

Key points

- Traditional Southeast Asian heroin producers continue to diversify into methamphetamine manufacturing: there have been large seizures of methamphetamine tablets in the region.
- A number of European countries continue to be major global manufacturers of MDMA.
- The Australian Customs Service detected increases in the amount of amphetamine-type substances, especially MDMA, being imported into Australia.
- The number of clandestine laboratories detected by Australian law enforcement agencies increased from 131 in 1998–99 to 150 in 1999–2000.
- The emergence of ‘base’ methamphetamine and its use in conjunction with heroin presents a number of challenges for Australian health, law enforcement and welfare agencies.

Description

For the purpose of this Report, all amphetamine derivatives and amphetamine analogues are collectively referred to as amphetamine-type substances, unless otherwise specified.

Table 4.1 shows the amphetamine-type substances commonly used in Australia.

Amphetamine

Amphetamine is a potent stimulant. It is synthetically derived from beta-phenethylamine to form a substance similar in structure and producing similar effects to the naturally occurring neurotransmitters adrenalin, dopamine and noradrenaline. Amphetamine directly affects the central nervous system by speeding up the activity of certain chemicals in the brain. Caffeine and cocaine are substances of a similar nature (Commonwealth of Australia 1993).

The term ‘amphetamine’ is usually used to denote the sulphate of amphetamine, which is the most common form of the drug in licit and illicit use. ‘Amphetamines’ is a generic term, referring to a range of amphetamine-based substances, including amphetamine, dexamphetamine and methylamphetamine but excluding amphetamine analogues such as MDMA (ecstasy—3,4-methylenedioxy-methylamphetamine) (Commonwealth of Australia 1993).

Amphetamine analogues

MDMA, commonly referred to as ‘ecstasy’, continues to be the most frequently used amphetamine analogue in Australia. It and its many derivatives form a pharmacological class of their own, referred to as ‘euphorics’. Common street names for MDMA are ‘Es’,

‘XTC’, ‘eekie’, ‘pills’ and the ‘love drug’. MDMA derivatives that have been found in Australia are MDA (3,4-methylenedioxyamphetamine), MDEA (3,4-methylenedioxy-N-ethylamphetamine), PMA (paramethoxyamphetamine) and 4-MTA (4-methylthioamphetamine).

Main forms and methods of administration

Amphetamine

Amphetamines are produced from an oil base that, for ease of handling and manufacture, is converted into amphetamine sulphate, which is a white, yellow or brown powder. The powder can then be processed into either tablets or capsules.

Methylamphetamine, or methamphetamine—both terms describe the same drug—is usually produced as a powder, although it can also take the form of a red liquid, referred to as ‘ox blood’, ‘red speed’ or ‘leopard’s blood’. There are numerous other street names for amphetamines, among them ‘speed’, ‘goey’ and ‘uppers’. Crystalline methylamphetamine hydrochloride, a purified form of methylamphetamine, is a transparent rock-like crystal resembling crushed ice; it therefore has the common street name of ‘ice’. Ice is translucent, with a pink, blue or green hue. It dissolves in water and breaks down into smaller particles (Thomas 1998). Other names for ice are ‘shabu’ (from the Philippines), ‘batu’, ‘glass’, ‘crystal’ and ‘crystal meth’.

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Although many of the street names—such as crystal, crank, meth and speed—are often used interchangeably, ‘speed’ usually refers to any amphetamine, methamphetamine or any general stimulant; ‘meth’ usually refers to any methamphetamine; ‘crank’ usually refers to methamphetamine sulphate or any methamphetamine that is snorted; and ‘crystal’ refers to crystalline methylamphetamine hydrochloride.

Methods of administration

Amphetamine can be administered orally, by inhaling or by intravenous injection. Dependant users prefer to inject it because the effect is almost immediate (Inaba et al. 1997). Ice is generally taken by inhaling the vapours of the heated crystal, but it can also be injected after it has been dissolved in water.

Effects

After administration, amphetamines induce short-term feelings of energy, power, strength, assertiveness and motivation. After passing into the brain, amphetamines release neurotransmitters (dopamine and serotonin) from stores in the brain’s nerve endings. This produces a sense of euphoria that can last for several hours that usually followed by depression and fatigue. Among other short-term physical effects are increases in blood pressure and breathing rate, enlarged pupils, reduced appetite (sometimes leading to anorexia and malnutrition), dental damage as a result of tooth grinding, insomnia and anxiety. Among the long-term effects can be depression, fatigue and paranoia (Commonwealth of Australia 1993; EMCDDA 1999).

Table 4.1: Amphetamine-type substances commonly used in Australia

| Drug type | Common names | Forms | Method of administration |
|--|--|--|-------------------------------|
| Amphetamine and derivatives-stimulants | | | |
| Amphetamine, dexamphetamine ^a | Speed, whiz, uppers, goey | White, yellow or brown powder, tablet | Injection, oral, snorting |
| Methylamphetamine, methamphetamine | Meth, base; otherwise street names the same as amphetamine | White, yellow or brown powder, paste, tablet, liquid | Injection, oral, snorting |
| Crystalline methamphetamine hydrochloride (D-methamphetamine)-purified methylamphetamine | Ice, meth, d-meth, glass, crystal, batu, shabu | Crystal-resembles crushed ice | Smoking, snorting, injection |
| Amphetamine analogues-euphorics | | | |
| 3,4-methylenedioxy-methylamphetamine (MDMA) | Ecstasy, Adam, hug or love drug, XTC, eckie, Es, | Tablet | Oral, injection (less common) |
| 3,4-methylenedioxy-N-ethylamphetamine (MDEA) | Eve | Tablet | Oral |
| 3,4-methylenedioxyamphetamine (MDA) | MDA | Tablet | Oral |
| N-methyl-1-(1,3-benzodioxol-5-yl)-2-butanamine (MBDB) | Eden | Tablet | Oral |
| Paramethoxyamphetamine (PMA)-has stimulant and hallucinogenic properties, an analogue of MDMA with broadly similar effects | Death drug, chicken yellow, chicken powder | Powder, tablet | Oral |
| 4-bromo-2,5-dimethoxyphenethylamine | 2CB, capsules, nexus, powder | Tablet | Oral |
| 4-bromo-2,5-dimethoxyphenethylamine (DOB) low dose | Bromo, bromo-DMA, golden eagles, club, Indian head, shamrock | Tablet, blotting paper | Oral |
| 2,5-dimethoxy-4-methylamphetamine (DOM)-similar dose to DOB | DOM, STP | Tablet, blotting paper | Oral |
| 4-methylthioamphetamine (4-MTA) | 4-MTA, flatliner | Tablet | Oral |

a. Dexamphetamine (also known as dextroamphetamine sulphate) is sold in tablet form in Australia for attention deficit hyperactivity disorder and narcolepsy, in accordance with State and Territory laws. It is also abused.

Source: ABCI; Australian Forensic Drug Laboratory; South Australian Forensic Science Centre.

Amphetamine analogues

Main forms

In its base form, MDMA is a white, musty-smelling oil with a searing, bitter taste. The base is converted into a salt form, or powder, for processing into tablets or capsules.

MDMA substitutes

Australian forensic laboratories' analyses of seized tablets confirm the continuing trend of tablets containing ketamine and methylamphetamine being sold as MDMA. The two drugs together produce effects similar to those produced by MDMA, and are easier to make.

MDMA is a scarce commodity—to meet the high demand for the drug, illicit tablet manufacturers are using anything available, including veterinary and agricultural drugs. Analysis has revealed methylamphetamine being mixed with such drugs as benzodiazepines, caffeine and agricultural chemicals. In some instances heroin or LSD has been found in seized tablets. Intelligence suggests that the tablets are being sold to users who believe they are buying MDMA.

Tablets containing PMA were seized during the reporting period. In February 2000 a person died at a dance party in western Sydney: autopsy results revealed that he had consumed a large amount of PMA (Martin 2000).

Methods of administration

The most popular method of administration is orally. When the drug is taken in this manner the pharmacological effects become evident in about 30 to 45 minutes and last for four to six hours. MDMA can also be taken intravenously: injecting users report a 'rush', or 'peak', similar to that produced by amphetamine or cocaine but different from that experienced with oral use (Thomas 1998). Another less common method of administration is to place the tablet inside the rectum, commonly called 'shafting'. This avoids the tablet causing irritation to the user's stomach lining, which is a common problem when MDMA is taken orally.

Effects

Amphetamine analogues have both stimulant and hallucinogenic properties. MDMA's effects differ from those of amphetamine: the main effects felt by MDMA users are confidence, warmth, empathy and intimacy with those around them. Some of the unpleasant short-term effects MDMA users have described are loss of appetite, nausea, raised body temperature, numbness and tingling, increased blood pressure, blurred vision, profuse sweating, jaw clenching, tooth grinding and anxiety (Solowij 1993).

The psychological and physical effects of long-term use of high doses of ecstasy have been documented. While there is no physical withdrawal associated with MDMA use, compulsive and excessive use (suggesting

psychological dependence) has been reported (EMCDDA 1999). Among the physical effects of long-term MDMA use are paranoia, insomnia, nausea, depression, extremely high heart rate, hypothermia and severe headaches. These effects tend to subside after drug use ceases. Researchers are investigating whether there are any residual effects resulting from long-term use of ecstasy (Solowij 1993).

Serious adverse physical effects resulting from MDMA use are relatively rare, although a range of complications have been reported, among them liver inflammation, bone marrow problems and sudden death. Most of the complications result from interaction between the pharmacological effects of the drug and the context in which the drug is used—for example, in nightclubs and at dance venues. Users risk overheating and dehydration as a result of excessive dancing in a confined environment while under the influence of the drug. This may lead to kidney failure, blood clots, convulsions and sometimes death (EMCDDA 1999).

Medical researchers have found that ecstasy use reduces the release of the brain chemical serotonin, which influences cognitive and memory functions. The reduced level of serotonin results in brain damage, also known as neurotoxicity. Gouzoulis-Mayfrank et al. (2000) have found that ecstasy users demonstrated impairment in memory, attention and learning tasks.

Strategic overview

Overview

The Bureau drew on the Australian Federal Police international liaison officer network and a number of publications to prepare this section. The publications include the *International Narcotics Control Strategy Report for 1999* (US Department of State 2000); *Global Illicit Drug Trends 2000* (UNODCCP 2000) and the *Report of the International Narcotics Control Board for 1999* (INCB 2000).

The United Nations reports that amphetamine-type substances continue to be a concern in East and Southeast Asia, Western Europe and North America. Worldwide seizures of amphetamine-type substances have reached record levels: the United Nations estimates that more than 12 tonnes was seized in 1999. Clandestine laboratory detections continue to confirm that methamphetamine is manufactured, trafficked and consumed in East and Southeast Asia and North America. East and Southeast Asia accounted for more than 40 per cent of the amphetamine-type substances seized in the world during 1998: the greatest amount was seized in Thailand. Europe remains an important location for the manufacture, trafficking and consumption of both amphetamine and amphetamine-type substances (UN Economic and Social Council 1999).

Europe

The United Nations reports that abuse of synthetic drugs, in particular amphetamine and amphetamine-type substances, has risen. After cannabis, amphetamine-type substances are the most commonly used illicit drugs in the European Union. Synthetic drug use is considered fashionable by, and is commonplace among, many young people, who represent the majority of users of these types of substances. The Netherlands, the United Kingdom and Belgium continue to be major producers of amphetamine-type substances. Other sources are the Baltic states, Poland, the Czech Republic, Hungary and Bulgaria (INCB 2000; UNODCCP 2000).

In March 2000 the Australian Federal Police sponsored a workshop examining the production and distribution of illicit synthetic drugs in Europe and the impact of this on Australia. Police from the Netherlands, Belgium, the United Kingdom and Israel came together to discuss trends in the manufacture of synthetic drugs and the trends' impact on Australia. The outcome of the workshop is greater cooperation between European law enforcement agencies and the Australian Federal Police in the detection of MDMA shipments to Australia.

Myanmar

The United States Department of State (2000) reports that an increasing amount of methamphetamine is being produced in laboratories co-located with heroin refineries in Myanmar's Wa and Shan States. The United States Government believes that some of the leaders of ethnic armies with whom the Myanmar Government has negotiated ceasefires are heavily involved in amphetamine manufacture.

During 1999 the amount of methamphetamine and ephedrine seized by Myanmar authorities increased: over 28.8 million amphetamine tablets were seized, compared with 15 million tablets in 1998. The methamphetamine produced by Myanmar ethnic groups is trafficked along the same routes as heroin, mostly crossing the porous Chinese and Thai borders. The Indian, Bangladeshi and Lao borders are used less often. Ephedrine, an essential ingredient for the production of amphetamine, is being obtained from India and China.

China

China is a major producer of the precursor chemicals needed for manufacturing amphetamine-type substances. The ephedra plant, from which ephedrine is made, grows wild in the north of the country. Whilst China is committed to further tightening of controls over precursor chemicals, the production of synthetic drugs is a growing problem in Fujian and Guangdong Provinces.

The Philippines

The Philippines is a producer and transshipment point for crystal methamphetamine. The United States Government reports that precursors for producing the drug are easily smuggled into the Philippines from China. A restructuring of domestic law enforcement organisations has been carried out in the hope of improving their effectiveness in tackling drug trafficking. During 1999 there was an increase in drug seizures and several clandestine laboratories were detected (US Department of State 2000).

The Australian Federal Police Liaison Officer in Manila reported that methamphetamine hydrochloride, or shabu, is easily obtainable throughout the country. In the six months to July 2000, Philippine authorities seized over 121 kilograms of the drug and arrested 51 foreign nationals in connection with its importation. Intelligence suggests that the majority of the drug seized had been manufactured in China, although, as noted, there have been seizures of laboratories in the Philippines.

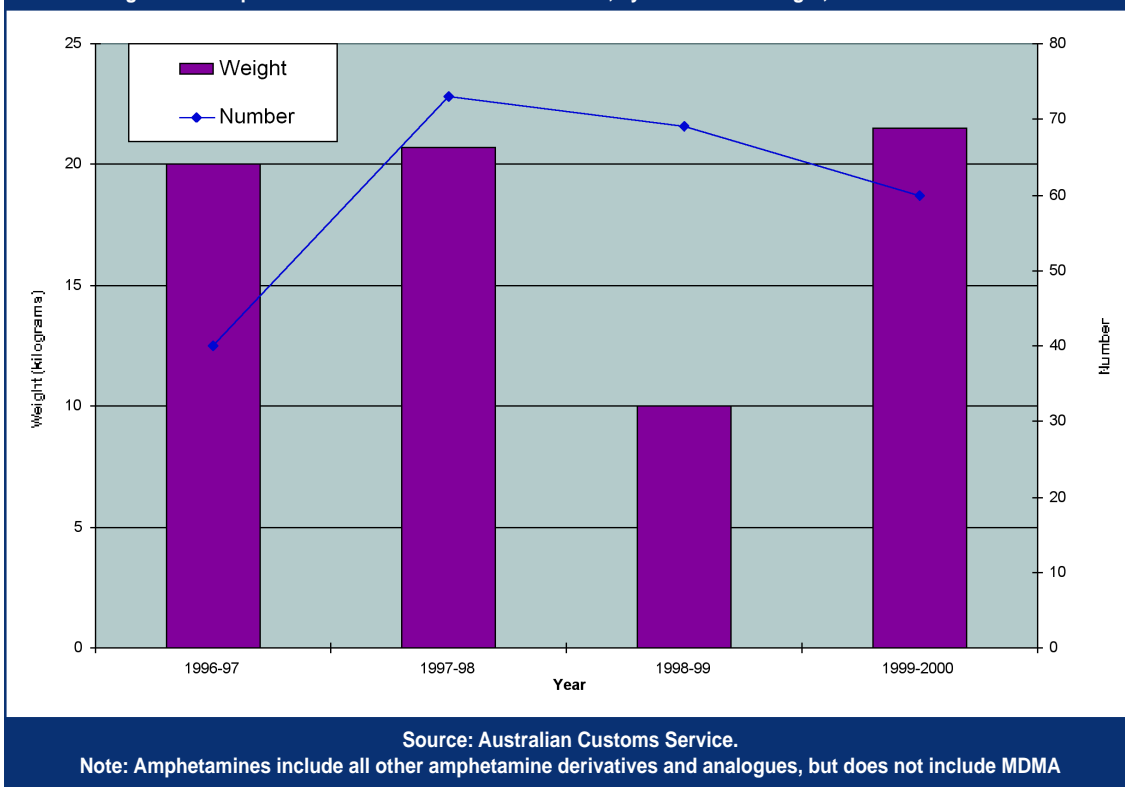
Vietnam

Vietnam is a transit country for methamphetamine from Cambodia, China and Myanmar. The increased availability of drugs within the country has resulted in greater domestic consumption. Concern about the level of drug use in the Vietnamese population has resulted in the Government declaring counter-narcotics activity the country's second-highest domestic priority after poverty reduction. Although this increased effort appears to have reduced illicit drug consumption overall, methamphetamine use has continued to increase.

The Australian Federal Police reports that, whilst heroin and opium use remains a major problem, the abuse of synthetic drugs is becoming increasingly popular among young Vietnamese people. The majority of amphetamine-type substances entering Vietnam come from China, although substantial quantities also come from Laos, suggesting that the drugs are manufactured in the Golden Triangle. Drug traffickers in possession of both heroin and amphetamine-type substances are often encountered, suggesting that traditional heroin-trafficking routes are being used to move both types of drugs.

During 1999–2000 the Australian Federal Police was able to provide technical and logistical support as well as training to Vietnamese law enforcement through the Law Enforcement Cooperation Program. Computers, narco-test kits and telecommunications equipment were supplied and a number of staff received training in Australia.

Figure 4.1: Amphetamines: Customs border detections, by number and weight, 1996–97 to 1999–2000



Laos

Laos is a major transit country for methamphetamine. During 1999 seizures of the drug rose by 30 per cent; approximately 806 700 methamphetamine tablets were seized. Vehicles, weapons and cash were seized in a large number of cases.

Thailand

Thailand is a major consumer of and transit country for methamphetamine. Although the vast majority of methamphetamine consumed in the country comes from Myanmar, Thai authorities did destroy 14 domestic clandestine methamphetamine laboratories in 1999–2000. From January to October 1999, 3248 kilograms of methamphetamine was seized and 146 317 people were arrested for methamphetamine-related offences.

Traditional opiate traffickers in Thailand, Laos and Myanmar are now either producing or trafficking in both opiates and amphetamine-type substances. The reason for this diversification is that methamphetamine generates more profit than heroin. With methamphetamine, both money and time are not tied up in the agricultural cycle of poppy growing. Further, Thailand’s position as a regional transport hub makes it attractive to transnational smuggling organisations (US Department of State 2000).

Indonesia

A transshipment point for amphetamine-type substances being moved to Australia, Indonesia is increasingly being targeted by international drug-trafficking organisations. Southeast Asian, South Asian and Nigerian drug-trafficking organisations have established presences there, and the arrest of foreigners, particularly Nigerians, is becoming quite common. There has been an increase in the number of clandestine methamphetamine and MDMA laboratories detected, the first of which was found in Jakarta.

Border detections

The Australian situation

During 1999–2000 Customs detected at the border a record total weight of 144.1 kilograms of MDMA and 21.5 kilograms of other amphetamines including 8.8 kilograms of methamphetamine. Australian law enforcement agencies made the largest single detection of MDMA to date at the border—67.4 kilograms of MDMA tablets and 9.0 kilograms of MDMA powder.

Importations of amphetamines

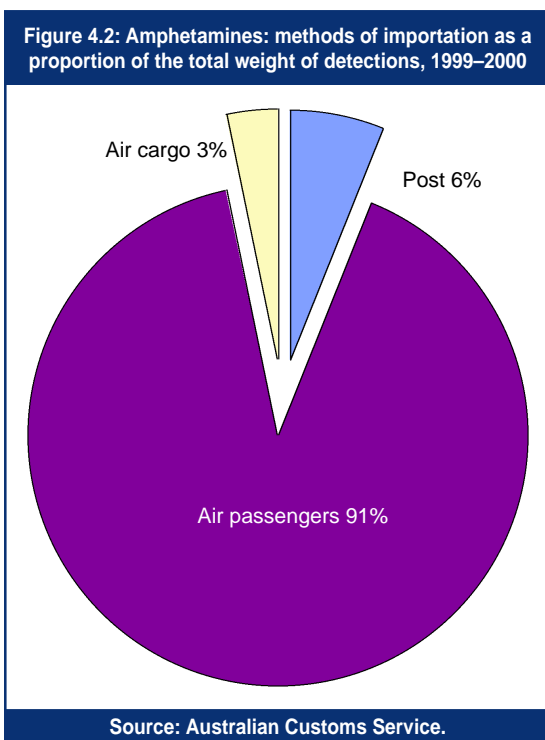
As Figure 4.1 shows, during 1999–2000 Customs detected 21.5 kilograms of amphetamines at the border.¹ There were 60 detections, a decline of nine on the previous year, but the average weight of detections rose to 364 grams in 1999–2000, compared with 145 grams in 1998–99.

The total weight of methamphetamine (including crystalline methamphetamine, or ice) detected increased from 3.47 kilograms in 1998–1999 to 8.81 kilograms in 1999–2000. This is the highest total weight of methamphetamine detected by Customs to date. Crystalline methamphetamine accounted for the majority (over 7.5 kilograms) of the methamphetamine detected. Since 1997–1998 the average weight of methamphetamine detections has risen from 74 grams to 419 grams.

The most commonly detected method of importing amphetamine is through the postal stream. Of the 60 amphetamine detections made by Customs in 1999–2000, 34 (57 per cent) used this method. The large number of postal detections, combined with a relatively low total weight (1.29 kilograms), suggests that the majority of detections of amphetamine were destined for personal use.

Air passengers accounted for 34 per cent of the number of detections of amphetamine in 1999–2000 and 91 per cent of the weight of detections. This suggests that the air passenger stream is the importation method favoured by higher level traffickers in amphetamine. The most noteworthy detection in 1999–2000 occurred in April 2000, when a Canadian citizen arrived at Brisbane Airport from the United Kingdom. An examination of his hand baggage revealed a package wrapped in black tape and concealed in a pair of green corduroy trousers. Inside the package was 4.8 kilograms of amphetamine powder.

Figure 4.2 shows details of methods of importation in 1999–2000.



Of the five detections of amphetamines in air cargo, three contained crystalline methamphetamine coming from the Philippines. One of these importations was detected on 6 November 1999, when 250 grams of the substance was found hidden inside a muffler that had been wrapped in newspaper.

During 1999–2000 Singapore was the final embarkation point for 86 per cent of detected amphetamine by weight: 18.5 kilograms were detected in what constituted 11.8 per cent of the number of detections. There were 11 detections from Indonesia (18.6 per cent of detections) eight from the Philippines (13.6 per cent) and seven from the United Kingdom (11.9 per cent).

Table 4.2 provides details of embarkation points for importations of the proportion of amphetamines and MDMA detected by Customs in 1999–2000.

Importations of MDMA

There was a significant increase in the weight of Customs detections of MDMA, from 102.1 kilograms in 1998–99 to 144.1 kilograms in 1999–2000. This is the largest total weight of MDMA detected by Customs to date (see Figure 4.3). The average weight of detections increased from 69 grams in 1996–97 to 1.37 kilograms in 1999–2000.

The increase in the quantity of MDMA detected, and in the average weight of detections, can be attributed in part to improved Customs and Australian Federal Police targeting of higher level MDMA traffickers as well as better links with overseas law enforcement agencies. Although there are indications that MDMA is being produced locally on a small scale. Studies show MDMA imported from Europe is more popular amongst users.

Forty-six per cent of MDMA detections during 1999–2000 involved air passengers; they accounted for 25 per cent of the total weight of detections. The largest detection in the air passenger stream occurred in November 1999, when a Dutch national flew into Sydney Airport from Amsterdam. On examining the man's backpack, Customs officers found 3.48 kilograms of MDMA inside a scuba-diving belt and vest.

The next most frequently used method of importation during 1999–2000 was the postal stream: this method made up 44 per cent of detections, representing 2 per cent of the total weight of MDMA detections. One MDMA interception in the postal stream occurred when Customs officers in New South Wales opened a package from the United Kingdom and found 1014 tablets, which had been packed flat in grids and taped between sheets of carbon paper behind a photo in a frame.

During 1999–2000, 55 per cent of the total weight of MDMA detections involved sea cargo. This is a large increase compared with the single sea cargo detection, of 290 grams, in 1998–99. The three sea cargo detections in

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Table 4.2: Amphetamines and MDMA: importations detected by Customs, by country of embarkation, 1999–2000 (per cent)

| Country of embarkation | MDMA | Amphetamine |
|------------------------|-------|-------------|
| Belgium | 2.86 | - |
| China | - | 5.08 |
| Germany | 3.81 | - |
| Hong Kong | 2.86 | 1.69 |
| Indonesia | 7.62 | 18.64 |
| Malaysia | 14.29 | - |
| Netherlands | 13.33 | - |
| Philippines | - | 13.56 |
| Singapore | 2.86 | 11.86 |
| United Kingdom | 25.71 | 11.86 |
| United States | 6.67 | 5.08 |
| Other | 20.00 | 32.20 |

Source: Australian Customs Service.

1999–2000 accounted for over 79 kilograms of MDMA. Indonesian crew members imported a further 15 kilograms on a bulk carrier that arrived in Broome, Western Australia.

In 1999–2000 the United Kingdom, Malaysia, the Netherlands and Indonesia were the most common embarkation points for MDMA detected by Customs. Nearly all the MDMA imported into Australia is produced in Western Europe, mainly the Netherlands, from which 89.5 kilograms of MDMA came in 1999–2000. Almost 25 per cent of detected MDMA importations in 1999–2000 arrived from Southeast Asian countries. There is little production of MDMA in Southeast Asia, so these countries are probably being used as transshipment points for MDMA produced in Europe.

Significant seizures

In January 2000 Customs officers, together with Australian Federal Police drug strike teams, made the largest seizure of MDMA in Australia to date. A container arriving in Brisbane from the Netherlands via Singapore was found to have inside it a wooden crate containing 38 large metal hydraulic ram cylinders. Customs' examination of the cylinders revealed 67.4 kilograms of MDMA tablets, 9.0 kilograms of MDMA powder and 9.1 kilograms of cocaine. Inquiries by the Australian Federal Police resulted in the arrest of seven men and the seizure of a further 8.0 kilograms of MDMA tablets and \$269 000 in cash. Plate 4.1 shows one of the opened hydraulic rams and its illicit contents.

One of the most unusual detections of amphetamines and MDMA during 1999–2000 was made on 27 October 1999 at Perth Airport. An Indonesian couple and a Singaporean

couple were found to be carrying a variety of drugs in sealed packets of assorted foodstuffs and in body packs. Customs officers detected 7.16 kilograms of crystalline methamphetamine, 5.31 kilograms of methamphetamine tablets, 678 grams of an unknown substance in tablet form, 276 grams of amphetamine tablets and one MDMA tablet.

The domestic situation

Clandestine laboratories

During 1999–2000, 150 clandestine laboratories were found in Australia. In comparison, 131 were found in 1998–99 and 95 in 1997–98. As in previous years, the greatest number of laboratories were found in Queensland (79); New South Wales recorded the next highest number (20). No laboratories were found in Tasmania. Table 4.3 shows the national detection figures, by State and Territory and quarter, for 1999–2000.

Clandestine amphetamine laboratories have been found in all sorts of places, among them residential dwellings, rented premises and semi-rural areas. A number have been hidden in buried shipping containers.

Production trends

The majority of the clandestine laboratories detected during 1999–2000 were found to be producing methylamphetamine. The south-east corner of Queensland continues to be the main location for laboratories.

The basic ingredient for the production of methamphetamine, pseudoephedrine, is predominantly extracted from cough and cold medications such as Sudafed tablets. The Queensland Police Service reported a continuing trend of pharmaceutical warehouses being broken into in the search for medications containing pseudoephedrine.

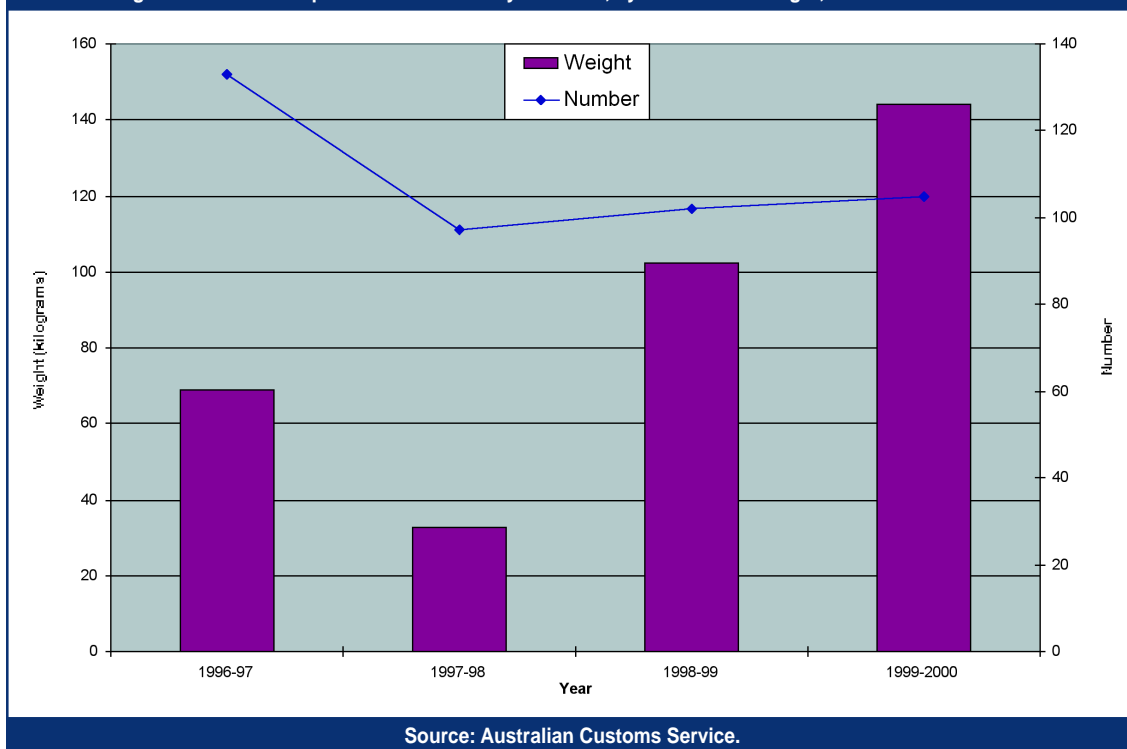
Project Arko, an illicit drug market scan conducted by the Queensland Police Service, noted a continuing trend

Plate 4.1: A hydraulic ram containing MDMA tablets



Source: Australian Customs Service.

Figure 4.3: MDMA: importations detected by Customs, by number and weight, 1996–97 to 1999–2000



towards the use of smaller laboratories (Queensland Police Service 2000). South Australia Police also noted the growing prominence of smaller laboratories, which are often producing methamphetamine for personal use.

During 1999–2000, five MDMA-producing laboratories were detected in Australia, two of them in Queensland and one in each of the Australian Capital Territory, New South Wales and Western Australia. In New South Wales two laboratories were found making methcathinone, which is an analogue of methamphetamine. New South Wales Police had previously detected two methcathinone laboratories during 1998–99.

The fact that so few MDMA laboratories were detected is probably a result of the difficulty people have obtaining the necessary ingredients for production, the difficulty of the production process and the availability of inexpensive imported ecstasy.

Manufacturing methods

In 1999–2000 the main method detected for producing methylamphetamine and amphetamine involved hypophosphorous acid. A number of other methods were detected, however, including one involving the catalytic hydrogenation of pseudoephedrine. There has also been a noteworthy increase in the ‘Nazi method’, which involves using sodium metal. The last two production methods are very risky because of the volatility of the chemicals used.

Chemical diversion

Most of the essential ingredients used in the illicit production of amphetamine-type substances are produced for legitimate use in industry. All State and Territory police services have now established chemical diversion desks to monitor suspicious purchases of precursor chemicals. The Bureau coordinates these special units at the national level; their existence promotes a cooperative approach to investigation of the diversion of chemicals for the illicit drug trade.

The level of cooperation between the services was highlighted when an offender was arrested in Townsville, Queensland. Improved communication between the services led to the identification of a person suspected of involvement in the theft of pseudoephedrine from a number of interstate pharmaceutical warehouses. The suspect was arrested when leaving a Townsville pharmaceutical warehouse he had just broken into.

Distribution

The most common method identified for the distribution of amphetamine-type substances is through drug-user networks. Places such as hotels, bars and nightclubs are often used; South Australia Police also noted that tattoo parlours and piercing shops are venues for methamphetamine distribution.

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Table 4.3: Clandestine laboratory detections, by State and Territory and quarter, 1999–2000

| State/Territory | 01 July to 30 Sept | 01 Oct to 31 Dec | 01 Jan to 31 March | 01 April to 30 June | Total |
|------------------------------|--------------------|------------------|--------------------|---------------------|------------|
| New South Wales | 3 | 1 | 12 | 4 | 20 |
| Victoria | 4 | 1 | 8 | 5 | 18 |
| Queensland | 18 | 23 | 20 | 18 | 79 |
| South Australia | 3 | 2 | 3 | 6 | 14 |
| Western Australia | 4 | 3 | 4 | 6 | 17 |
| Northern Territory | 1 | - | - | - | 1 |
| Australian Capital Territory | - | - | - | 1 | 1 |
| Total | 33 | 30 | 47 | 40 | 150 |

Note: No clandestine laboratories were found in Tasmania.
Source: ABCI.

MDMA is distributed mainly through licensed premises such as nightclubs. There is evidence that employees and managers of a number of nightclubs and dance clubs in Sydney's Kings Cross are complicit in the sale of amphetamine-type substances.

Victoria Police reported that the most common method for amphetamine distribution is dealers selling to their associates from their homes. New South Wales Police have identified a new trend whereby the dealer delivers the drugs, thus avoiding the attention attracted to their premises if a large number of people visit regularly.

There are continued intelligence reports suggesting that some organised criminal groups are involved in the manufacture and distribution of amphetamine-type substances. A number of outlaw motorcycle gangs are closely associated with production and distribution. The level of their involvement varies depending on the gang and the location.

Western Australia Police reported that amphetamine distribution, particularly in the Kalgoorlie area, is controlled by local outlaw motorcycle gangs. New South Wales Police have noticed a trend of traditional ethnic based criminal groups cooperating, by trading and buying drugs with each other, for their own distribution networks.

Tasmania Police reported that amphetamine-type substances are not produced on the island—all are brought from the mainland by couriers, who travel by commercial flight or ferry to Victoria to obtain the drugs.

A number of individuals portray themselves as specialist illicit drug manufacturers who are available for hire. They are known as 'cooks'. New South Wales Police have identified a number of people in that State who specialise in the production of amphetamine-type substances. Intelligence suggests that they are responsible for

manufacturing for both personal use and profit. These people use a rapid production method that results in a poor-quality product and poses serious health risks for users. Manufacturing is often done with portable equipment in isolated areas, and the process can take from two to eight hours.

Market indicators

Seizures

Table 4.4 shows the number and weight of seizures of amphetamine-type substances in Australia for 1999–2000.

Domestic seizures of amphetamine-type substances have increased: 4861 seizures (where the drug weight was recorded) were made during 1999–2000, an increase of 657 on 1998–99. Of particular concern is the amount of drugs seized: the Bureau has been informed that 381.3 kilograms of amphetamine-type substances were seized in 1999–2000; an increase of 124.4 kilograms on the 256.9 kilograms seized in 1998–99. The 1999–2000 figure excluded seizure information from South Australia which was not available.

The increase in the weight of seizures was particularly noteworthy in Queensland—from 18.7 kilograms in 1998–99 to 120.4 kilograms in 1999–2000. This is partly because of an 84-kilogram seizure of MDMA by the Australian Federal Police in January 2000.

Arrests

Table 4.5 shows details of 1999–2000 consumer and provider arrests connected with amphetamine-type substances, by State and Territory and gender. Figures for the Australian Capital Territory were not available.

Consumer and provider arrests for amphetamine-type substances have continued to increase Australia-wide, from 6584 in 1998–99 to 8083 in 1999–2000. A number of jurisdictions do not differentiate between arrests connected with MDMA and those connected with amphetamine-type substances, so all arrests have been aggregated. New South Wales accounts for the greatest number of consumer arrests, there being 2389 recorded during 1999–2000. Queensland recorded the greatest number of provider arrests, at 547.

Prices

Prices for an amphetamine street deal (0.6–0.8 grams) have remained relatively unchanged since 1998–99, ranging from \$50 in Victoria to \$80 in Western Australia. Results from the Illicit Drug Reporting System survey also show amphetamine prices remaining stable in all jurisdictions (McKetin et al. 2000). Prices for 1 gram ranged from \$50 in Queensland and South Australia to \$300 in the Australian Capital Territory.

The New South Wales Police Service reported that the price for a street deal ranges from \$25 to \$100, whilst the price for 0.25 grams of cut amphetamine could be as low as \$5. Generally, the price of amphetamine fluctuates according to the place of purchase.

The purchase price for high-purity ‘base’ methamphetamine is higher than for methamphetamine powder. The Illicit Drug Reporting System survey found that a ‘point’ of base costs \$50 to \$60 in Queensland, South Australia and Tasmania. A point is equivalent to one-tenth of a gram.

The Illicit Drug Reporting System survey found that the price of an MDMA tablet in New South Wales, Victoria, Queensland and South Australia varies between \$35 and \$60. In Western Australia the price can vary between \$50 and \$70, whilst in the Northern Territory it is \$50 to \$100. In comparison, Victoria Police reported that the price of an MDMA tablet in Ballarat could be as low as \$25.

Purity

Not all of the amphetamine-type substances seized by Australian law enforcement agencies are subjected to forensic analysis. In a number of instances the seized drug will be analysed only in a contested court matter. The purity figures reported in this section therefore relate to an unrepresentative sample of the amphetamine-type substances seized in Australia.

Amphetamine seized in Australia is generally of low quality: during 1999–2000 forensic testing revealed purity levels ranging from less than 1 per cent to 65 per cent. The median purity for methamphetamine seized Australia-wide ranged from 0.7 to 46.6 per cent.

South Australia Police reported that increased production of methamphetamine in that State has led to an increase in purity: the purity of ‘street level’ methamphetamine has on occasion risen to as much as 60 per cent.

The New South Wales Police Service reported that suppliers are tending to carry very pure amphetamine so that if they are detected they are found to have a smaller amount, thus limiting the potential for being charged with a serious offence.

Availability

Law enforcement agencies Australia-wide reported that methamphetamine is becoming increasingly available. New South Wales Police reported that this is the case across the State. The situation is the same for other amphetamine-type substances—in particular, there are reports of an increase in the use and distribution of ice, or shabu, by members of the Filipino community in the Blacktown area of Sydney.

Tasmania Police reported increased availability of amphetamine in the Hobart area.

Police in Geraldton, Western Australia, reported that the use of methamphetamine and crystalline methamphetamine (ice) is becoming more prevalent in the area, and that there has been a corresponding increase in the activity of outlaw motorcycle gangs there.

In the Northern Territory police reported an increase in the availability of methamphetamine in the Darwin area as a result of increased illicit manufacture. It is thought that all the amphetamine-type substances produced in the Darwin area are for local consumption.

Table 4.4: Number and weight of seizures of amphetamine-type substances, by State and Territory, 1999–2000

| State/Territory | Seizures | |
|------------------------------|--------------|----------------|
| | Number | Weight (grams) |
| New South Wales | 1 527 | 92 017 |
| Victoria | 296 | 118 905 |
| Queensland | 2 068 | 120 416 |
| South Australia | n.a | n.a |
| Western Australia | 754 | 39 777 |
| Tasmania | 31 | 2 428 |
| Northern Territory | 79 | 7 077 |
| Australian Capital Territory | 106 | 651 |
| Total | 4 861 | 381 271 |

Source: ABCI.

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Table 4.5: Amphetamine-type substances: consumer and provider arrests, by State and Territory and gender, 1999–2000

| | Consumer | | | | Provider | | | | Total | | | |
|--------------|--------------|--------------|-----------|--------------|--------------|------------|-----------|--------------|--------------|--------------|-----------|--------------|
| | Male | Female | Not known | Total | Male | Female | Not known | Total | Male | Female | Not known | total |
| NSW | 1 861 | 465 | 63 | 2 389 | 321 | 67 | 9 | 397 | 2 182 | 532 | 72 | 2 786 |
| Vic | 638 | 133 | 3 | 774 | 302 | 64 | - | 366 | 940 | 197 | 3 | 1 140 |
| Qld | 1 225 | 386 | - | 1 611 | 419 | 116 | 12 | 547 | 1 644 | 502 | 12 | 2 158 |
| SA | 456 | 115 | - | 571 | 138 | 34 | - | 172 | 594 | 149 | - | 743 |
| WA | 619 | 191 | - | 810 | 232 | 60 | - | 292 | 853 | 251 | - | 1 104 |
| Tas | 14 | 4 | 2 | 20 | 7 | - | 1 | 8 | 21 | 4 | 3 | 28 |
| NT | 61 | 16 | - | 77 | 38 | 9 | - | 47 | 99 | 25 | - | 124 |
| Total | 4 874 | 1 310 | 68 | 6 252 | 1 457 | 350 | 22 | 1 829 | 6 333 | 1 660 | 90 | 8 083 |

Note: Figures for the Australian Capital Territory not available.
Source: ABCI.

In contrast, Victoria Police reported a decline in the availability of amphetamine, particularly in rural Victoria. This supports findings from the Illicit Drug Reporting System survey—that amphetamine is hard to obtain in the State (McKetin et al. 2000). Victoria Police further reported that use of MDMA is becoming more prevalent. Young people in Ballarat prefer to use MDMA because they perceive it to be cheaper than alcohol and to have less deleterious effects on their health.

Initiatives

Project Arko

Project Arko was an initiative of the Queensland Police Service. Data were obtained from a wide variety of sources in the north coast region, with a view to gaining a better understanding of the illicit drug market there. Police found that a number of interlinked illicit drug markets were operating in the area and that methamphetamine was the primary drug. They also found that methamphetamine manufacture was well established. In instances where traditional policing methods had proven ineffective, other strategies were suggested on the basis of the project's findings (Queensland Police Service 2000).

Legislation

The 1999 Chemical Diversion Conference was held at the Bureau's offices in Canberra on 29–30 November; it was attended by police and forensic chemists from Australasia. The aim of these conferences is to assemble representatives of Australian jurisdictions and New Zealand, so that they can discuss the investigation of clandestine laboratories.

At the end of the 1999 conference a number of resolutions were passed in relation to implementation of a Chemical Industry National Code of Conduct for precursor chemicals and the disposal of toxic by-products of clandestine laboratories. At the time of writing, the Code of Conduct

has passed into legislation in South Australia and Queensland, and is voluntary in all other jurisdictions. Further, the National Drug and Poisons Scheduling Committee has before it a submission proposing that a range of precursor chemicals be included as an attachment to the Standard Uniform Scheduling of Drugs and Poisons.

An Intergovernmental Committee on Drugs (IGCD) working group has resolved to revise the 1995 National Best Practise Guidelines for Environmental Health and Safety: Clandestine Drug Laboratories, to bring them into line with current knowledge and practice and legislative requirements. The draft revised document is scheduled for tabling at the February 2001 IGCD meeting, for endorsement and forwarding to police commissioners for their consideration. The working group will also report on recommendations for safe handling and disposal of waste from clandestine laboratories.

Chemical diversion desks

Chemical diversion desks in the States and Territories continue to liaise closely with the chemical and pharmaceutical industry in their jurisdiction. Seminars with industry representatives have been held, to discuss matters such as pharmaceutical robberies and thefts and the provision of adequate security. The Bureau briefed the National Conference of the Pharmacy Guild on new trends in methamphetamine production and their implications for pharmacists.

Social and law enforcement concerns

User groups

The 1998 National Drug Strategy Household Survey found that, after cannabis, amphetamine is the most frequently used illicit drug. It found that approximately 3.6 per cent of respondents had used amphetamine or methamphetamine in the previous year; this compares with

4. AMPHETAMINE-TYPE SUBSTANCES

2.1 per cent of respondents in the 1995 survey. MDMA use had also increased—from about 1 per cent of respondents in the 1995 survey to over 2 per cent of respondents in 1998 (AIHW 1999).

The Australian NSP Survey found that for nearly half (46 per cent) of injecting drug users surveyed in Queensland amphetamine was the drug they had most recently injected. Other States demonstrating relatively high levels of amphetamine injection were South Australia (38 per cent) and Tasmania (33 per cent). In contrast, New South Wales, Victoria and the Australian Capital Territory—where levels of heroin use are high—showed low levels of amphetamine injection, at 7 per cent, 5 per cent and 6 per cent respectively. This is consistent with other findings from law enforcement and health agencies.

The primary age group of people arrested for offences connected with amphetamine-type substances is 20–24 years: this age group accounts for 23 per cent of arrests. The second-largest cohort is the 25–29 year age group, which accounts for 22 per cent of arrests. The 15–19 year age group accounts for 12 per cent of arrests.

South Australia's Drug and Alcohol Services Council reported that an increasing number of young people are starting to use amphetamine-type substances. Northern Territory Police reported that the main users of methylamphetamine continue to be long-term drug users, both male and female, aged between 25–40 years and

generally unemployed or from a lower socio-economic group. Victoria Police reported that it has not identified a particular user group for amphetamine-type substances.

Figure 4.4 provides details of offenders, by age and gender, for 1999–2000.

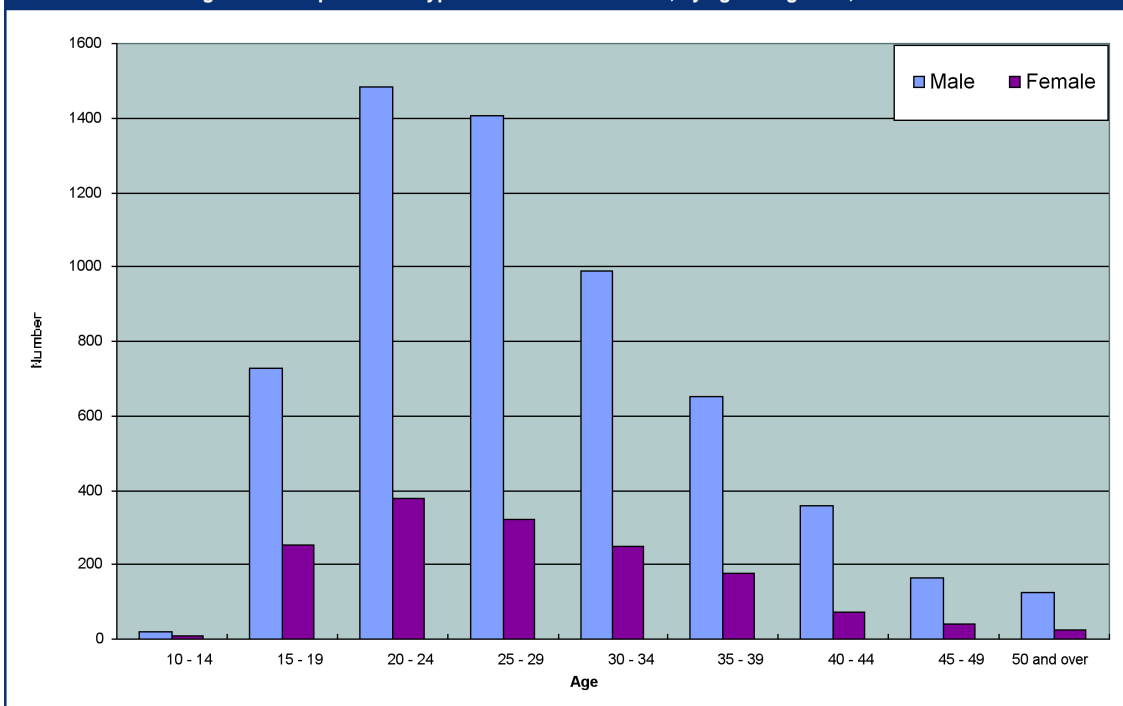
The New South Wales Police Service reported that use of amphetamine-type substances is particularly noticeable in Cessnock, Kurri Kurri and Maitland and is now spreading to people who are generally not considered typical users.

Patterns in use

Health and law enforcement agencies across Australia are reporting a greater level of use of the very pure methamphetamine called 'base'. Base methamphetamine is described as being either moist or oily in consistency and beige in colour—like putty. Its appearance and the name 'base' suggest that it is methamphetamine at the penultimate stage of production, before being converted to methamphetamine crystals. Because of its dampness, base is difficult to smoke or snort, so the preferred method of administration is injection.

A number of social, health and law enforcement problems are now emerging as a result of the high prevalence of base, particularly in the greater Brisbane area where base is believed to have first emerged. The Community Based Drug Reporting Working Group reported that use of base methamphetamine is rapidly increasing among young

Figure 4.4: Amphetamine-type substances: offenders, by age and gender, 1999–2000



Note: Excludes data for the Australian Capital Territory.
Source: ABCI.

people of both sexes (Davey & Davies 1999). In a survey of its clients, the Brisbane Youth Service found that 44 per cent were currently using base. Further, 15 per cent of the clients were using it at least once a day. Data from the Queensland Corrective Service show 26 per cent of female inmates using amphetamine, with 61 per cent of them using daily. In comparison, 27 per cent of male inmates reported using amphetamine, with 51 per cent of them using the drug daily. It was concluded that the greater prevalence of amphetamine and base use is a result of high levels of manufacture, both mobile and static, in the outer areas of Brisbane, particularly in the Pine Rivers, Caboolture and Logan districts.

But the high prevalence of base methamphetamine use is not confined to Queensland. Turning Point Alcohol and Drug Centre in Victoria, claim that there has been an increase in the use of methamphetamine, as opposed to amphetamine sulphate, in Melbourne. South Australia Police reported that high-purity methamphetamine is currently being sold in the southern and western suburbs of Adelaide.

The emerging use of base methamphetamine brings with it a number of concerns for health and law enforcement agencies. Its use, and the popularity of injecting it, have led to an increase in the number of young injecting drug users, and heroin is being introduced to a population that otherwise might never have used that drug (Davey & Davies, 2000).

A number of health services in the Brisbane area reported increasing numbers of people presenting with problems—such as paranoia, psychosis, depression and suicidal tendencies—associated with methamphetamine use. Further, a growing number of Brisbane high-school students are using methamphetamine to help them study; young women are also using it to help them lose weight, often developing eating disorders as a consequence (Davey & Davies 1999).

With the increased use of base methamphetamine, there is growing evidence of an accompanying withdrawal syndrome following cessation of use. In Brisbane, the Chermiside Alcohol and Drug Team reported that some clients experience the protracted physical withdrawal symptoms normally associated with opiate withdrawal for 10 to 20 days following cessation of use (Davey & Davies 1999).

Social costs to the Australian community

For health and law enforcement agencies, the implications of the growing popularity of base methamphetamine are many. With the drug's emergence, and the preference for injecting it, come the threat of a greater spread of blood-borne viruses, among them hepatitis C and HIV. Interviews conducted by the Bureau with a number of health agencies providing services to illicit drug consumers suggest that

the amphetamine-using population is generally younger—for example, homeless adolescents. These people lead lifestyles with little stability and are generally unaware of safe-injecting protocols. Further, there is the trend to use base methamphetamine in conjunction with heroin, which is more addictive. The spectre of fatal opiate overdose always exists with use of base and heroin. Finally, the growing popularity of base has led to an increase in demand for emergency health services, to treat the harms associated with its use. Governments Australia-wide can expect to bear an increased financial burden from the provision of treatment services.

The Queensland Police Service reported that amphetamines are showing up more often in blood samples from traffic offenders. Further, it noted that a number of violent incidents have been associated with amphetamine use. Amphetamine abuse is strongly associated with property crime; for example, covert operations conducted by the Queensland Police Service have shown that drug dealers are prepared to supply amphetamine in return for stolen property such as jewellery and electrical goods.

Changes in the methamphetamine-manufacturing scene also present challenges for law enforcement agencies. In response to the growing demand for products such as base, production has moved to smaller laboratories with shorter distribution chains to the user. With the greater number of laboratories, more resources will need to be devoted, directly and indirectly, to the investigation of methamphetamine manufacture and use. More resources will also need to be allocated to policing the social harms—such as aggression and psychosis—associated with methamphetamine use.

Initiatives such as Project Arko will give law enforcement agencies insights into local illicit drug marketplaces and help in the development of strategies for the effective policing.

Outlook

It is expected that amphetamine-type substances will continue to remain readily available in the Australian illicit drug marketplace. Improved cooperation between law enforcement and health agencies on one hand and industry representatives on the other will continue to strengthen controls on obtaining precursor chemicals and the disposal of the toxic by-products of illicit drug production.

The extent to which the use of base methamphetamine will spread throughout the amphetamine-using population is unclear. Interviews conducted by the Bureau with health organisations indicates that base appeals to users, and it is evident that use of the drug is posing a growing financial burden on health, law enforcement and welfare agencies.

Conclusion

The use of amphetamine-type substances continues to increase. Intelligence from Europe and Southeast Asia suggests that the substances are being produced in large quantities. Traditional heroin producers in Southeast Asia have diversified into amphetamine-type substances. A number of nations in the region have recognised the threat this poses to their own people's health and are devoting what resources are available to stem the tide of the drugs.

The extent of the threat posed for Australia is not yet clear. Southeast Asian drug networks use ingenious methods to conceal illicit drugs, as well as their external distribution links. Australia is an affluent country with a relatively large market for amphetamine-type substances. It remains to be seen whether Southeast Asian manufacturers will target us.

Despite the best efforts of Australian law enforcement agencies, large quantities of amphetamine are being produced in this country. The number of clandestine laboratories detected by police services continues to grow. The trend towards smaller laboratories, first identified in Queensland, is now being seen in other jurisdictions. This may be responsible for the emergence of the new form of amphetamine known as 'base'. Base is a potent stimulant generally administered by injection, and it is commonly used in conjunction with heroin. Users report that base's effects are much better than those produced by powder methamphetamine. Health and welfare organisations in Brisbane, where use of base is prevalent, are reporting a number of associated harms such as aggression, paranoia, psychosis, depression and suicide. Further, there are reports of long-lasting withdrawal symptoms following cessation of use. There are a number of implications for the Australian community if the use of base methamphetamine continues to grow.

The National Chemical Industry Code of Conduct in relation to precursor chemicals has been implemented in all States and Territories. The National Best Practice Guidelines for Environmental Health and Safety: Clandestine Drug Laboratories, together with recommendations on the safe handling and disposal of clandestine laboratory waste, will be presented to the Intergovernmental Committee on Drugs for endorsement prior to forwarding to police commissioners for consideration. The Queensland Police Service has developed a model for the conduct of illicit drug market scans; it will provide insights into local markets and strategies for dealing with them more effectively.

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Note

- ¹ Where the weight of a detection was not available, an estimate of 0.29 grams per tablet has been used. This is based on an average weight of tablets seized.