

Phenethylamines



KEY POINTS

- The majority of the world's MDMA ('ecstasy') continues to be produced in Western Europe, with increases noted in Eastern Europe, South East Asia and Canada.
- The majority of MDMA border detections (by number) occurred in the postal stream, whereas the largest proportion (by weight) was detected in sea cargo.
- What appears to be a large reduction in the weight of border detections of MDMA is attributable to the high weight of seizures in the previous reporting year.

MAIN FORMS

Phenethylamines are a group of synthetic drugs which exhibit chemical similarity to amphetamines. As defined in the Australian Bureau of Statistics (ABS) *Australian Standard Classification of Drugs of Concern*, phenethylamines include 3,4-methylenedioxyethylamphetamine (MDMA) or 'ecstasy' and its derivatives (ABS, 2000). MDMA is a central nervous system stimulant and has both hallucinogenic and ephedrine-like effects (Johnson, Maxwell and Leitnerschmidt, 1997). Although chemically related to amphetamine, MDMA is not a derivative and is produced by a different chemical process.

In its base form, MDMA is an oil which can be converted into powder for inclusion into tablets or capsules. MDMA tablets usually feature a symbol or logo from popular culture, such as logos from clothing labels, car manufacturers or other desirable items. Table 6 details common types of phenethylamines used in Australia.

Table 6: Phenethylamines used in Australia

Drug type	Common names	Forms	Method of administration
3,4-methylenedioxyethylamphetamine (MDMA)	XTC, X, Ecstasy, Adam, M & M, eccy, E, Go, Scooby Snacks, hug, beans	Tablet, capsule, powder	Oral, intranasal, smoking, injecting
3,4- methylenedioxyethylamphetamine (MDEA)	Eve	Tablet, capsule	Oral
3,4-methylenedioxyamphetamine (MDA)	Love bug, Crystal, P, Window Pane	Tablet	Oral
N-methyl-1-(1,3-benzodioxol-5-yl)-2-butanamine (MBDB)	Eden	Tablet	Oral
Paramethoxyamphetamine (PMA) ^a	Death, Dr Death, Mitsubishi Double	Tablet, powder (rare)	Oral, intranasal, injecting (rare)
4-bromo-2,5-dimethoxyphenethylamine	Nexus, 2-CB, bromo, TWOs	Tablet (Nexus), blotting paper, powder	Oral, intranasal
4-bromo-2,5-dimethoxyamphetamine (DOB) ^b	DOB, 4-bromo-DMA, bromo	Tablet, blotting paper	Oral
2,5-dimethoxy-4-methylamphetamine (DOM) ^c	DOM, STP	Tablet, blotting paper	Oral
4-methylthioamphetamine (4-MTA)	Flatliner, Golden Eagle	Tablet	Oral

a. PMA has stimulant and hallucinogenic properties. It is an analogue of MDMA with broadly similar effects.

b. Strong effect—low effective dose.

c. Similar dose to DOB.

Source: ACC, Australian Government Analytical Laboratories, South Australia Forensic Science Centre.

INTERNATIONAL TRENDS

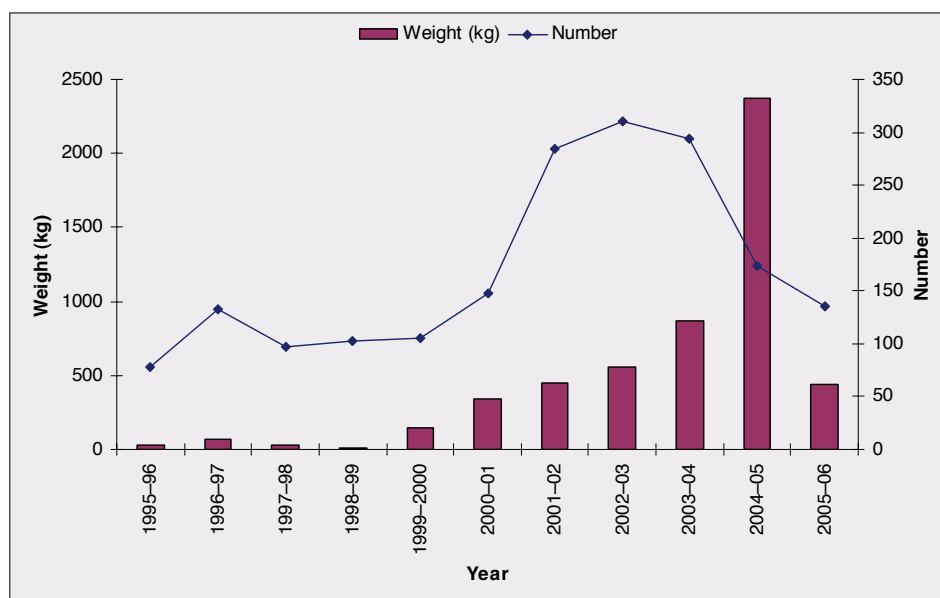
Western Europe, particularly the Netherlands and Belgium, remains the primary manufacturer and supplier of MDMA to the global market. MDMA production has also been identified in Poland, Canada and South East Asia (BINLEA, 2006), with China a predominant source of precursor chemicals for the global market (Devaney, Reid and Baldwin, 2006). One-third of the 36 clandestine laboratories detected in Canada during 2005 were involved in the production of MDMA (BINLEA, 2006). The discovery of a large MDMA and ATS laboratory in Indonesia in November 2005 highlighted the continuing presence of large-scale MDMA production facilities in South East Asia. MDMA trafficking syndicates remain adaptive to law enforcement operations and are continuing in their attempts to avoid detection by shipping MDMA in powder and liquid forms.

DOMESTIC TRENDS

Australian border situation

In comparison with 2004–05, detections of MDMA at the Australian border in 2005–06 fell significantly. The weight detected decreased from 2,375 kilograms to 435 kilograms, a reduction of approximately 82 percent, and in number from 173 to 135 detections, a reduction of 22 percent. This outcome was influenced by the very high baseline set by record MDMA detections in the year 2004–05 (see Figure 8). These included a single detection of over 1.2 tonnes of MDMA tablets (five million tablets) in Melbourne in April 2005.

Figure 8: Number and weight of detections of phenethylamines at the Australian border, 1995–96 to 2005–06 (Source: Australian Customs Service)



Only 14 out of 135 MDMA detections in 2005–06 were above one kilogram. These 14 detections constituted 98 percent of the total weight of MDMA detected at the Australian border. The majority of detections (by number) occurred in the postal stream, whereas the largest proportion (by weight) was detected in sea cargo (see Figures 9 and 10).

Figure 9: Number of detections of phenethylamines at the Australian border, by method of importation, 2005–06 (Source: Australian Customs Service)

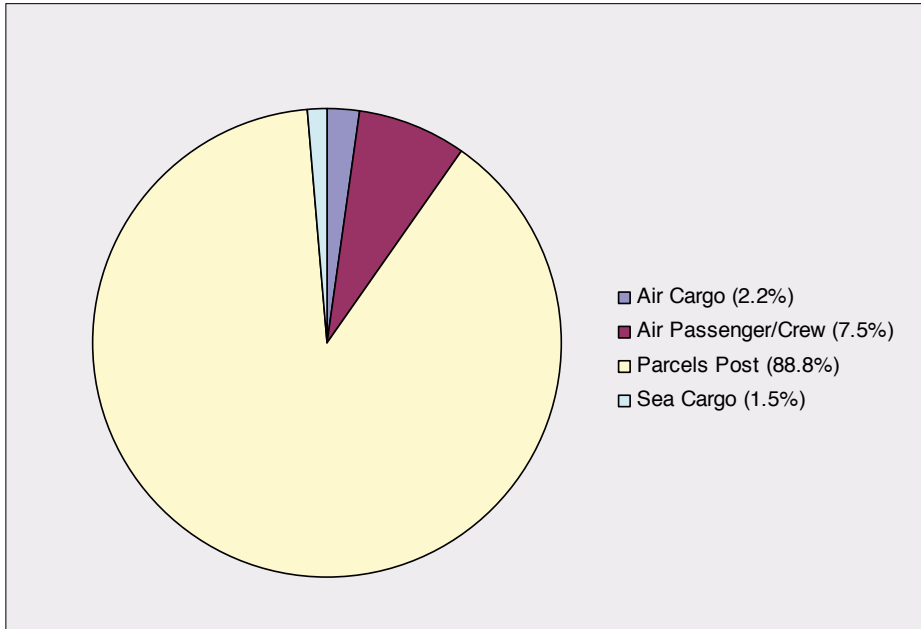
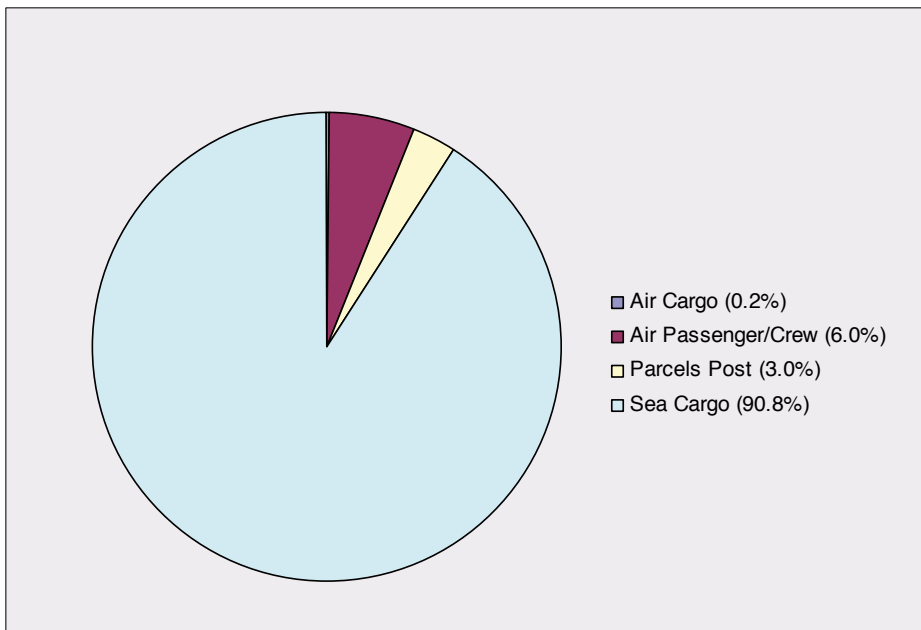


Figure 10: Weight of detections of phenethylamines at the Australian border, by method of importation, 2005–06 (Source: Australian Customs Service)



Significant border detections

Significant border detections of MDMA in 2005–06 included:

- 371 kilograms, or approximately 1.2 million MDMA tablets, concealed in a sea cargo container-load of printer ink, shipped from Canada via Hong Kong to Melbourne, detected on 7 June 2006;
- 23.6 kilograms of bulk MDMA powder, equivalent to approximately 240,000 tablets, concealed in tubular frames of metal furniture shipped by sea cargo from Belgium to Melbourne, detected on 7 September 2005;
- Six air passenger couriers carrying quantities of MDMA tablets, a combined total of 22.9 kilograms (approximately 79,000 tablets), from France, the United Kingdom (UK) and Canada, detected between July 2005 and January 2006 in Sydney and Melbourne; and
- 4.8 kilograms of liquid MDMA solution concealed in wine bottles sent from Belgium in a series of postal articles to addresses in NSW, detected at Sydney on 10 October 2005.

Embarkation points

Countries of embarkation for MDMA shipments in 2005–06 (with weight over one kilogram) were, in weight order, Canada, Belgium, the UK and France. The last three aforementioned embarkation points of attempted importations reflect the traditional Western European origin of MDMA trafficked to Australia. The routing of the largest MDMA importation (371 kilograms) through Hong Kong might simply be a reflection of commercial trade routes, or it could be pointing to an Asian organised crime connection.

It should be noted that embarkation data are affected by air transport connection patterns and location of air traffic hubs and do not necessarily reflect the true origin of drugs.

DOMESTIC MARKET INDICATORS

The UNODC continues to report that Australia has the highest rate of MDMA consumption, per capita, in the world (UNODC, 2006). This consumption is estimated at approximately 100,000 tablets nationally, each weekend (Victoria Police, 2006). MDMA is the third most common illicit drug used in Australia, preceded by cannabis and ATS, and is the second most common recently used illicit drug (AIHW, 2005). Persons aged 20–29 reported the highest levels of consumption, with more than one in five reporting they had used MDMA, and more than one in 10 reporting use in the preceding 12 months (AIHW, 2005).

Historically, the majority of MDMA in Australia has been imported, however, there is evidence of domestic manufacture with a number of clandestine laboratories detected in the last few years. In 2005–06, seven MDMA clandestine laboratories were detected in Australia, all in New South Wales. For more information on clandestine laboratory detections, please refer to the *Amphetamines* chapter.

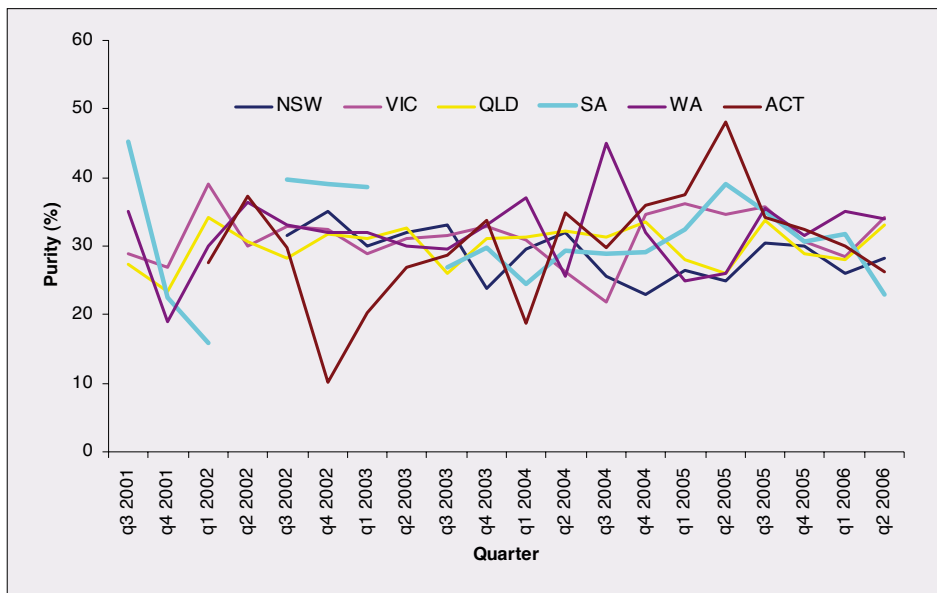
Price

Price data were not available in many jurisdictions during the reporting period for weights above a single MDMA tablet. New South Wales reported prices for all weights, with one tablet priced between \$30 and \$60 which was slightly cheaper than the previous year. Victoria reported the cheapest price per tablet, at \$21. For purchases of more than 1,000 tablets, New South Wales reported a price range of \$7 to \$16 per tablet. Similarly, South Australia and Victoria reported prices of \$15 to \$16 and \$16.50 per tablet respectively for purchases over 1,000 tablets.

Purity

Some tablets sold under the guise of 'ecstasy' may actually contain various additives including methylamphetamine, ketamine, MDA, PMA, MDEA, paracetamol or caffeine, with some tablets containing no MDMA at all. Consequently, the purity of phenethylamines can vary markedly. Within Australia, the median purity of phenethylamines varies within and between jurisdictions, generally between 20 and 40 percent (see Figure 11).

Figure 11: Median purity of phenethylamine samples, 2001-02 to 2005-06



Note: Breaks in the lines in this chart indicate that no seizures were analysed in that quarter.

Availability

According to NDARC research in 2006, the majority of regular MDMA users considered MDMA⁴ as 'very easy' or 'easy' to obtain in all jurisdictions. MDMA was nominated the drug of choice for almost half of the survey respondents, followed by cannabis. Seventy-two percent of respondents were able to purchase other drugs from the same source in conjunction with MDMA (NDARC, 2006).

Since 2000, there has been a steady increase in the proportion of police detainees testing positive to MDMA (Mouzos, Smith and Hind, 2006). Over half of police detainees in 2005 who alleged recent MDMA use tested positive to methylamphetamine. This may suggest that some consumers were not aware of the constituents of the drug consumed (Mouzos, Smith and Hind, 2006). MDMA use within the wider community has increased from one percent in 1991 to three percent in 2004 (AIC, 2006). The highest rates of recent MDMA use are believed to be amongst persons 20–29 years (AIHW, 2005), who also have a tendency to engage in poly-drug use (Stafford, Degenhardt, Dunn, Fischer, George, Johnston, Matthews, Newman, Proudfoot & Weekley, 2006; QCC, 2001).

Seizures and arrests

Many jurisdictions do not differentiate between seizures of phenethylamines and ATS. As a result, it is not possible to provide a breakdown for each jurisdiction. All seizures relating to ATS and phenethylamines are aggregated into the ATS category and reported in the *Amphetamines* chapter.

NATIONAL IMPACT

Australia has the highest rate of MDMA use per capita, supported by some domestic clandestine production and importation of MDMA and precursor chemicals. Although the capacity of users to discern substances has increased, substances other than MDMA, particularly methylamphetamine, will continue to be misrepresented as MDMA. The adaptability of criminal groups diversifying into other drug markets and utilising established trafficking routes will also influence embarkation points for attempted importations. MDMA has traditionally been imported from Western Europe, however, the emergence of shipments from Canada via Hong Kong may suggest possible Asian organised crime involvement. As with attempted ATS importations, crime groups have continued to experiment with concealment methods, attempting to import MDMA in tablet, powder and liquid forms.

⁴ Results of NDARC surveys conducted related to the respondent's knowledge of tablets sold as MDMA, regardless of their actual composition.

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