

AMPHETAMINE-TYPE STIMULANTS

KEY POINTS

- While the number and weight of ATS (excluding MDMA) detected at the Australian border decreased in 2015–16, they are the second highest on record.
- The weight of MDMA detected at the Australian border decreased significantly this reporting period, largely due to a single detection in 2014–15 that weighed 1 917.4 kilograms, accounting for 95.8 per cent of the weight of MDMA detected in 2014–15.
- Drug profiling data of both border and domestic seizures indicates the continued prominence of methylamphetamine manufactured from ephedrine/pseudoephedrine.
- The number of national ATS seizures increased to a record 39 014 in 2015–16. While the weight of ATS seized nationally decreased this reporting period, it is the second highest weight on record.
- There was a record 47 625 national ATS arrests in 2015–16.



MAIN FORMS

The term amphetamine-type stimulants (ATS) refers to a group of psychostimulant drugs that are related to the parent compound amphetamine and include amphetamine, methylamphetamine and 3,4-methylenedioxymethamphetamine (MDMA) (WHO 2016). ATS affect the central nervous system by increasing levels of dopamine, serotonin and noradrenalin in the brain. Table 1 outlines common ATS used in Australia.

TABLE 1: ATS used in Australia

Drug type	Common names	Forms	Method of administration
Amphetamine	Speed, whiz, uppers, goey, louee, dexies, pep pills	White, yellow, pink or brown powder; paste	Oral, intranasal, injection, anal ^a
Dexamphetamine ^b (amphetamine dextro isomer in a pharmaceutical preparation)	Dexies, D-amp, dex	White, round tablets that can have the marking 'D5'	Oral, intranasal, injections, anal ^a
Methylamphetamine	Meth, speed, whiz, fast, uppers, goey, louee, Lou Reed ^c , rabbit ^c , tail ^c , pep pills; in paste form can be referred to as base, pure or wax; in liquid form can be referred to as ox blood, leopard's blood, red speed or liquid red	White, yellow or brown powder, paste, tablets or a red liquid	Oral, intranasal, injection, anal ^a
Crystal methylamphetamine	Ice, dmeth, glass, crystal, batu, shabu (in South East Asia)	Crystalline—resembles crushed ice, particle size variable	Smoking, intranasal, injection
3,4-methylenedioxymethamphetamine (MDMA)	XTC, X, ecstasy, Adam, M&M, eccy, E, go, Scooby snacks, hug, beans	Tablet, powder, capsule, gelta (rare), crystal	Oral, intranasal, smoking, injecting
3,4- methylenedioxyethylamphetamine (MDEA)	Eve	Tablet	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



Drug type	Common names	Forms	Method of administration
Paramethoxyamphetamine (PMA) ^d	Death, Dr Death, Mitsubishi double	Tablet, powder	Oral, intranasal, injecting (rare)
Paramethoxymethylamphetamine (PMMA)	PMMA	Tablet	Oral
4-bromo-2,5-dimethoxyphenethylamine	Nexus, 2-CB, bromo, TWOs	Tablet (Nexus), blotting paper, powder	Oral, intranasal
4-bromo-2,5-dimethoxyamphetamine (DOB)	DOB, 4-bromo-DMA, bromo	Tablet, blotting paper	Oral
2,5-dimethoxy-4-methylamphetamine (DOM)	DOM, STP	Tablet, blotting paper	Oral
4-methylthioamphetamine (4-MTA)	Flatliner, golden eagle	Tablet	Oral

- In tablet form, the drug can be inserted into the anus or the vagina (also known as ‘shafting’ or ‘shelving’) to avoid irritation to the user’s stomach, as commonly occurs when taken orally.
- Dexamphetamine (also known as dextroamphetamine sulphate) is sold in tablet form in Australia for Attention Deficit Hyperactivity Disorder (ADHD) and narcolepsy, in accordance with state and territory laws. It is also used illicitly.
- Terminology noted in Queensland.
- PMA has stimulant and hallucinogenic properties.

Amphetamine and methylamphetamine are central nervous system stimulants which increase levels of dopamine, serotonin and noradrenaline, producing feelings of euphoria, increased alertness and a sense of increased energy. Due to slight structural differences, methylamphetamine produces a stronger nervous system response than amphetamine. Short-term effects of amphetamine and methylamphetamine use may include sleep disorders, anxiety, paranoia, hypertension and tachycardia. Long-term use can result in deficits in memory, decision making and verbal reasoning, reduced immunity, high blood pressure, cardiovascular problems, kidney failure, depression, anxiety and dental problems (ADF 2016; ADF 2016a; EMCDDA 2015; EMCDDA 2015a; PM&C 2015; NIDA 2014).

The most common forms of amphetamine are powder and tablets. Amphetamine can be swallowed, snorted, smoked and less commonly injected. In contrast, methylamphetamine has four common forms—tablet, crystalline (often referred to as ‘ice’), base (also referred to as ‘paste’) and powder (also referred to as ‘speed’). Methylamphetamine can be swallowed, snorted, smoked or injected. The crystalline form of methylamphetamine is considered the most potent form¹ and is generally heated and the vapours inhaled. It can also be injected after being dissolved in water (EMCDDA 2015; EMCDDA 2015a; PM&C 2015; NDARC 2006).

¹ While the crystalline form of methylamphetamine is typically of higher purity, appearance alone is not a reliable indicator of purity. Purity levels may be influenced by a number of factors, including the adulterants used.

MDMA has a chemical structure and effects similar to amphetamine and may also induce hallucinogenic effects. Having stimulant and hallucinogenic effects, MDMA is associated with a wide-range of physical and psychological health impacts. Short-term effects of MDMA use may include impaired cognitive functions, dehydration, increased body temperature, blood pressure and heart rate, nausea, blurred vision and insomnia. Long-term use may lead to cognitive and memory impairment, flashbacks, panic attacks, depression and psychosis. In high doses MDMA can interfere with the body's ability to regulate temperature and can result in liver, kidney or cardiovascular system failure (NIDA 2016; ADF 2016b; EMCDDA 2015b).

MDMA is most commonly sold in tablet form featuring a characteristic impression or logo, with an increasing trend towards the use of MDMA capsules and crystals. MDMA in powder form is also used. While MDMA is most commonly ingested, it can also be snorted, inhaled and injected. MDMA is commonly referred to as 'ecstasy'. Ecstasy may contain a range of other drugs and substances, such as ephedrine, ketamine and caffeine and may contain no MDMA at all. These other drugs may or may not be similar in effect to MDMA and may be highly toxic, such as paramethoxyamphetamine (PMA). As a result the effects of tablets sold as ecstasy are unpredictable and vary greatly due to the unknown content (ADF 2016b; EMCDDA 2015b; CAMH 2012).

INTERNATIONAL TRENDS

Globally, amphetamines remain the second most widely used drugs after cannabis, with amphetamines use appearing stable. Global ATS seizures reached a peak of more than 170 tonnes in 2014 after three years of relative stability. In recent years, methylamphetamine has accounted for the greatest portion of global ATS seizures on an annual basis. East, South-East Asia and North America together account for the majority of global methylamphetamine seizures. North America consistently accounts for the largest proportion of global methylamphetamine seizures, with the large and growing market for crystalline and tablet methylamphetamine in East and South-East Asia seeing reported methylamphetamine seizures in these regions almost quadrupling between 2009 and 2014. Global amphetamine seizures have fluctuated on an annual basis since 2009, from between about 20 and 46 tonnes, while ecstasy seizures more than doubled to 9 tonnes in 2014, compared with between 4 and 5 tonnes seized annually in the period 2009–2013 (UNODC 2016).

Amphetamine and MDMA are the main synthetic stimulants in the European drug market, with relatively small quantities of methylamphetamine seized. This appears to be a particularly dynamic market, with considerable differences in prevalence and patterns of use between countries. Indicators suggest the overall use of methylamphetamine remains relatively low, with amphetamine more widely used and seized. However, there are indicators of diffusion to some central European countries and displacement of amphetamine by methylamphetamine in northern and Baltic drug markets. After a period of relative shortage, recent data indicates the increased availability of high purity MDMA. While the price of MDMA has remained relatively stable, the purity of MDMA in tablets has increased to an all-time high (EMCDDA and Europol 2016; EMCDDA and Europol 2016a).





The majority of synthetic drugs used in the European Union (EU) are produced in the region. In addition to intra-European trafficking, some of these drugs are exported to other regions, including Australia, with the EU also an important transit zone for methylamphetamine produced in Iran and West Africa. In Europe, the Netherlands and Belgium are principal areas for amphetamine and MDMA production, with amphetamine production also occurring in Poland, the Baltic states, Bulgaria and Germany. Traditionally, methylamphetamine production in the EU has been limited to countries in central Europe, primarily the Czech Republic. Recent evidence indicates significant production capacity exists in the Netherlands, with small-scale production also occurring in countries bordering the Czech Republic (EMCDDA and Europol 2016a).

The total number of amphetamine seizures by World Customs Organization (WCO) agencies increased 5.4 per cent, from 556 in 2014 to 586 in 2015. The weight seized decreased 38.6 per cent, from 5 496 kilograms in 2014 to 3 376 kilograms in 2015. The United States (US) accounted for the greatest proportion of both the number and weight of amphetamine seizures in 2015, accounting for 24.7 per cent of the number and 35.4 per cent of the weight. The total number of methylamphetamine seizures by WCO agencies decreased 9.6 per cent, from 2 439 in 2014 to 2 204 in 2015. The weight seized increased 35.7 per cent, from 16 267 kilograms in 2014 to 22 073 kilograms in 2015. The US accounted for the greatest proportion of both the number and weight of methylamphetamine seizures in 2015, accounting for 70.1 per cent of the number and 75.2 per cent of the weight (WCO 2016).

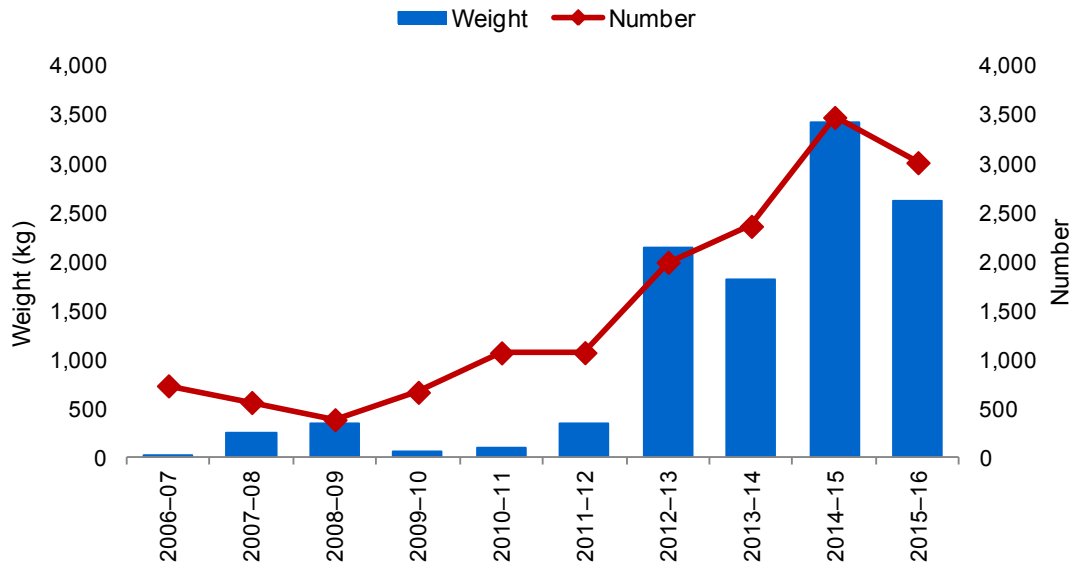
The total number of MDMA seizures by WCO agencies increased 29.3 per cent, from 543 in 2014 to 702 in 2015. The weight seized increased 22.9 per cent, from 1 224 kilograms in 2014 to 1 504 kilograms in 2015. The US accounted for the greatest proportion of the number of MDMA seizures in 2015, accounting for 44.4 per cent, while Turkey accounted for the greatest proportion of the weight of MDMA seized, accounting for 23.9 per cent (WCO 2016).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The Department of Immigration and Border Protection continues to detect large quantities of ATS, particularly methylamphetamine, at the Australian border. The number of ATS (excluding MDMA) detections decreased 13.3 per cent this reporting period, from 3 479 in 2014–15 to 3 017 in 2015–16 and is the second highest number on record. The weight of ATS (excluding MDMA) detected decreased 23.4 per cent, from 3 422.8 kilograms in 2014–15 to 2 620.6 kilograms in 2015–16 and is the second highest weight on record (see Figure 1).

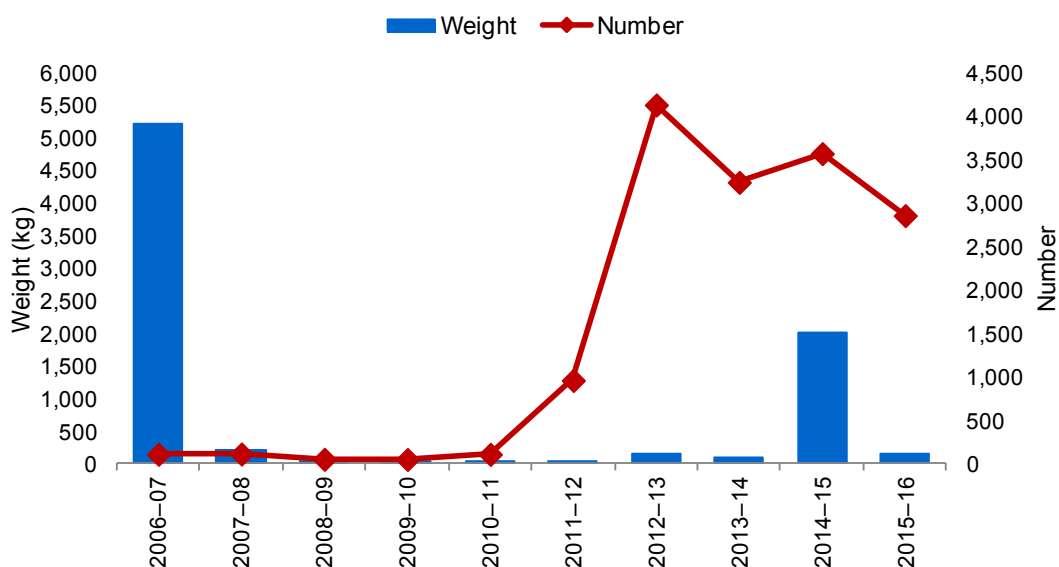
FIGURE 1: Number and weight of ATS (excluding MDMA) detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)



Detections of ATS (excluding MDMA) this reporting period were in liquid, crystal, powder, paste and tablet/capsule form. By weight, methylamphetamine was the predominant drug detected in crystal, powder and liquid form, with crystal methylamphetamine accounting for 64.2 per cent of the weight of ATS (excluding MDMA) detected in 2015–16. In 2015–16, 350 detections of ATS (excluding MDMA) weighed one kilogram or more. With a combined total weight of 2 438.7 kilograms, these 350 detections account for 11.6 per cent of the number of ATS (excluding MDMA) detections and 93.1 per cent of the weight of ATS (excluding MDMA) detected at the Australian border this reporting period.

The number of MDMA detections at the Australian border decreased 20.0 per cent this reporting period, from 3 578 in 2014–15 to 2 864 in 2015–16. The weight of MDMA detected this reporting period decreased significantly, from 2 002.4 kilograms in 2014–15 to 141.5 kilograms in 2015–16. The considerable decrease in the weight of MDMA detected is largely due to a single detection in the previous reporting period, which weighed 1 917.4 kilograms and accounted for 95.8 per cent of the weight of MDMA detected in 2014–15 (see Figure 2).

FIGURE 2: Number and weight of MDMA detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)





Detections of MDMA at the Australian border this reporting period were in crystal, liquid, powder, tablet and paste form. By weight, 34.7 per cent of MDMA detections in 2015–16 were in crystal form, 33.1 per cent in powder form and 17.2 per cent in tablet form. The average weight of MDMA detections continues to remain low, averaging less than 10 grams this reporting period. In 2015–16, 17 detections of MDMA weighed one kilogram or more. With a combined total weight of 81.1 kilograms, these 17 detections account for 0.6 per cent of the number and 57.3 per cent of the weight of MDMA detected at the Australian border this reporting period.

SIGNIFICANT BORDER DETECTIONS

Significant border detections of ATS (excluding MDMA) in 2015–16 include:

- 200.0 kilograms of crystal methylamphetamine detected on 17 June 2016, loaded on a pallet, via air cargo from Taiwan to Sydney
- 195.0 kilograms of methylamphetamine detected on 4 January 2016, concealed in bra bladder inserts, via sea cargo from Hong Kong to Sydney
- 162.0 kilograms of crystal methylamphetamine detected on 15 June 2016, concealed in logs, via sea cargo from Nigeria to Sydney
- 100.0 kilograms of crystal methylamphetamine detected on 20 June 2016, built into the floor of a shipping container, via sea cargo from China to Melbourne
- 72.0 kilograms of crystal methylamphetamine detected on 11 January 2016, concealed in an elastic spool, via sea cargo from China to Melbourne.

These 5 detections have a combined weight of 729.0 kilograms and account for 27.8 per cent of the total weight of ATS (excluding MDMA) detected at the Australian border in 2015–16.

Significant border detections of MDMA in 2015–16 include:

- 10.0 kilograms of MDMA detected on 29 October 2015, concealed in a plastic tub, via air cargo from the Netherlands to Sydney
- 8.3 kilograms of MDMA detected on 18 September 2015, described as bread mix, via international mail from the Netherlands to Melbourne
- 6.0 kilograms of MDMA detected on 27 May 2016, concealed in cereal boxes, via international mail from Germany to Sydney
- 2.0 kilograms of MDMA detected on 24 April 2016, concealed in glass candles, via air cargo from the Netherlands to Brisbane
- 2.0 kilograms of MDMA detected on 12 April 2016, concealed in shampoo bottles, via international mail from the Netherlands to Melbourne.

These 5 detections have a combined weight of 28.3 kilograms and account for 20.0 per cent of the total weight of MDMA detected at the Australian border in 2015–16.

IMPORTATION METHODS

While detections of ATS (excluding MDMA) also occurred in the air cargo, air passenger/crew and sea cargo streams this reporting period, the majority occurred in the international mail stream, in weights ranging from 12.4 kilograms to less than one gram.

In 2015–16, the international mail stream accounted for 86.9 per cent of the number and 19.0 per cent of the weight of ATS (excluding MDMA) detected at the Australian border. Conversely, the sea cargo stream accounted for 1.3 per cent of the number and 46.2 per cent of the weight of ATS (excluding MDMA) detected this reporting period (see Figures 3 and 4).

FIGURE 3: Number of ATS (excluding MDMA) detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)

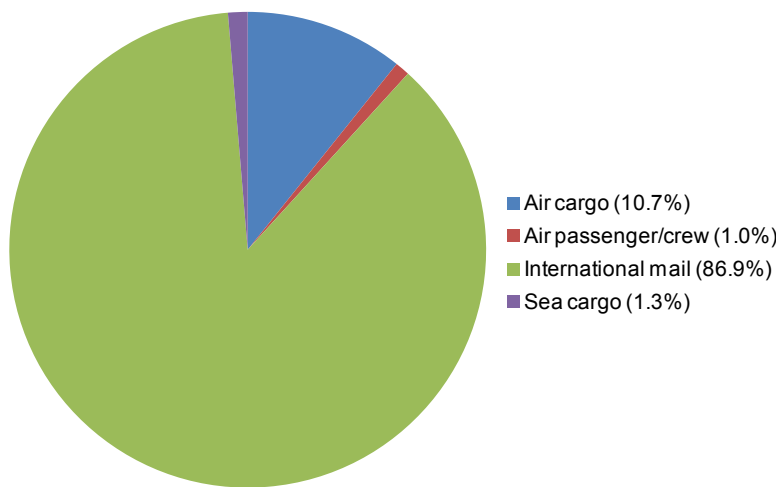
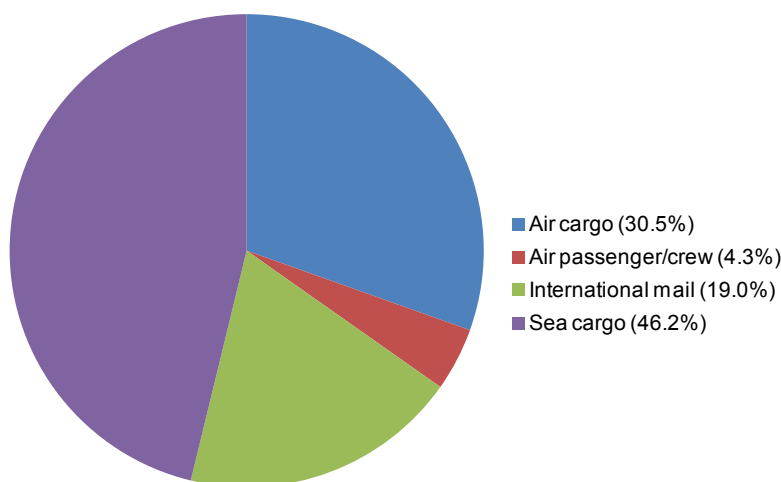


FIGURE 4: Weight of ATS (excluding MDMA) detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)





In 2015–16, detections of MDMA occurred in the international mail, air cargo and air passenger/ crew streams. This reporting period the international mail stream accounted for 99.5 per cent of the number and 83.3 per cent of the weight of MDMA detected at the Australian border. The air cargo stream accounted for 0.3 per cent of the number and 16.5 per cent of the weight of MDMA detected in 2015–16 (see Figures 5 and 6).

FIGURE 5: Number of MDMA detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)

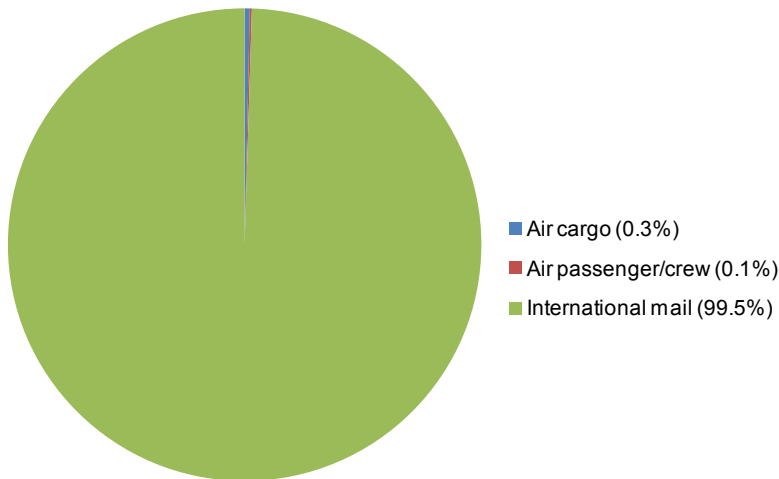
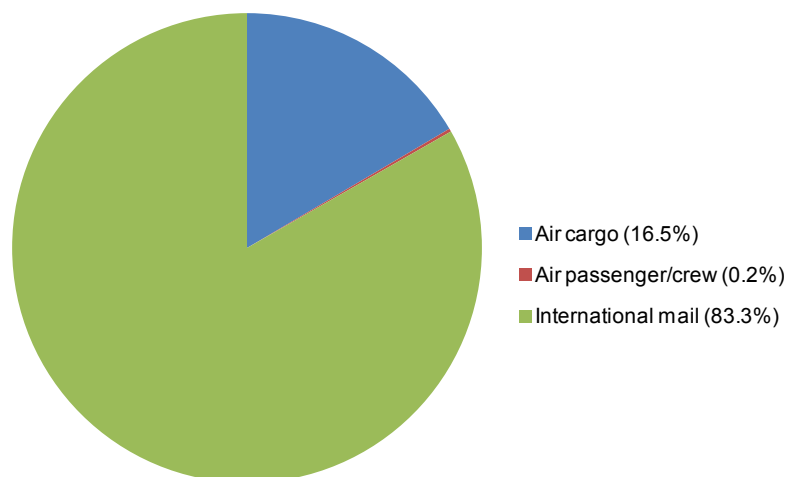


FIGURE 6: Weight of MDMA detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



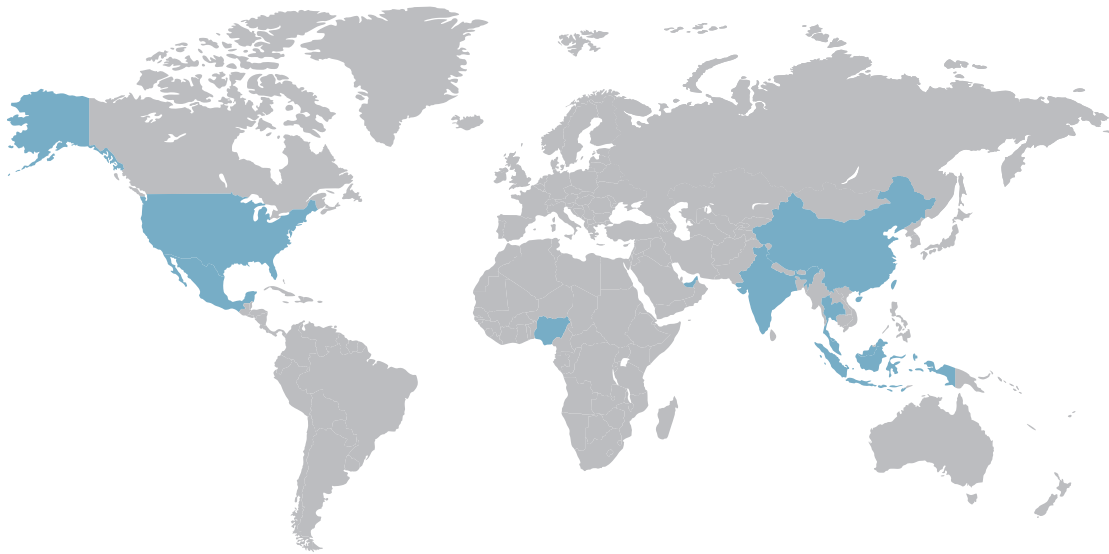
EMBARKATION POINTS

In 2015–16, 49 countries were identified as embarkation points for ATS (excluding MDMA) detected at the Australian border, compared with 48 countries in 2014–15.

By number, the Netherlands was the primary embarkation point for ATS (excluding MDMA) detections in 2015–16, with 457 detections. Other key embarkation points this reporting period include China (including Hong Kong; 408 detections), the United Kingdom (UK; 398 detections), Singapore (272 detections), Germany (201 detections), India (188 detections), Thailand (169 detections), Malaysia (143 detections), Canada (142 detections) and the US (136 detections). Combined, these 10 embarkation points account for 83.3 per cent of the number of ATS (excluding MDMA) detections at the Australian border in 2015–16.

By weight, China (including Hong Kong; 1 458.7 kilograms), Taiwan (289.2 kilograms) and Nigeria (222.0 kilograms) were the most significant embarkation points for ATS (excluding MDMA) detected at the Australian border this reporting period. Combined, these 3 embarkation points account for 75.2 per cent of the weight of ATS (excluding MDMA) detected at the Australian border in 2015–16 (see Figure 7).

FIGURE 7: Key embarkation points for ATS (excluding MDMA) detections, by weight, at the Australian border, 2015–16



Top 10 embarkation points by weight: China (including Hong Kong), Taiwan, Nigeria, US, Mexico, Malaysia, Indonesia, India, Thailand and United Arab Emirates.

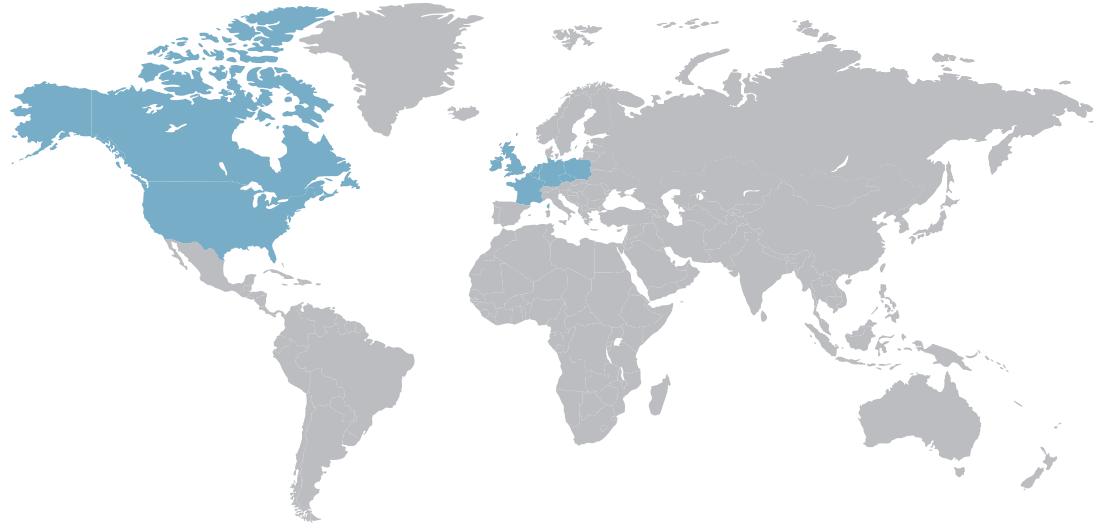
In 2015–16, 29 countries were identified as embarkation points for MDMA detected at the Australian border, compared with 30 countries in 2014–15.

By number, the Netherlands was the primary embarkation point for MDMA detections in 2015–16, with 1 132 detections. Other key embarkation points this reporting period include the UK (986 detections), Germany (359 detections), Belgium (111 detections) and Canada (105 detections). Combined, these 5 embarkation points account for 94.0 per cent of the number of MDMA detections at the Australian border in 2015–16.

By weight, the Netherlands (80.2 kilograms), Germany (27.0 kilograms) and the UK (21.9 kilograms) were the most significant embarkation points for MDMA detected at the Australian border this reporting period. Combined, these 3 embarkation points account for 91.3 per cent of the weight of MDMA detected at the Australian border in 2015–16 (see Figure 8).



FIGURE 8: Key embarkation points for MDMA detections, by weight, at the Australian border, 2015–16



Top 10 embarkation points by weight: Netherlands, Germany, UK, Belgium, Ireland, Poland, France, Canada, US and Czech Republic.

DRUG PROFILING

The Australian Federal Police (AFP) Forensic Drug Intelligence (FDI) team operates a forensic drug profiling capability through the National Measurement Institute (NMI), which enables the identification of the synthetic route of synthesis for samples of methylamphetamine and MDMA submitted from seizures made at the Australian border. The capability also allows for comparisons within and between seizures to identify distinct batches of drugs, the origin of drugs, or to demonstrate links between groups involved in illicit drug manufacture or trafficking. The following data relate to seizures investigated by the AFP between 2010 and June 2016 from which samples were submitted to the NMI for routine analysis and profiling.²

Consistent with previous years, ephedrine/pseudoephedrine (Eph/PSE) remain the dominant precursors for methylamphetamine seized at the border (see Tables 2 and 3). In 2015 there was an increase of the use of P2P as a precursor. This can be attributed to a large single seizure (nearly 500 kilograms) of methylamphetamine dissolved in liquid. A related seizure of methylamphetamine dissolved in liquid was seized in January 2016. This seizure was smaller in weight (164 kilograms) and was also analysed to have been manufactured from P2P.

In 2015, there were 252 seizures of methylamphetamine representing a total weight of 1 841 kilograms, a decrease in both number and bulk weight compared with 2014. Data from Jan–Jun 2016 indicates a sharp increase in the bulk weight of methylamphetamine seized compared to 2015. In the first six months of 2016 there were 37 seizures of methylamphetamine, totalling nearly 1.8 tonnes. Analysis data to date shows a continuation of the use of Eph/PSE as a precursor in the manufacture of methylamphetamine destined for the Australian market. The majority of methylamphetamine seized in Australia originates from China and its provinces, with profiling showing that Eph/PSE remains the preferred precursor in that region.

² Profiling data relate to seizures investigated by the AFP between 2010 to June 2016, and from which samples were submitted to the National Measurement Institute for routine analysis and profiling. For all reporting years, the data represents a snapshot across the applicable reporting period. These figures cannot reflect seizures that have not been submitted for forensic examination due to prioritisation of law enforcement resources or those that have passed through the border undetected. Certain seizures/samples, such as those containing swabs or trace material, have been omitted from the analysis as they are not amenable to chemical profiling. It is difficult to extrapolate the impact of any observed border trends on drugs reaching consumers i.e. street level seizures in Australia but samples from selected state and territory jurisdictions are submitted for chemical profiling as part of the Enhanced National Intelligence Picture on Illicit Drugs (ENIPID) project.

TABLE 2: Synthetic route of manufacture of methylamphetamine samples as a proportion of analysed AFP border seizures classified by precursor, 2010–June 2016³
 (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2016	78.3	10.4	11.3
2015	77.0	18.6	4.4
2014	77.9	13.8	8.3
2013	66.9	23.2	9.9
2012	71.8	19.1	9.1
2011	56.8	13.6	29.6
2010	80.4	5.9	13.7

TABLE 3: Synthetic route of manufacture of methylamphetamine samples as a proportion of total bulk weight of analysed AFP border seizures classified by precursor, 2010–June 2016⁴
 (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2016	62.1	1.4	36.5
2015	65.7	29.4	4.9
2014	48.0	5.5	46.5
2013	76.4	14.7	8.9
2012	72.2	27.8	–
2011	35.6	62.8	1.6
2010	48.5	1.8	49.7

The Enhanced National Intelligence Picture on Illicit Drugs (ENIPID) project extends this profiling to include state and territory seizures involving heroin, methylamphetamine, MDMA and cocaine. This enables detection of similarities between supply routes into different jurisdictions; links between different criminal groups; as well as comparison of trends between jurisdictions, including importations seized and profiled from the border.

Both Western Australia Police and the New South Wales Police Force continue to be the largest contributors to the ENIPID project—combined they account for 70.4 per cent of all methylamphetamine samples submitted in 2015.

Mirroring the border data, methylamphetamine manufactured from Eph/PSE continued to account for the greatest proportion of analysed ENIPID cases and samples in 2015 (see Tables 4 and 5). Data from the first six months of 2016 indicates a continuation of this trend. In 2015 there were 1 337 samples of methylamphetamine submitted for analysis; an increase from the 478 submitted samples in 2014. For the first six months of 2016 there have been 179 samples of methylamphetamine submitted for profiling through the ENIPID project.

³ This data may also include seizures destined for Australia which occurred offshore.

⁴ This data may also include seizures destined for Australia which occurred offshore.





TABLE 4: Synthetic route of manufacture of methylamphetamine ENIPID samples as a proportion of analysed jurisdictional samples, classified by precursor, 2010–June 2016
(Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Jurisdiction	Synthetic Route			Total %
		Eph/PSE %	P2P %	Mixed/ Unclassified %	
Jan–Jun 2016	ACT	2.0	–	–	2.0
	NSW	50.8	4.0	9.2	64.0
	NT	16.2	0.7	0.3	17.2
	QLD	–	–	–	–
	SA	4.3	1.3	2.0	7.6
	VIC	4.3	1.3	0.6	6.2
	WA	3.0	–	–	3.0
Total		80.6	7.3	12.1	100
2015	ACT	1.1	–	–	1.1
	NSW	30.5	2.3	2.0	34.8
	NT	5.1	0.5	–	5.6
	QLD	–	–	–	–
	SA	6.8	0.6	1.0	8.4
	TAS	0.1	–	–	0.1
	VIC	10.2	0.1	0.4	10.7
WA	34.9	1.9	2.5	39.3	
Total		88.7	5.4	5.9	100
2014	NSW	31.4	3.9	3.1	38.4
	NT	3.7	0.9	0.4	5.0
	QLD	–	–	0.1	0.1
	SA	2.4	1.6	1.2	5.2
	TAS	0.8	–	0.5	1.3
	VIC	1.2	–	0.3	1.5
	WA	38.9	4.8	4.8	48.5
Total		78.4	11.2	10.4	100
2013	NSW	28.4	4.5	0.9	33.8
	NT	3.3	0.2	0.9	4.5
	TAS	2.4	0.2	–	2.6
	VIC	–	0.2	–	0.2
	WA	40.7	10.9	7.3	58.9
Total		74.7	16.1	9.2	100
2012	ACT	4.7	–	–	4.7
	NSW	38.2	0.6	6.2	45.0
	NT	7.9	–	0.3	8.2
	TAS	0.6	–	–	0.6
	WA	34.4	4.4	2.7	41.5
Total		85.8	5.0	9.2	100
2011	NSW	13.7	0.9	2.4	17.0
	NT	5.7	0.5	–	6.2
	TAS	2.4	–	–	2.4
	WA	46.0	1.9	26.5	74.4
Total		67.8	3.3	28.9	100

Note: Due to a lack of available data, some samples were classified based on the sample collection date in place of the sample seizure date.

TABLE 5: Synthetic route of manufacture of methylamphetamine ENIPID samples as a proportion of analysed jurisdictional cases, classified by precursor, 2010–June 2016
 (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Jurisdiction	Synthetic Route			Total %
		Eph/PSE %	P2P %	Mixed/ Unclassified %	
Jan–Jun 2016	ACT	2.2	–	–	2.2
	NSW	53.1	4.5	10.1	67.7
	NT	12.8	–	0.6	13.4
	QLD	–	–	–	–
	SA	4.5	1.1	2.2	7.8
	VIC	3.3	1.1	1.1	5.5
	WA	3.4	–	–	3.4
Total		79.3	6.7	14.0	100
2015	ACT	1.8	–	–	1.8
	NSW	31.2	2.2	3.4	36.8
	NT	4.8	0.4	–	5.2
	QLD	–	–	–	–
	SA	8.9	0.7	1.1	10.7
	VIC	11.3	–	0.6	11.9
	WA	29.1	0.7	3.8	33.6
Total		87.1	4.0	8.9	100
2014	NSW	31.0	3.6	4.6	39.2
	NT	4.6	0.6	0.8	6.0
	QLD	–	–	0.2	0.2
	SA	2.3	1.9	1.7	5.9
	TAS	1.3	–	0.6	1.9
	VIC	1.9	–	0.4	2.3
	WA	35.9	4.4	4.2	44.5
Total		77.0	10.5	12.5	100
2013	NSW	33.9	4.6	1.7	40.2
	NT	4.6	0.4	1.7	6.7
	TAS	2.9	–	0.4	3.3
	VIC	–	0.4	–	0.4
	WA	33.5	6.7	9.2	49.4
Total		74.9	12.1	13.0	100
2012	ACT	3.5	–	–	3.5
	NSW	41.3	0.5	5.5	47.3
	NT	11.4	–	0.5	11.9
	TAS	1.0	–	–	1.0
	WA	26.8	5.0	4.5	36.3
Total		84.0	5.5	10.5	100
2011	NSW	13.5	1.8	4.5	19.8
	NT	8.1	1.0	–	9.1
	TAS	4.5	–	–	4.5
	WA	32.4	2.7	31.5	66.6
Total		58.5	5.5	36.0	100

Note: Due to a lack of available data, some samples were classified based on the sample collection date in place of the sample seizure date.



Since 2012 there has been an ongoing dominance of MDMA manufactured using reductive amination via platinum hydrogenation. This trend continued in 2015, with 83.0 per cent of all seizures profiled involving reductive amination using platinum hydrogenation (see Tables 6 and 7). The majority of MDMA seized originated from Europe. Data from Jan–Jun 2016 shows an increase in MDMA that could not be classified, although overall seizure numbers and weights are relatively low in this period, so care should be taken in interpreting these preliminary results.

TABLE 6: Synthetic route of manufacture of MDMA samples as a proportion of analysed AFP border seizures, 2010–June 2016⁵ (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Reductive Amination					
	Unclassified %	Borohydride %	Platinum Hydrogenation %	Palladium Hydrogenation %	Aluminium Amalgam %	Mixed/ Unclassified %
Jan–Jun 2016	13.5	5.4	62.2	–	–	18.9
2015	–	2.1	83.0	–	–	14.9
2014	2.3	9.3	79.1	2.3	–	7.0
2013	7.8	14.1	71.9	–	–	6.2
2012	14.0	8.0	70.0	–	–	8.0
2011	–	58.3	16.7	–	8.3	16.6
2010	–	66.7	22.2	–	–	11.1

TABLE 7: Synthetic route of manufacture of MDMA samples as a proportion of total bulk weight of analysed AFP border seizures, 2010–June 2016⁶ (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Reductive Amination					
	Unclassified %	Borohydride %	Platinum Hydrogenation %	Palladium Hydrogenation %	Aluminium Amalgam %	Mixed/ Unclassified %
Jan–Jun 2016	34.2	9.9+	48.6	–	–	7.3
2015	–	0.01	64.9	–	–	35.1
2014	<0.1	1.3	98.0	<0.1	–	<0.1
2013	94.7	3.3	1.7	–	–	0.3
2012	0.9	96.7	2.4	–	–	–
2011	–	70.6	26.6	–	2.0	0.8
2010	–	99.9	0.1	–	–	<0.1

In 2015, Western Australia Police and Victoria Police both submitted a quarter of the MDMA samples, with the New South Wales Police Force contributing a further 39.3 per cent of MDMA samples to the ENIPID project. Mirroring the border data, the majority of state-based MDMA samples and cases show the ongoing dominance of MDMA manufactured using reductive amination via platinum hydrogenation (see Tables 8 and 9).

⁵ This data may also include seizures destined for Australia which occurred offshore.

⁶ This data may also include seizures destined for Australia which occurred offshore.

TABLE 8: Synthetic route of manufacture of MDMA ENIPID samples as a proportion of analysed jurisdictional samples, 2011–June 2016 (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Jurisdiction	Reductive Amination						Total %
		Unclassified %	Aluminium Amalgam %	Borohydride %	Palladium Hydrogenation %	Platinum Hydrogenation %	Mixed/Unclass %	
Jan–Jun 2016	ACT	0.8	–	–	–	2.3	–	3.1
	NSW	12.1	3.0	2.3	–	24.2	–	41.6
	NT	7.6	–	–	–	18.9	–	26.5
	QLD	–	–	–	–	–	–	–
	SA	1.5	0.8	2.3	–	–	–	4.6
	TAS	–	–	–	–	–	–	–
	VIC	3.0	1.5	3.0	–	9.9	3.0	20.4
	WA	2.3	–	–	–	1.5	–	3.8
	Total	27.3	5.3	7.6	–	56.8	3.0	100
2015	ACT	–	–	–	–	1.8	–	1.8
	NSW	4.0	4.0	1.8	–	24.3	0.7	34.8
	NT	0.4	0.7	–	–	4.0	–	5.1
	QLD	–	–	–	–	–	–	–
	SA	1.1	0.7	0.7	–	5.5	–	8.0
	TAS	–	–	–	–	–	–	–
	VIC	6.9	1.1	0.7	1.8	14.1	–	24.6
	WA	1.8	2.5	0.7	–	19.6	1.1	25.7
	Total	14.2	9.0	3.9	1.8	69.3	1.8	100
2014	ACT	–	0.9	–	–	–	–	0.9
	NSW	1.8	5.0	2.3	–	13.2	1.4	23.7
	NT	–	–	–	–	3.6	–	3.6
	QLD	–	–	–	–	3.6	–	3.6
	SA	2.3	–	–	–	11.3	–	13.6
	TAS	–	–	–	–	0.9	–	0.9
	VIC	0.9	–	2.7	–	6.8	0.5	10.9
	WA	–	–	0.5	–	42.3	–	42.8
	Total	5.0	5.9	5.5	–	81.7	1.9	100
2013	NSW	8.0	6.7	–	1.3	21.3	–	37.3
	NT	1.3	–	–	–	–	–	1.3
	QLD	–	–	–	–	8.0	–	8.0
	VIC	1.3	–	1.3	–	16.0	–	18.6
	WA	4.0	–	17.3	–	10.7	2.8	34.8
	Total	14.6	6.7	18.6	1.3	56.0	2.8	100
2012	ACT	–	2.7	1.3	–	1.3	–	5.3
	NSW	10.7	14.7	16.0	–	24.0	–	65.4
	NT	–	–	1.3	–	1.3	–	2.6
	WA	5.4	–	9.3	–	12.0	–	26.7
	Total	16.1	17.4	27.9	–	38.6	–	100
2011	NSW	15.4	–	–	–	15.4	–	30.8
	NT	15.4	–	–	–	15.4	–	30.8
	WA	–	30.8	7.6	–	–	–	38.4
	Total	30.8	30.8	7.6	–	30.8	–	100

Note: Due to a lack of available data, some samples were classified based on the sample collection date in place of the sample seizure date.



TABLE 9: Synthetic route of manufacture of MDMA ENIPID samples as a proportion of analysed jurisdictional cases, 2011–June 2016 (Source: Australian Federal Police, Forensic Drug Intelligence)

Year	Jurisdiction	Reductive Amination						Mixed/ Unclass %	Total %
		Unclassified %	Aluminium Amalgam %	Borohydride %	Palladium Hydrogenation %	Platinum Hydrogenation %			
Jan–Jun 2016	ACT	1.6	–	–	–	1.6	–	3.2	
	NSW	9.7	–	1.6	–	30.7	9.7	51.7	
	NT	3.2	–	–	–	4.9	1.6	9.7	
	QLD	–	–	–	–	–	–	–	
	SA	3.2	1.6	3.2	–	–	–	8.0	
	TAS	–	–	–	–	–	–	–	
	VIC	1.6	3.2	3.2	–	8.1	6.5	22.6	
	WA	3.2	–	–	–	1.6	–	4.8	
	Total	22.5	4.8	8.0	–	46.9	17.8	100	
2015	ACT	–	–	–	–	2.5	–	2.5	
	NSW	5.1	5.7	1.9	–	22.8	3.8	39.3	
	NT	0.6	0.6	–	–	5.1	–	6.3	
	QLD	–	–	–	–	–	–	–	
	SA	1.9	0.6	0.6	–	5.1	0.6	8.8	
	TAS	–	–	–	–	–	–	–	
	VIC	1.9	–	0.6	0.6	8.9	4.5	16.5	
	WA	1.9	3.2	0.6	–	19.0	1.9	26.6	
	Total	11.4	10.1	3.7	0.6	63.4	10.8	100	
2014	ACT	–	0.7	–	–	–	–	0.7	
	NSW	2.6	3.3	0.7	–	17.8	2.0	26.4	
	NT	–	–	–	–	3.9	–	3.9	
	QLD	–	–	–	–	5.3	–	5.3	
	SA	3.3	–	–	–	15.8	–	19.1	
	TAS	–	–	–	–	0.7	–	0.7	
	VIC	1.3	–	3.3	–	7.2	1.3	13.1	
	WA	–	–	–	–	30.2	0.6	30.8	
	Total	7.2	4.0	4.0	–	80.9	3.9	100	
2013	NSW	7.9	6.3	–	1.6	20.7	1.6	38.1	
	NT	1.6	–	–	–	–	–	1.6	
	QLD	–	–	–	–	9.5	–	9.5	
	VIC	1.6	–	1.6	–	19.0	–	22.2	
	WA	3.2	–	9.5	–	11.1	4.8	28.6	
	Total	14.3	6.3	11.1	1.6	60.3	6.4	100	
2012	ACT	–	1.9	–	–	–	1.9	3.8	
	NSW	9.6	13.5	15.4	–	21.2	9.6	69.3	
	NT	–	–	1.9	–	1.9	–	3.8	
	WA	1.9	–	9.6	–	11.6	–	23.1	
	Total	11.5	15.4	26.9	–	34.7	11.5	100	
2011	NSW	25.0	–	–	–	25.0	–	50.0	
	NT	–	–	–	–	12.5	12.5	25.0	
	WA	–	12.5	12.5	–	–	–	25.0	
	Total	25.0	12.5	12.5	–	37.5	12.5	100	

Note: Due to a lack of available data, some samples were classified based on the sample collection date in place of the sample seizure date.



DOMESTIC MARKET INDICATORS

The number of clandestine laboratories detected nationally decreased this reporting period, from 667 in 2014–15 to 575 in 2015–16. Of the 575 clandestine laboratories detected in 2015–16, the majority were producing ATS (excluding MDMA). Although the number of laboratories detected this reporting period manufacturing MDMA decreased, from 18 in 2014–15 to 17 in 2015–16, the number remains high (see *Clandestine laboratories and precursors* chapter).

According to the 2013 National Drug Strategy Household Survey (NDSHS), 7.0 per cent of the Australian population aged 14 years or older reported using meth/amphetamines at least once in their lifetime. In the same survey, 2.1 per cent reported recent⁷ meth/amphetamines use. These figures remain unchanged from those reported in 2010 (AIHW 2014).

In a 2015 national study of regular injecting users, the proportion of respondents reporting the recent⁸ use of any form of methylamphetamine increased, from 70.0 per cent in 2014 to 72.0 per cent in 2015. Within this regular drug injecting user population, the reported median days of methylamphetamine use in the six months preceding interview remained stable at 24 days. Early findings from the 2016 study indicate the proportion of respondents reporting the recent use of any form of methylamphetamine increased to 75.0 per cent, with the reported median days of methylamphetamine use in the six months preceding interview increasing to 36.5 days (Stafford & Breen 2016; Stafford et al 2016).

Within this user population, the proportion of respondents reporting the recent use of crystal methylamphetamine increased, from 61.0 per cent in 2014 to 67.0 per cent in 2015. Early findings from the 2016 study indicate this has further increased to 73.0 per cent. The proportion of respondents reporting the recent use of speed decreased, from 30.0 per cent in 2014 to 25.0 per cent in 2015. Early findings from the 2016 study indicate this further decreased to 20.0 per cent. The proportion of respondents reporting the recent use of methylamphetamine base decreased, from 12.0 per cent in 2014 to 10.0 per cent in 2015. Early findings from the 2016 study indicate this has further decreased to 8.0 per cent (see Figure 9; Stafford & Breen 2016; Stafford et al 2016).

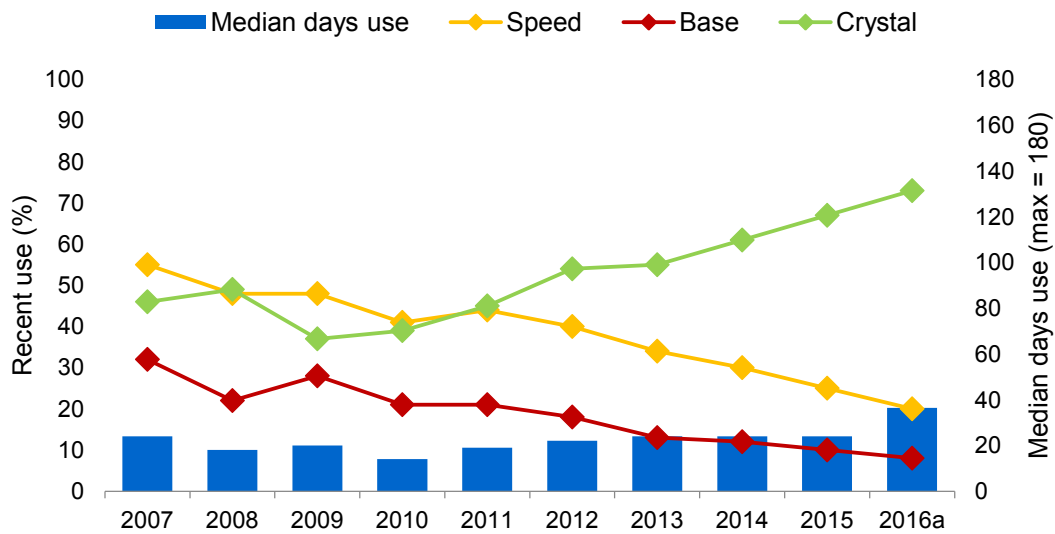
⁷ In the NDSHS, recent use refers to reported use in the 12 months preceding interview.

⁸ In both the Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS), recent use refers to reported use in the six months preceding interview.





FIGURE 9: Proportion of a regular injecting drug user population reporting recent use of speed, base or crystal and median days of use of any form of methylamphetamine, 2007 to 2016 (Source: National Drug and Alcohol Research Centre)



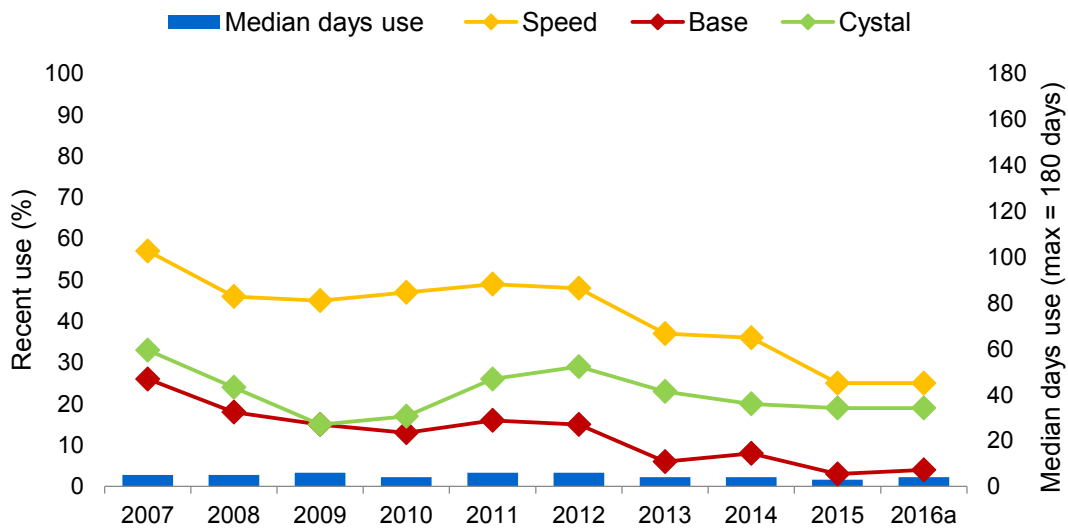
a. Reported figures for 2016 are preliminary.

In the same 2015 study, the proportion of respondents reporting methylamphetamine as their drug of choice increased, from 24.0 per cent in 2014 to 25.0 per cent in 2015. Early findings from the 2016 study indicate this has further increased to 29.0 per cent (Stafford & Breen 2016; Stafford et al 2016).

According to the Australian Needle and Syringe Program Survey (ANSPS), the prevalence of respondents reporting methylamphetamine as the drug last injected increased, from 27.0 per cent in 2011 to 33.0 per cent in 2014. In 2014, methylamphetamine surpassed heroin (31.0 per cent) as the most commonly reported drug last injected nationally. The prevalence of respondents reporting methylamphetamine as the drug last injected further increased to 36.0 per cent in 2015 and continues to remain higher than that reported for heroin (Memedovic et al 2016).

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting the recent use of any form of methylamphetamine decreased, from 47.0 per cent in 2014 to 38.0 per cent in 2015. Early findings from the 2016 study indicate this figure has remained stable at 38.0 per cent. Speed remained the most common form of methylamphetamine used. Within this user population, the proportion of respondents reporting the recent use of speed decreased, from 36.0 per cent in 2014 to 25.0 per cent in 2015. Early findings from the 2016 study indicate this has remained stable at 25.0 per cent. The proportion of respondents reporting the recent use of crystal decreased, from 20.0 per cent in 2014 to 19.0 per cent in 2015. Early findings from the 2016 study indicate this has remained stable at 19.0 per cent. The proportion of respondents reporting the recent use of base decreased, from 8.0 per cent in 2014 to 3.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 4.0 per cent. Within this regular ecstasy user population, the reported median days of methylamphetamine use in the six months preceding interview in 2015 was 3 days. Early findings from the 2016 study indicate the reported median days of methylamphetamine use has increased to 4 days (see Figure 10; Sindicich et al 2016; Stafford et al 2016).

FIGURE 10: Proportion of a regular ecstasy drug user population reporting recent use of speed, base or crystal and median days of use of any form of methylamphetamine, 2007 to 2016 (Source: National Drug and Alcohol Research Centre)



a. Reported figures for 2016 are preliminary.

According to the 2013 NDSHS, 10.9 per cent of the Australian population aged 14 years or older reported using ecstasy at least once in their lifetime, an increase from the 10.3 per cent reported in 2010. In the 2013 survey, 2.5 per cent reported recent ecstasy use, a decrease from the 3.0 per cent reported in 2010 (AIHW 2014).

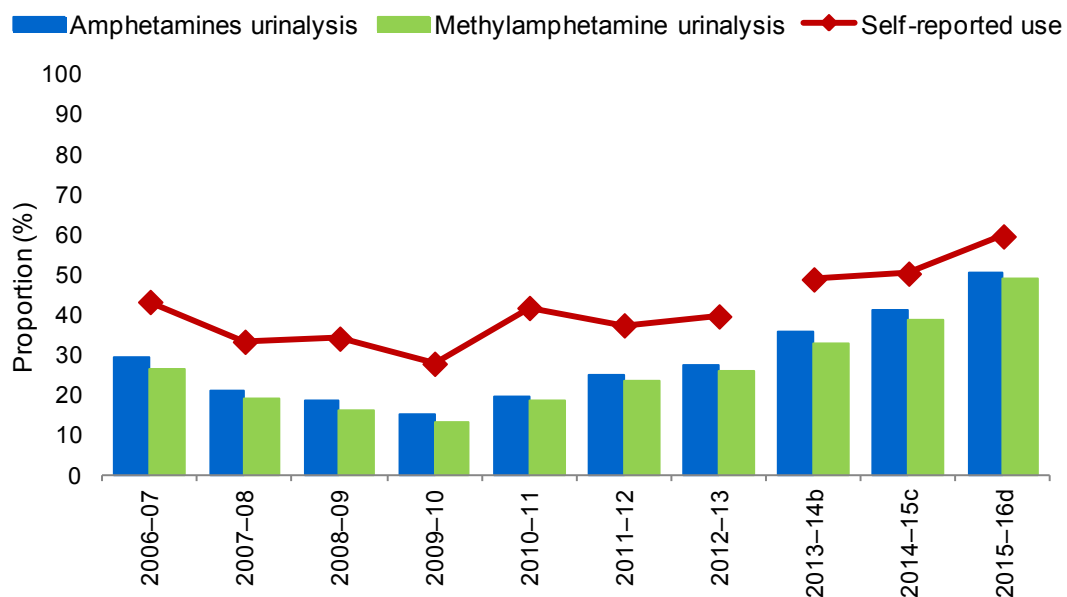
In a 2015 national study of regular ecstasy users, the reported median days of ecstasy use (any form) in the six months preceding interview decreased, from 13 days in 2014 to 12 days in 2015. Early findings from the 2016 study indicate this has increased to 13 days. Within this user population, the proportion of respondents reporting the recent use of ecstasy tablets decreased, from 92.0 per cent in 2014 to 85.0 in 2015. Early findings from the 2016 study indicate this has decreased to 82.0 per cent. The proportion of respondents reporting the recent use of ecstasy crystals increased, from 49.0 per cent in 2014 to 52.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 57.0 per cent. The proportion of respondents reporting the recent use of ecstasy capsules increased, from 53.0 per cent in 2014 to 60.0 per cent in 2015. Early findings from the 2016 study indicate this remains unchanged. The proportion of respondents reporting the recent use of ecstasy powder decreased, from 24.0 per cent in 2014 to 22.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 21.0 per cent (Sindicich et al 2016; Stafford et al 2016).





The Drug Use Monitoring in Australia (DUMA) program, which examines drug use and offending patterns among police detainees, comprises an interviewer-assisted self-report survey and the voluntary provision of a urine sample which is subjected to urinalysis to detect licit and illicit drug use.⁹ The proportion of detainees testing positive¹⁰ via urinalysis for amphetamines¹¹ increased, from 40.9 per cent in 2014–15 to 50.5 per cent in 2015–16, the highest percentage reported in the last decade. This increase in amphetamines use is largely due to an increase in the proportion of detainees testing positive for methylamphetamine, from 38.7 per cent in 2014–15 to 49.0 per cent in 2015–16 (see Figure 11). The proportion of detainees testing positive for methylamphetamine continues to be higher than the proportion testing positive for MDMA, heroin, cocaine, benzodiazepines and opiates (excluding heroin). In 2015–16, the proportion of detainees testing positive for methylamphetamine was higher than the proportion testing positive for cannabis (44.4 per cent). In 2015–16, 59.7 per cent of detainees self-reported recent¹² methylamphetamine use, an increase from the 50.4 per cent reported in 2014–15.

FIGURE 11: National proportion of detainees testing positive for amphetamines/ methylamphetamine compared with self-reported recent use, 2006–07 to 2015–16 (Source: Australian Institute of Criminology)



- a. From 2013–14, the self-report question changed from including ‘amphetamine/speed/methylamphetamine’ to ‘methylamphetamine/speed/ice’.
- b. Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.
- c. Urine was collected in the third quarter of 2014 and the first and second quarter of 2015.
- d. Urine was collected in the third quarter of 2015 and the first and second quarter of 2016.

9 Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

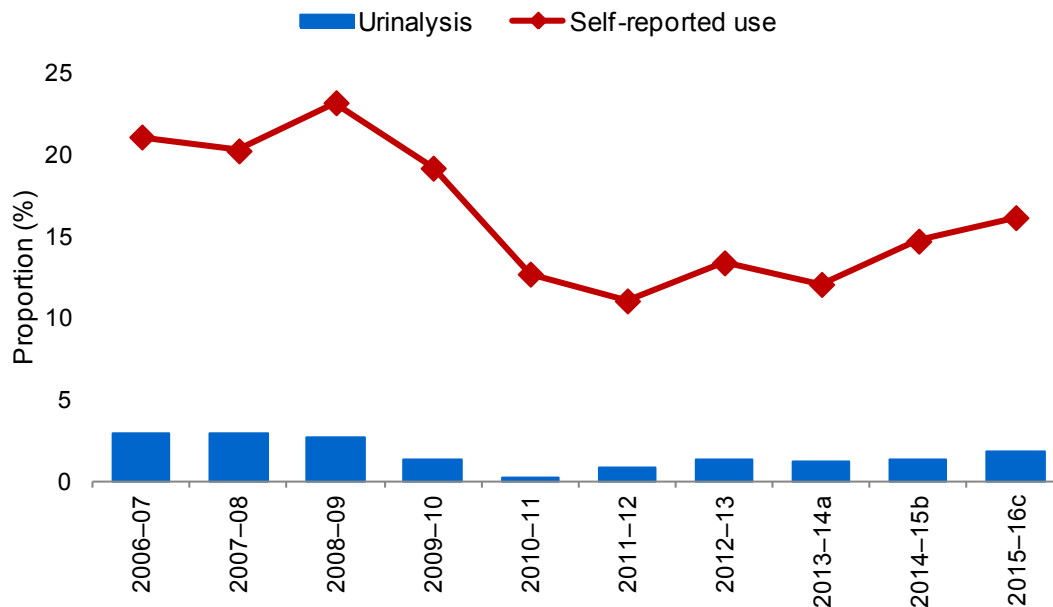
10 Amphetamines and their metabolites can be detected in urine up to 2 to 4 days after administration.

11 Amphetamines in the DUMA program include results for methylamphetamine, MDMA and other amphetamines.

12 Recent use in the DUMA program refers to self-reported use in the 12 months prior to arrest.

The proportion of detainees testing positive to MDMA via urinalysis increased, from 1.3 per cent in 2014–15 to 1.9 per cent in 2015–16. Over the last decade the proportion of detainees testing positive to MDMA has remained low (under 2.9 per cent). Self-reported recent use of MDMA¹³ increased from 14.7 per cent in 2014–15 to 16.2 per cent in 2015–16 (see Figure 12).

FIGURE 12: National proportion of detainees testing positive for MDMA compared with self-reported recent use, 2006–07 to 2015–16 (Source: Australian Institute of Criminology)



- a. Urine was collected in the third and fourth quarters of 2013 and the first quarter of 2014.
- b. Urine was collected in the third quarter of 2014 and the first and second quarters of 2015.
- c. Urine was collected in third quarter of 2015 and the first and second quarters of 2016.

Wastewater analysis has become the standard for measuring population-scale consumption of a range of different chemical compounds. The underlying concepts involved in wastewater analysis are well established in Australia and have been applied to a wide range of licit and illicit drugs. Estimates of drug consumption in a population can be back-calculated from measured concentrations of drug metabolites (excreted into the sewer system after consumption) in wastewater samples. Following on from recommendations from the National Ice Taskforce and National Ice Action Strategy, the Commonwealth Minister for Justice approved \$3.6 million over three years from the Commonwealth Confiscated Assets Account for the Australian Criminal Intelligence Commission (ACIC) to develop a national program to monitor drug consumption through wastewater analysis. This program of sampling and analysis is known as the National Wastewater Drug Monitoring Program (NWDMP).¹⁴

¹³ The self-report question includes use of ecstasy/MDMA in the 12 months prior to arrest.

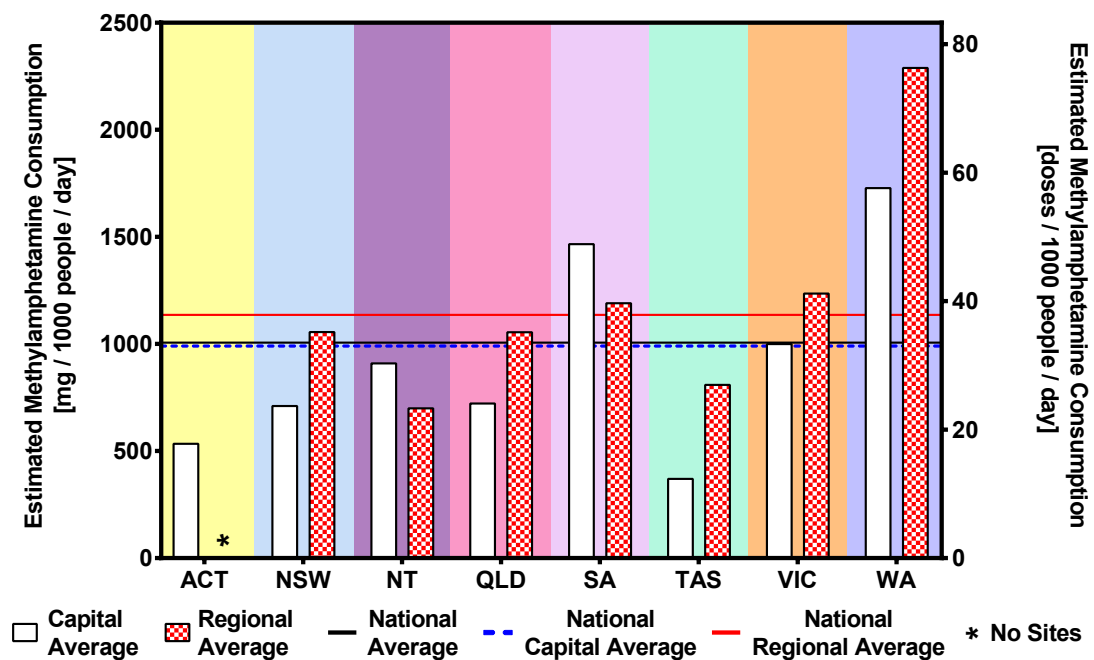
¹⁴ The public NWDMP reports are available on the ACIC website. See <https://www.acic.gov.au/sites/g/files/net1491/f/national_wastewater_drug_monitoring_program_report_1_0.pdf?v=1490333695>.





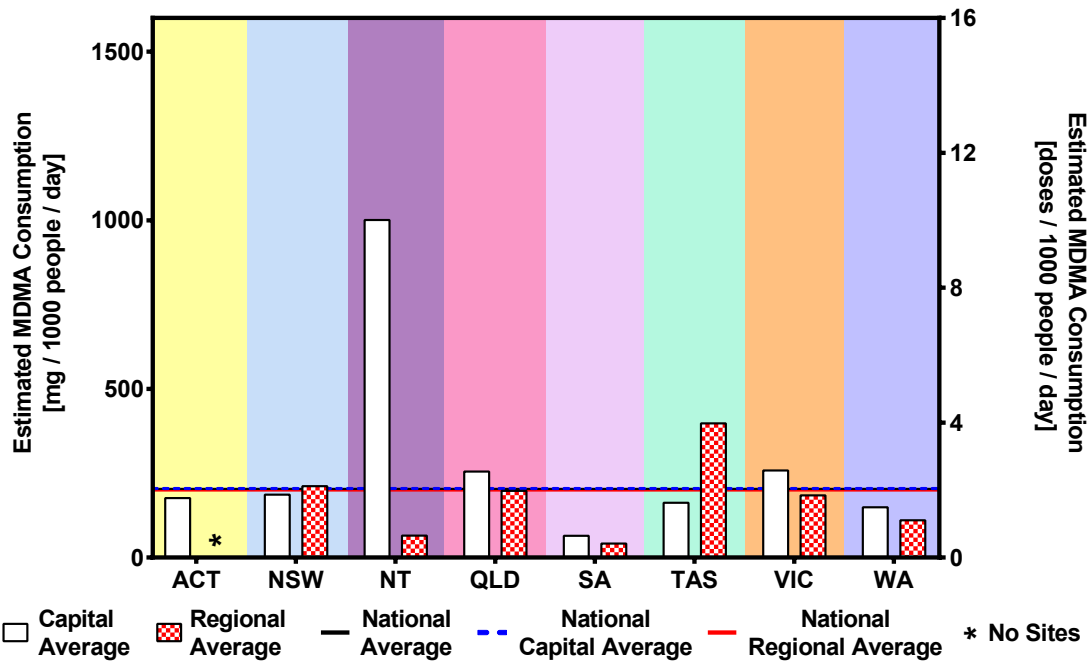
Wastewater analysis conducted in the latter half of 2016 shows that in all jurisdictions, methylamphetamine consumption far exceeds the consumption of the other illicit stimulants tested and the consumption (both licit and illicit) of oxycodone and fentanyl. Western Australia had the highest levels of methylamphetamine, with consumption in both capital city and regional sites above the respective national averages. It should be noted that only one regional site was included in the Western Australia collection. With the exception of South Australia and the Northern Territory, regional sites had higher levels of methylamphetamine consumption than capital sites. Capital city sites in the Australian Capital Territory and Tasmania had the lowest methylamphetamine consumption levels nationwide (see Figure 13).

FIGURE 13: Estimated average consumption of methylamphetamine for capital city sites and regional sites by state/territory (Source: National Wastewater Drug Monitoring Program)



Levels of MDMA consumption were consistently low across the country compared to methylamphetamine. Regional, capital city and national average MDMA consumption levels were almost identical. The capital city site in the Northern Territory ranked highest in terms of estimated MDMA consumption. In contrast, MDMA use in regional Northern Territory and South Australia was well below other regional areas. The Northern Territory was also the only state or territory with substantially higher MDMA use in the capital city than in the regional areas (see Figure 14).

FIGURE 14: Estimated average consumption of MDMA for capital city sites and regional sites by state/territory (Source: National Wastewater Drug Monitoring Program)



PRICE

Nationally, the price range for a street deal (0.1 grams) of amphetamine ranged between \$40 and \$70 in 2015–16, compared with a price range between \$50 and \$150 in 2014–15. Nationally, the price range for 1 gram of amphetamine ranged between \$150 and \$800 in 2015–16, compared with a price range between \$180 and \$800 in 2014–15. Victoria was the only state to report a price for 1 kilogram of amphetamine this reporting period, which ranged between \$100 000 and \$120 000. No price data was available for 1 kilogram of amphetamine in 2014–15.

Nationally, the price range for a street deal (0.1 grams) of non-crystal methylamphetamine ranged between \$30 and \$150 in 2015–16, compared with a price range between \$20 and \$150 in 2014–15. Nationally, the price range for 1 gram of non-crystal methylamphetamine ranged between \$170 and \$500 in 2015–16, compared with a price range between \$100 and \$500 in 2014–15. Victoria was the only state to report a price for 1 kilogram of non-crystal methylamphetamine this reporting period, which ranged between \$80 000 and \$120 000. New South Wales was the only state to report a price for 1 kilogram of non-crystal methylamphetamine in 2014–15, which ranged between \$70 000 and \$110 000.

Nationally, the price range for a street deal (0.1 grams) of crystal methylamphetamine ranged between \$20 and \$200 in 2015–16, compared with a price range between \$50 and \$150 in 2014–15. Nationally, the price range for 1 gram of crystal methylamphetamine ranged between \$150 and \$1 200 in 2015–16, compared with a price range between \$250 and \$1 200 in 2014–15. Nationally, the price range for 1 kilogram of crystal methylamphetamine ranged between \$75 000 and \$280 000 in 2015–16, compared with a price range between \$120 000 and \$280 000 in 2014–15.



Nationally, the price for 1 MDMA tablet/capsule ranged between \$20 and \$50 in 2015–16, compared with a price range between \$10 and \$50 in 2014–15. This reporting period price data was also collected for 1 kilogram of MDMA, which ranged between \$27 000 and \$60 000 nationally in 2015–16.

PURITY

Figure 15 illustrates the annual median purity of analysed amphetamine¹⁵ samples over the last decade. Since 2006–07, the median purity of analysed amphetamine samples has fluctuated, most significantly in the Australian Capital Territory and Western Australia. Amphetamine purity levels have ranged between 0.1 per cent and 77.7 per cent since 2006–07. In 2015–16, the annual median purity ranged from 1.8 per cent in Queensland to 76.8 per cent in the Australian Capital Territory. This reporting period Victoria and Western Australia reported an increase in the annual median purity of amphetamine, while a decrease was reported in New South Wales, Queensland and the Australian Capital Territory.

FIGURE 15: Annual median purity of amphetamine samples, 2006–07 to 2015–16

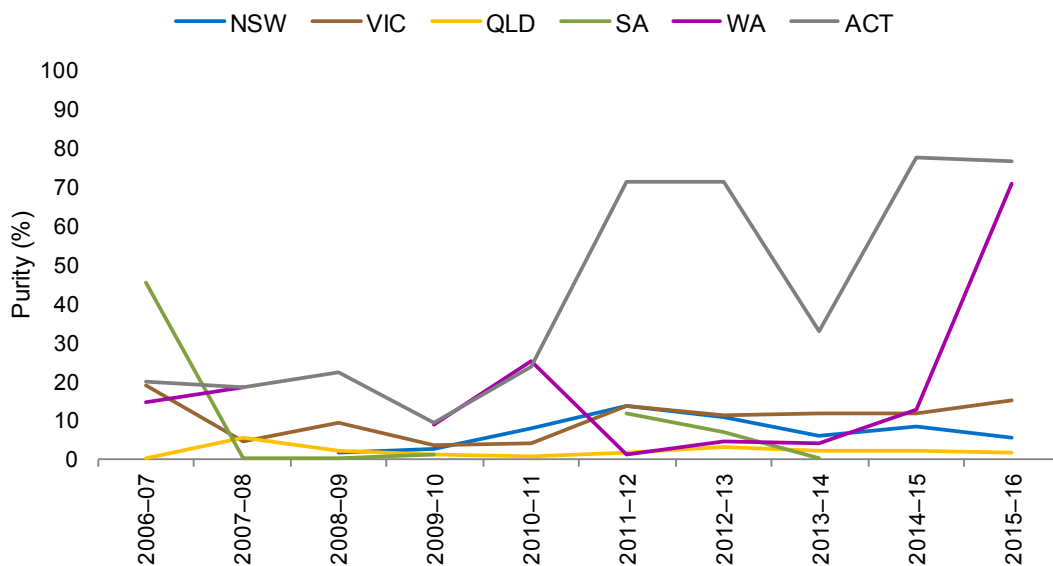


Figure 16 illustrates the median purity of analysed amphetamine samples on a quarterly basis in 2015–16. This reporting period the quarterly median purity of amphetamine ranged between 4.6 per cent in Queensland in the fourth quarter of 2015 and 76.8 per cent in the Australian Capital Territory in the third quarter of 2015.

¹⁵ Amphetamine is a manufacturing by-product of some commonly used methods of methylamphetamine production. This can result in two separate purity figures for a single drug sample—one as methylamphetamine with considerable purity and another of amphetamine with low purity.

FIGURE 16: Quarterly median purity of amphetamine samples, 2015–16

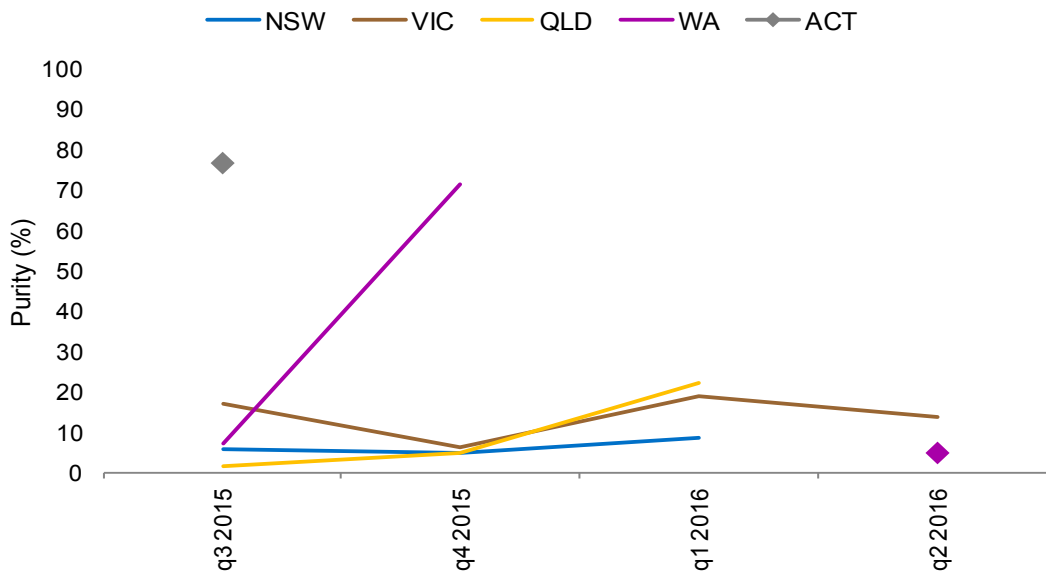


Figure 17 illustrates the annual median purity of analysed methylamphetamine samples over the last decade. Since 2006–07, the median purity of methylamphetamine has ranged from 4.4 per cent to 83.4 per cent. With the exception of New South Wales which remained stable, all states reported an increase in the median purity of methylamphetamine this reporting period and are at record highs. In 2015–16, the annual median purity ranged between 73.5 per cent in Queensland and 83.4 per cent in Victoria.

FIGURE 17: Annual median purity of methylamphetamine samples, 2006–07 to 2015–16

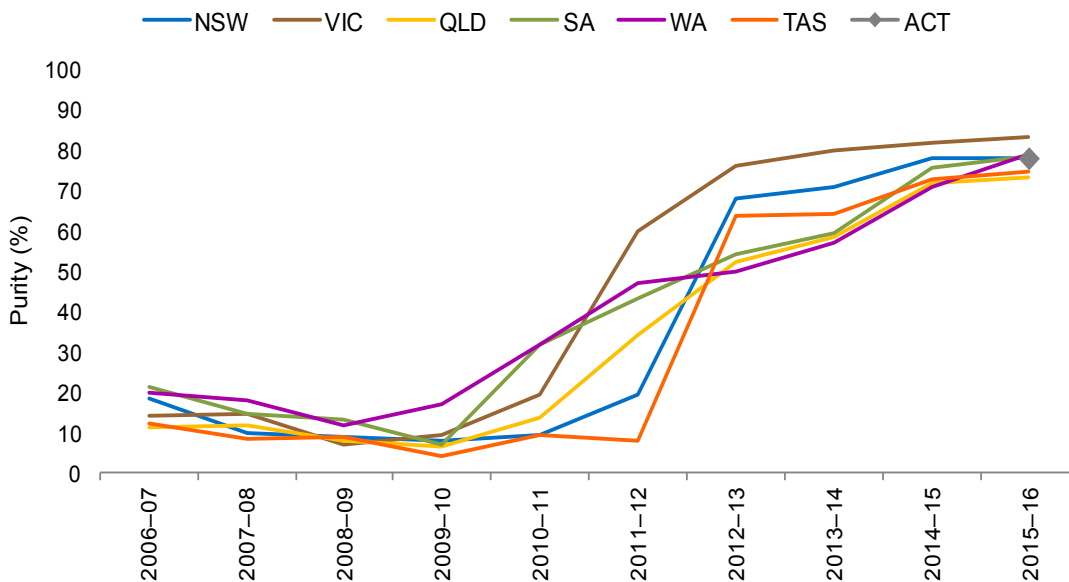


Figure 18 illustrates the median purity of analysed methylamphetamine samples on a quarterly basis in 2015–16. This reporting period the quarterly median purity of methylamphetamine ranged between 73.3 per cent in Queensland in the fourth quarter of 2015 and 83.6 per cent in Victoria in the first quarter of 2016.





FIGURE 18: Quarterly median purity of methylamphetamine samples, 2015–16

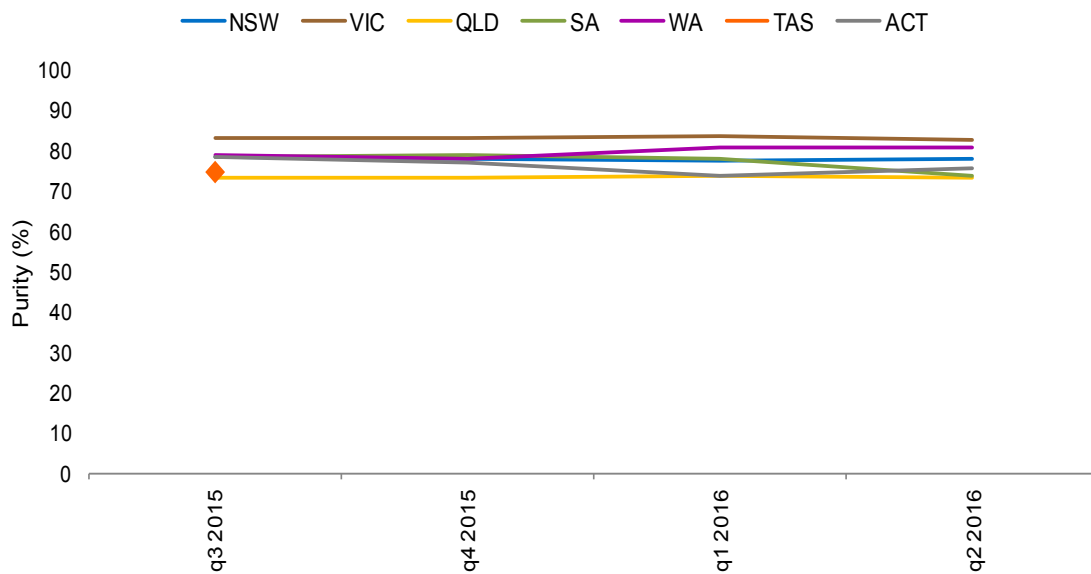


Figure 19 illustrates the annual median purity of analysed phenethylamine samples over the last decade, the majority of which relate to MDMA. Since 2006–07, the annual median purity of phenethylamines has ranged between 6.8 per cent and 82.7 per cent. In 2015–16, the annual median purity of phenethylamines ranged from 17.3 per cent to 76.9 per cent. This reporting period New South Wales, Victoria, South Australia and the Australian Capital Territory reported an increase in the annual median purity of phenethylamines, while Queensland and Western Australia reported a decrease.

FIGURE 19: Annual median purity of phenethylamine samples, 2006–07 to 2015–16

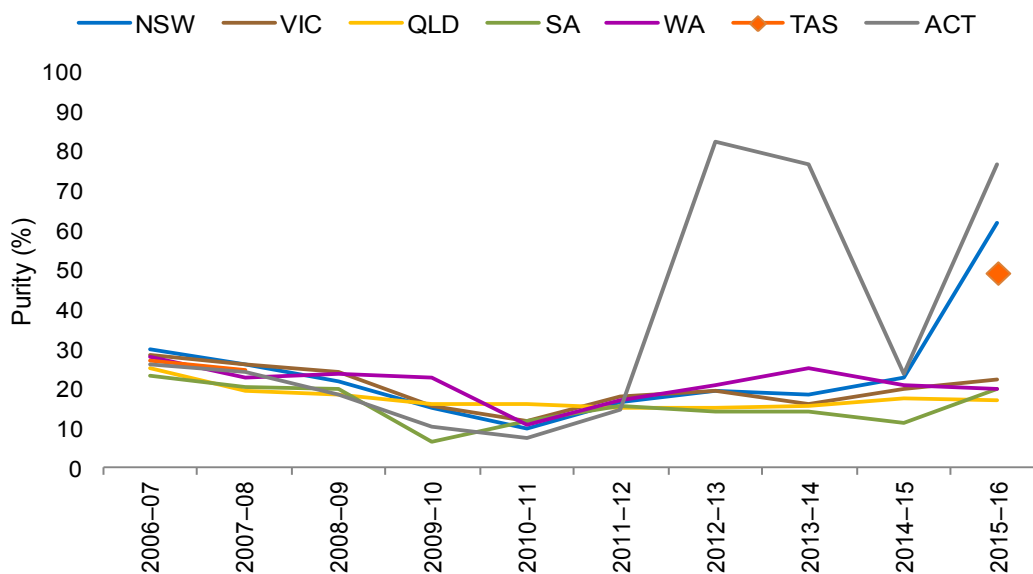
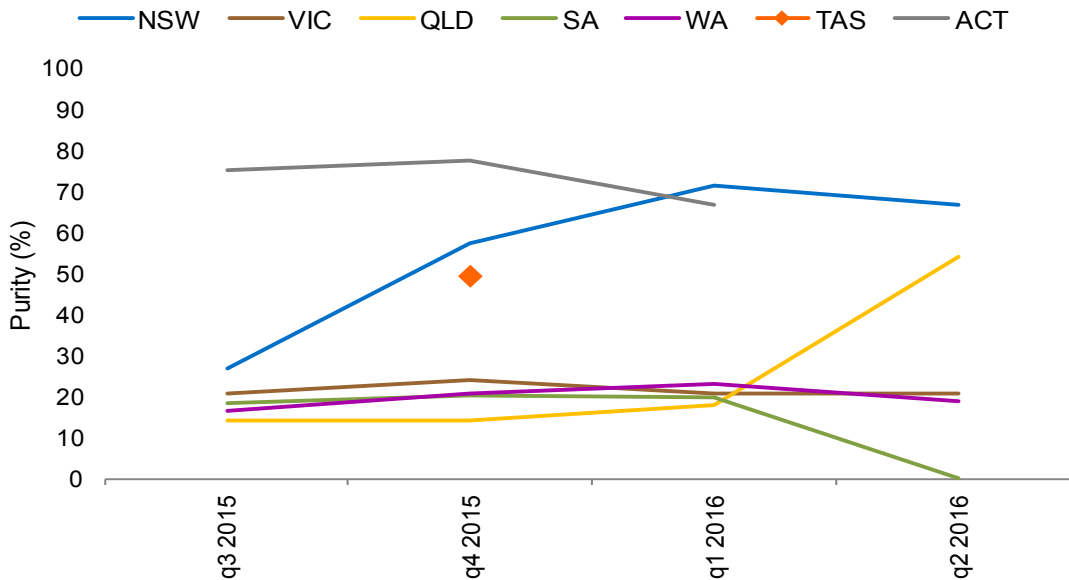


Figure 20 illustrates the median purity of analysed phenethylamine samples on a quarterly basis in 2015–16. This reporting period the quarterly median purity of phenethylamines ranged between 0.2 per cent in South Australia in the second quarter of 2016 and 77.6 per cent in the Australian Capital Territory in the fourth quarter of 2015.

FIGURE 20: Quarterly median purity of phenethylamine samples, 2015–16



AVAILABILITY

In a 2015 national study of regular injecting drug users, the proportion of respondents reporting crystal methylamphetamine (ice) as easy or very easy to obtain increased, from 91.0 per cent in 2014 to 95.0 per cent per cent in 2015. Early findings from the 2016 indicate this has further increased to 96.0 per cent. The proportion of respondents reporting methylamphetamine powder (speed) as easy or very easy to obtain decreased, from 85.0 per cent in 2014 to 77.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 75.0 per cent. The proportion of respondents reporting base as easy or very easy to obtain also decreased, from 83.0 per cent in 2014 to 62.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 68.0 per cent (Stafford & Breen 2016; Stafford et al 2016).

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting crystal methylamphetamine as easy or very easy to obtain increased, from 86.0 per cent in 2014 to 97.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 92.0 per cent. The proportion of respondents reporting methylamphetamine powder as easy or very easy to obtain decreased, from 73.0 per cent in 2014 to 59.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 60.0 per cent. The proportion of respondents reporting base as easy or very easy to obtain also decreased, from 72.0 per cent in 2014 to 53.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 64.0 per cent (Sindicich et al, 2016; Stafford et al 2016).



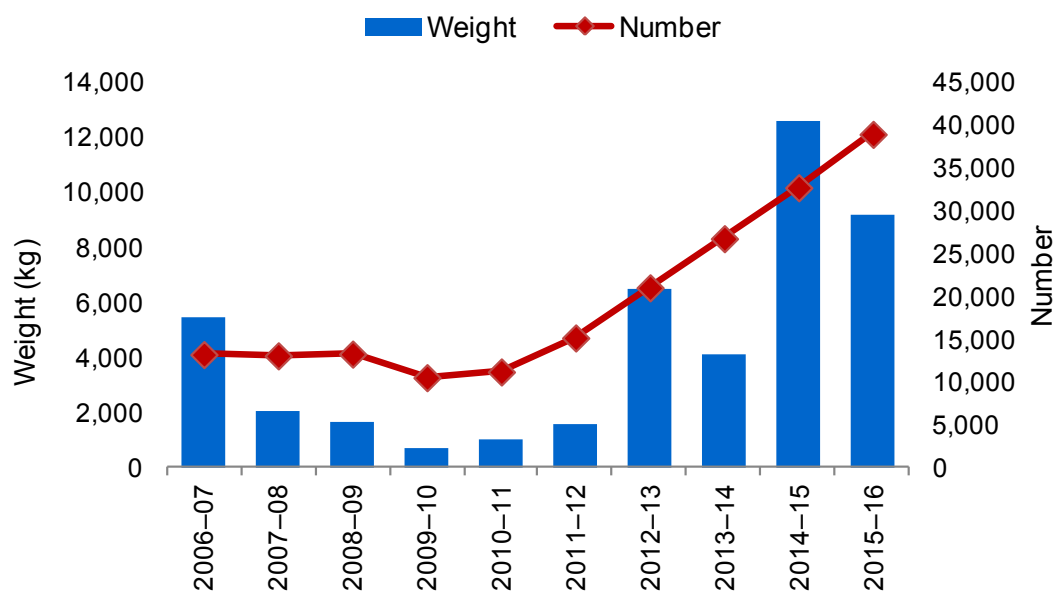


In the same 2015 study, the proportion of respondents reporting ecstasy as easy or very easy to obtain increased, from 89.0 per cent in 2014 to 93.0 per cent in 2015. Early findings from the 2016 study indicate this has remained stable at 93.0 per cent (Sindicich et al, 2016; Stafford et al 2016).

SEIZURES AND ARRESTS

The number of national ATS seizures increased 19.1 per cent this reporting period, from 32 768 in 2014–15 to a record 39 014 in 2015–16. While the weight of ATS seized nationally decreased 27.0 per cent this reporting period, from 12 631.5 kilograms in 2014–15 to 9 218.2 kilograms in 2015–16, it is the second highest weight on record (see Figure 21).

FIGURE 21: National ATS seizures, by number and weight, 2006–07 to 2015–16



The Australian Capital Territory reported the greatest percentage increase (64.9 per cent) in the number of ATS seizures in 2015–16, while Victoria reported the greatest percentage increase in the weight of ATS seized (396.1 per cent). New South Wales continues to account for the greatest proportion of the number of national ATS seizures (35.2 per cent this reporting period), while Victoria accounted for the greatest proportion of the weight of ATS seized nationally in 2015–16 (53.1 per cent; see Table 10).

TABLE 10: Number, weight and percentage change of national ATS seizures, 2014–15 and 2015–16

State/Territory ^a	Number			Weight (grams)		
	2014–15	2015–16	% change	2014–15	2015–16	% change
New South Wales	11 999	13 749	14.6	10 974 399	3 487 494	-68.2
Victoria ^b	3 696	3 438	-7.0	986 968	4 896 036 ^b	396.1
Queensland	6 727	8 294	23.3	191 851	147 601	-23.1
South Australia	755	1 166	54.4	144 919	82 216	-43.3
Western Australia	7 874	10 640	35.1	276 248	566 726	105.2
Tasmania	895	679	-24.1	7 231	4 809	-33.5
Northern Territory	494	507	2.6	16 933	30 831	82.1
Australian Capital Territory	328	541	64.9	32 997	2 580	-92.2
Total	32 768	39 014	19.1	12 631 546	9 218 293	-27.0

a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.

b. The majority of the weight of ATS seized in Victoria in 2015–16 relates to a small number of significant MDMA seizures.

Figure 22 illustrates national ATS seizures over the last decade by drug type¹⁶ (amphetamines¹⁷, MDMA and other ATS), number and weight. The number of national amphetamines seizures increased 20.0 per cent this reporting period, from 26 901 in 2014–15 to 32 273 in 2015–16, with the weight of amphetamines seized decreasing 27.2 per cent, from 6 186.5 kilograms in 2014–15 to 4 505.4 kilograms in 2015–16. The number of national MDMA seizures increased 10.1 per cent this reporting period, from 5 418 in 2014–15 to 5 967 in 2015–16, with the weight of MDMA seized decreasing 28.7 per cent, from 6 105.6 kilograms to 4 352.7 kilograms. The number of other ATS seizures decreased 27.8 per cent this reporting period, from 449 in 2014–15 to 324 in 2015–16, while the weight seized increased 6.1 per cent, from 339.3 kilograms in 2014–15 to 360.1 kilograms in 2015–16.

Amphetamines accounted for 83.9 per cent of the number of national ATS seizures in 2015–16, followed by MDMA (15.3 per cent) and other ATS (0.8 per cent). Amphetamines accounted for 48.9 per cent of the weight of ATS seized nationally in 2015–16, followed by MDMA (47.2 per cent) and other ATS (3.9 per cent).

16 Granularity within drugs categorized as ATS is determined by available data. At this time it is not possible at a national level to provide a further breakdown of drugs within the amphetamines category.

17 Amphetamines include amphetamine, methylamphetamine, dexamphetamine and amphetamine not elsewhere classified.



FIGURE 22: National ATS seizures, by ATS drug type, number and weight, 2006–07 to 2015–16

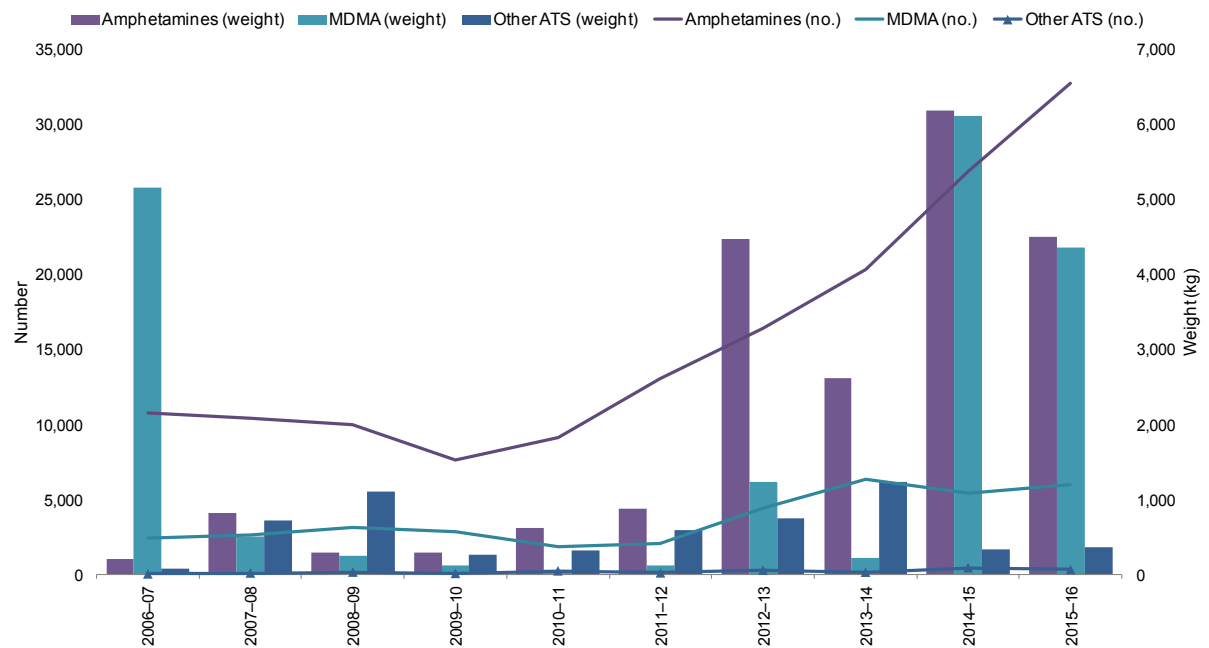


Figure 23 illustrates the form (crystalline, powder, tablet and other¹⁸) of national ATS seizures over the last decade, by number and weight. The predominant drug form, by both number and weight, has varied across the decade. The number of national ATS seizures in crystalline form increased 35.8 per cent this reporting period, from 18 985 in 2014–15 to 25 786 in 2015–16. The number of national ATS seizures in powder form increased 5.3 per cent this reporting period, from 3 844 in 2014–15 to 4 046 in 2015–16. The number of national ATS seizures in tablet form increased 1.3 per cent this reporting period, from 2 416 in 2014–15 to 2 448 in 2015–16, while the number of national ATS seizures in other drug forms decreased 10.5 per cent, from 7 523 in 2014–15 to 6 734 in 2015–16.

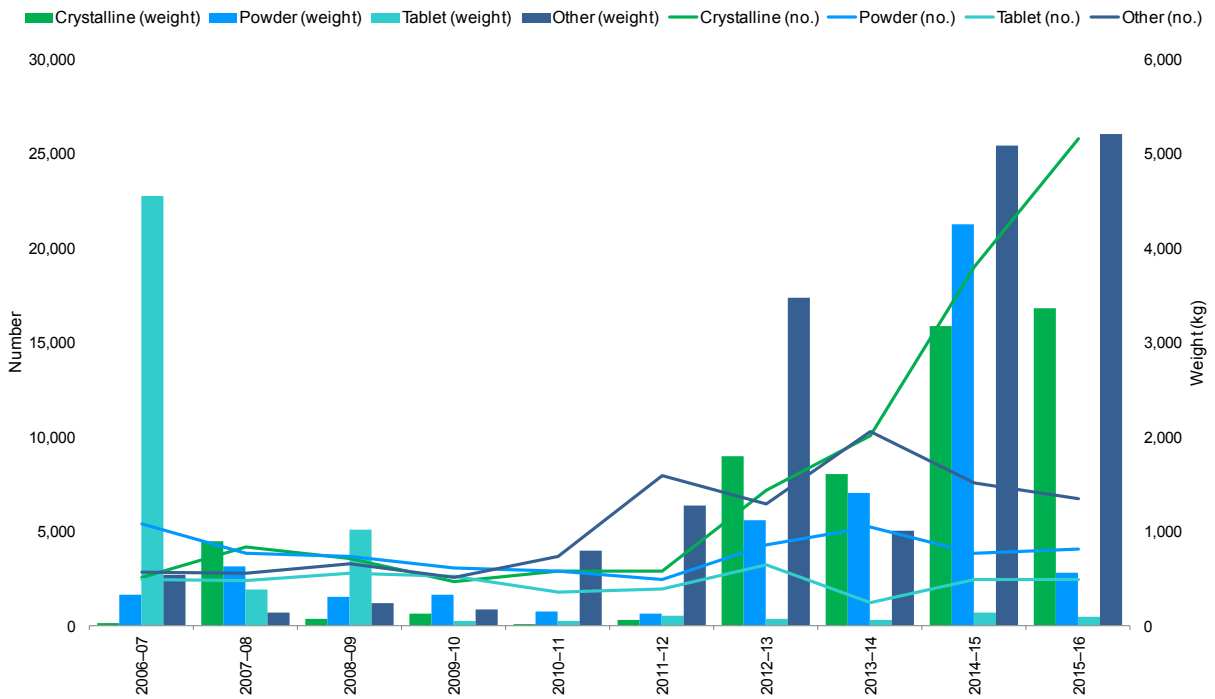
The weight of ATS seized nationally in crystalline form increased 5.8 per cent this reporting period, from 3 172.6 kilograms in 2014–15 to 3 357.9 kilograms in 2015–16. The weight of ATS seized nationally in powder form decreased 86.9 per cent this reporting period, from 4 245.5 kilograms in 2014–15 to 555.0 kilograms in 2015–16. The weight of ATS seized nationally in tablet form decreased 26.9 per cent this reporting period, from 132.5 kilograms in 2014–15 to 96.8 kilograms in 2015–16. The weight of ATS seized nationally in other drug forms has increased 2.5 per cent this reporting period, from 5 080.7 kilograms in 2014–15 to 5 208.4 kilograms in 2015–16.

ATS seizures in crystalline form accounted for 66.1 per cent of the number of national ATS seizures in 2015–16, followed by other (17.3 per cent), powder (10.4 per cent) and tablet (6.3 per cent). Other drug forms accounted for 56.5 per cent of the weight of ATS seized nationally in 2015–16, followed by crystalline (36.4 per cent), powder (6.0 per cent) and tablet (1.1 per cent).

¹⁸ In relation to ATS drug form, the category of 'other' reflects drug forms other than crystalline, powder or tablet and includes seizures for which the drug form was not known or inadequately described.

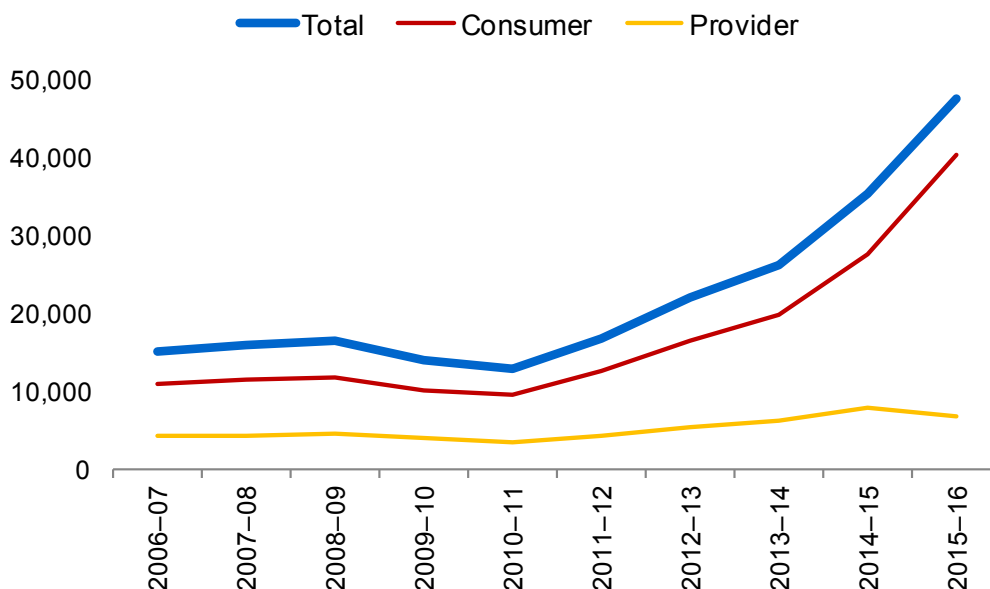


FIGURE 23: National ATS seizures, by drug form, 2006–07 to 2015–16



The number of national ATS arrests increased 34.3 per cent this reporting period, from 35 468 in 2014–15, to a record 47 625 in 2015–16. Consumer arrests continue to account for the greatest proportion of arrests, comprising 85.1 per cent of national ATS arrests in 2015–16 (see Figure 24). However, the Northern Territory reported more ATS provider arrests than consumer arrests in 2015–16.

FIGURE 24: Number of national ATS arrests, 2006–07 to 2015–16



All states and territories reported increases in the number of ATS arrests in 2015–16. South Australia reported the greatest percentage increase in ATS arrests this reporting period (280.1 per cent). Queensland accounted for the greatest proportion of national ATS arrests in 2015–16 (26.3 per cent), followed by Victoria (22.9 per cent) and New South Wales (20.2 per cent). Combined, these three states account for 69.3 per cent of national ATS arrests in 2015–16 (see Table 11).





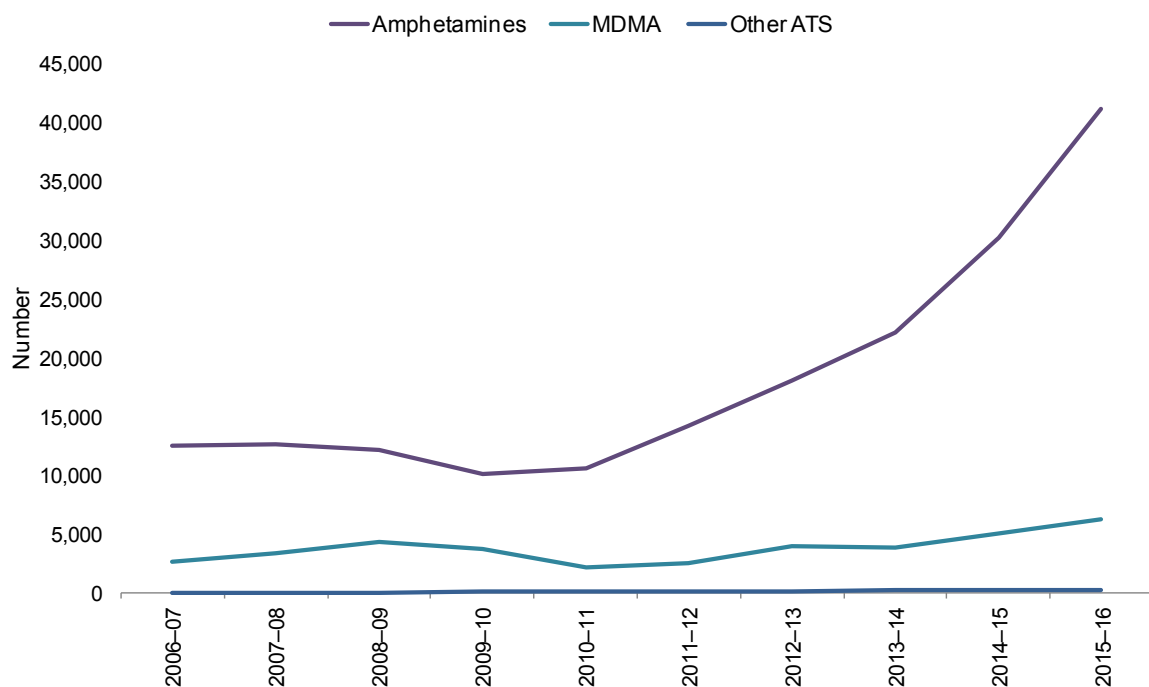
TABLE 11: Number and percentage change of national ATS arrests, 2014–15 and 2015–16

State/Territory ^a	Arrests		
	2014–15	2015–16	% change
New South Wales	8 495	9 605	13.1
Victoria	9 734	10 895	11.9
Queensland	9 533	12 507	31.2
South Australia ^b	1 573	5 979	280.1
Western Australia	5 287	7 516	42.2
Tasmania	430	530	23.3
Northern Territory	282	445	57.8
Australian Capital Territory	134	148	10.4
Total	35 468	47 625	34.3

- a. The arrest data for each state and territory include Australian Federal Police data.
- b. For the first time, offender data provided by South Australia Police in 2015–16 included data for offenders participating in its Drug Diversion Program (excluding diversion records not related to a drug seizure).

Figure 25 illustrates the number of national ATS arrests by drug type (amphetamines, MDMA and other ATS) over the last decade. Amphetamines have accounted for the greatest proportion of national ATS arrests over the last decade. The number of national amphetamines arrests has continued to increase since 2009–10. Amphetamines arrests account for 86.5 per cent of national ATS arrests in 2015–16, followed by MDMA (13.2 per cent) and other ATS (0.4 per cent). The number of national amphetamines arrests increased 36.2 per cent this reporting period, from 30 230 in 2014–15 to 41 177 in 2015–16. The number of national MDMA arrests increased 24.1 per cent this reporting period, from 5 053 in 2014–15 to 6 272 in 2015–16. The number of other ATS arrests remains low, decreasing 4.9 per cent this reporting period from 185 in 2014–15 to 176 in 2015–16.

FIGURE 25: Number of national ATS arrests, by drug type, 2006–07 to 2015–16



NATIONAL IMPACT

Surveys of regular injecting drug user and police detainee populations indicate a continued increase in methylamphetamine use. According to a national study of police detainees, the proportion of respondents who tested positive to methylamphetamine increased from 38.7 per cent in 2014–15 to 49.0 per cent in 2015–16. According to a 2015 national study of regular injecting drug users, 72.0 per cent of respondents reported the recent use of any form of methylamphetamine, an increase from 70.0 per cent in 2014. Early findings from the 2016 study indicate this has further increased to 75.0 per cent. Crystal methylamphetamine continues to be the preferred form of the drug used within this user group, with 73.0 per cent of respondents in 2016 reporting the recent use of crystal methylamphetamine, compared with 20.0 per cent for speed and 8.0 per cent for base.

Wastewater analysis conducted in the latter half of 2016 as part of the NWDMP measured the presence of 13 substances across 51 sites nationally. Alcohol and tobacco consumption was the highest of all substances tested in all states and territories. Of the remaining substances, methylamphetamine consumption was highest by some margin. With the exception of South Australia and the Northern Territory, regional sites had higher per capita levels of methylamphetamine consumption than capital sites. Compared to methylamphetamine, levels of MDMA consumption were consistently low across the country, with regional, capital city and national average MDMA consumption levels almost identical.

Despite decreases in the number and weight of ATS (excluding MDMA) detections at the Australian border this reporting period, they are the second highest figures on record. The number of ATS (excluding MDMA) detections at the Australian border decreased from 3 578 in 2014–15 to 2 864 in 2015–16, with the weight detected decreasing from 3 422.8 kilograms in 2014–15 to 2 620.6 kilograms in 2015–16. Crystal methylamphetamine accounted for 64.2 per cent of the weight of ATS (excluding MDMA) detected at the Australian border this reporting period. The international mail stream was the primary importation method by number for detections of ATS (excluding MDMA) at the Australian border in 2015–16, while sea cargo was the primary importation method by weight. The number of embarkation points identified for ATS (excluding MDMA) detections at the Australian border increased this reporting period, from 48 in 2014–15 to 49 in 2015–16. The Netherlands was the prominent embarkation point by number for ATS (excluding MDMA) detections this reporting period, while China was the prominent embarkation point by weight.

Surveys of a regular ecstasy user population indicate that MDMA use remains relatively stable. Ecstasy tablets continue to be the preferred form of the drug used within this user group, with 82.0 per cent of respondents in 2016 reporting the recent use of ecstasy tablets, compared with 60.0 per cent for ecstasy capsules, 57.0 per cent for ecstasy/MDMA crystals and 21.0 per cent for ecstasy/MDMA powder. While surveys of police detainee populations indicate an increase in both the self-reported use and proportion of respondents who tested positive for MDMA in 2015–16, figures remain low.





Both the number and weight of MDMA detected at the Australian border also decreased this reporting period. The number of MDMA detections decreased from 3 578 in 2014–15 to 2 864 in 2015–16, with the weight detected decreasing from 2 002.4 kilograms in 2014–15 to 141.5 kilograms in 2015–16.¹⁹ Crystal MDMA accounted for 34.7 per cent of the weight of MDMA detected at the Australian border this reporting period, followed by powder (33.1 per cent) and tablet form (17.2 per cent). The international mail stream was the primary importation method by number and weight for MDMA detections at the Australian border in 2015–16. The number of embarkation points identified for MDMA detections at the Australian border decreased this reporting period, from 30 in 2014–15 to 29 in 2015–16. The Netherlands was the prominent embarkation point by number and weight for MDMA detections in 2015–16.

Consistent with previous years, the majority of analysed samples of methylamphetamine seized at the Australian border and as part of the ENIPID project are predominately manufactured from Eph/PSE. The majority of analysed samples of MDMA seized at the Australian border and as part of the ENIPID project continue to be predominately manufactured through reductive amination via platinum hydrogenation.

The number of national ATS seizures increased to a record 39 014 in 2015–16. While the weight of ATS seized nationally decreased this reporting period, the 9 218.2 kilograms seized in 2015–16 is the second highest weight on record. Amphetamines continue to account for the greatest proportion of the number of national ATS seizures (83.9 per cent this reporting period). Amphetamines also accounted for the greatest proportion of the weight of ATS seized nationally in 2015–16 (48.9 per cent), closely followed by MDMA (47.2 per cent). There was a record 47 625 national ATS arrests in 2015–16. Amphetamines continue to account for the greatest proportion of national ATS arrests, accounting for 86.5 per cent of arrests in 2015–16.

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¹⁹ In 2014–15, a single MDMA detection weighed 1 917.4 kilograms and accounted for 95.8 per cent of the weight of MDMA detected in that reporting period.

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