



AMPHETAMINE- TYPE STIMULANTS



KEY POINTS

- The weight of ATS seized globally continued to increase in 2017—primarily due to increases in the weight of global methylamphetamine seizures.
 - While the weight of global amphetamine seizures decreased and the weight of ecstasy seizures remained stable in 2017, the weight of methylamphetamine seizures increased.
 - Methylamphetamine accounted for the majority of global ATS seizures in 2017.
- Drug profiling data of analysed border and domestic seizures indicate that ephedrine and pseudoephedrine remain key methylamphetamine precursors, however the proportion of methylamphetamine seizures manufactured using P2P-based methods has increased in recent years.
- Several indicators of ATS supply and demand in Australia suggest that the markets for both methylamphetamine and MDMA are expanding:
 - While the number of ATS (excluding MDMA) detections at the Australian border decreased in 2018–19, the weight detected increased and is the highest weight on record.
 - Both the number and weight of MDMA detections at the Australian border increased in 2018–19, with the weight detected the highest reported in the last decade.
 - Data from the National Wastewater Drug Monitoring Program indicate that the population-weighted average consumption of methylamphetamine in capital city and regional sites, and MDMA consumption in regional sites, increased from August 2018 to August 2019.



MAIN FORMS

Amphetamine-type stimulants (ATS) are a group of central nervous system stimulants, which include amphetamine, methylamphetamine and 3,4-methylenedioxymethamphetamine (MDMA).

- Owing to differences in chemical composition, methylamphetamine is more potent than amphetamine, resulting in a stronger nervous system reaction.
- Methylamphetamine has four common forms: tablet, crystalline (often referred to as ‘ice’ and considered the most potent form of the drug), base (also referred to as ‘paste’) and powder (also referred to as ‘speed’). Methylamphetamine can be swallowed, snorted, smoked or injected.
- MDMA is a derivative of amphetamine, but has an important difference in chemical structure which provides MDMA’s hallucinogenic (in addition to stimulant) properties.
- Amphetamine is most commonly found in powder and tablet form, which can be swallowed, snorted, smoked or (less commonly) injected.
- MDMA (also referred to as ‘ecstasy’), is most commonly found in tablet form of varying colours and sizes, often imprinted with a picture or symbol. MDMA is also found in capsule, powder and crystal form. While MDMA is most commonly ingested, it can also be snorted, inhaled and injected (ADF 2019a; ADF 2019b; EMCDDA 2015; Degenhardt & Hall 2010).

INTERNATIONAL TRENDS

According to the 2019 United Nations Office on Drugs and Crime (UNODC) World Drug Report, the total weight of ATS seized globally has continued to increase over the last two decades—primarily due to increases in methylamphetamine seizures. Between 2016 and 2017, the total weight of global methylamphetamine seizures increased 16 per cent, from 158 tonnes to 184 tonnes. Over the same period the weight of amphetamine seizures decreased approximately 18 per cent, from 70 tonnes to 58 tonnes, while seizures of ecstasy remained stable at approximately 14 tonnes (UNODC 2019).

Similar to most years since 1998, the majority of ATS seizures in 2017 were methylamphetamine, seized predominantly in North America, particularly the United States (US) and in East and South-East Asia, particularly China. The UNODC has also noted a 40 per cent increase in methylamphetamine seizures in tablet and crystal form being seized annually in East and South-East Asia (UNODC 2018; UNODC 2019).

Europe continued to account for the greatest proportion of global ecstasy seizures in 2017. The weight of ecstasy seized in Europe increased from 2.2 tonnes in 2013 to 6.4 tonnes in 2017. The UNODC reports that increasing quantities of ecstasy have also been seized in Asia—particularly in East and South-East Asia—between 2013 and 2017. The weight of ecstasy seized in Asia increased from 0.6 tonnes in 2013 to 2.9 tonnes in 2017, with East and South-East Asia accounting for 96 per cent of ecstasy seizures in Asia over that period. Approximately 9 million ecstasy tablets were seized in East and South-East Asia in 2017, compared to approximately 3 million ecstasy tablets seized annually in East and South-East Asia between 2014 and 2016 (UNODC 2019).

According to the World Customs Organisation (WCO), the number and weight of methylamphetamine and amphetamine seizures reported by WCO agencies increased in 2018. Methylamphetamine was the most frequently seized substance within the ‘psychotropic substance’ category, followed by MDMA. The number and weight of MDMA seizures reported by WCO agencies continued to decrease in 2018, with the weight of MDMA seized decreasing by 847.3 kilograms in 2018. MDMA was the only substance within the ‘psychotropic substances’ category to record a decrease in the weight seized in 2018. Specific data for the number and weight of methylamphetamine, amphetamine and MDMA seized in 2018 were not available (WCO 2019).

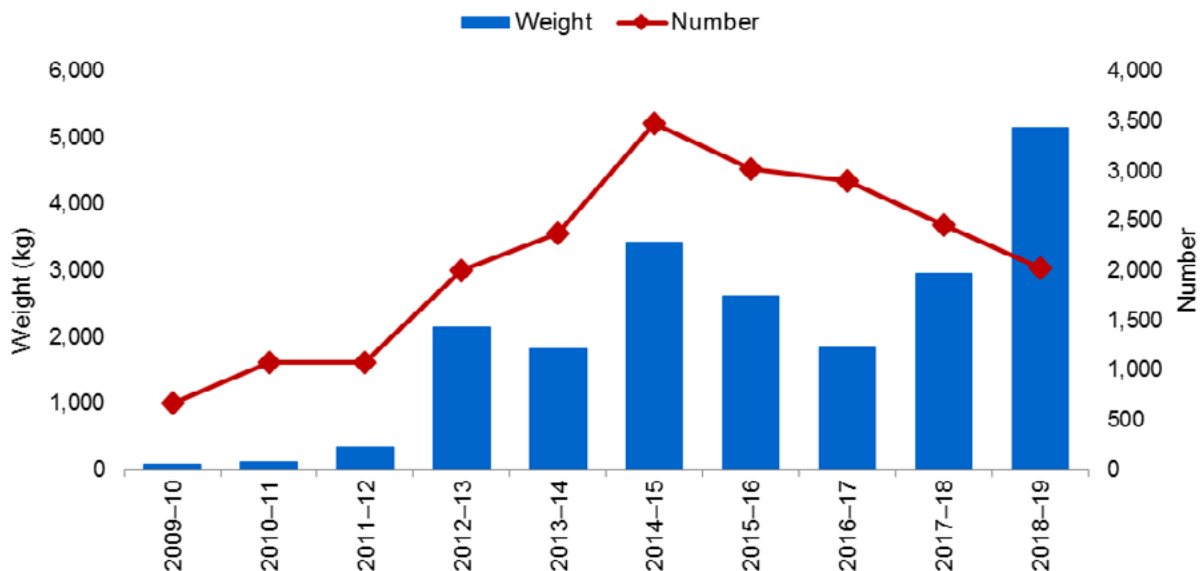
DOMESTIC TRENDS AUSTRALIAN BORDER SITUATION

Overall, the number of ATS (excluding MDMA) detections increased 201 per cent over the last decade, from 672 in 2009–10 to 2,022 in 2018–19, although since 2014–15 has steadily decreased. The number of detections decreased 18 per cent this reporting period, from 2,451 in 2017–18.

The weight of ATS (excluding MDMA) detections fluctuated greatly over the last decade, although there was an increase in the long-term trend—the weight increased 7,619 per cent from 66.7 kilograms in 2009–10 to 5,148.4 kilograms in 2018–19, the highest weight on record (see Figure 1). The weight detected this reporting period increased 74 per cent, from 2,952.5 kilograms in 2017–18.

In 2018–19, 277 of the 2,022 ATS (excluding MDMA) detections (14 per cent) weighed one kilogram or more. With a combined weight of 5,028.8 kilograms, these 277 detections accounted for 98 per cent of the weight of ATS (excluding MDMA) detected in 2018–19.¹⁰

FIGURE 1: Number and weight of ATS (excluding MDMA) detections at the Australian border, 2009–10 to 2018–19 (Source: Department of Home Affairs)



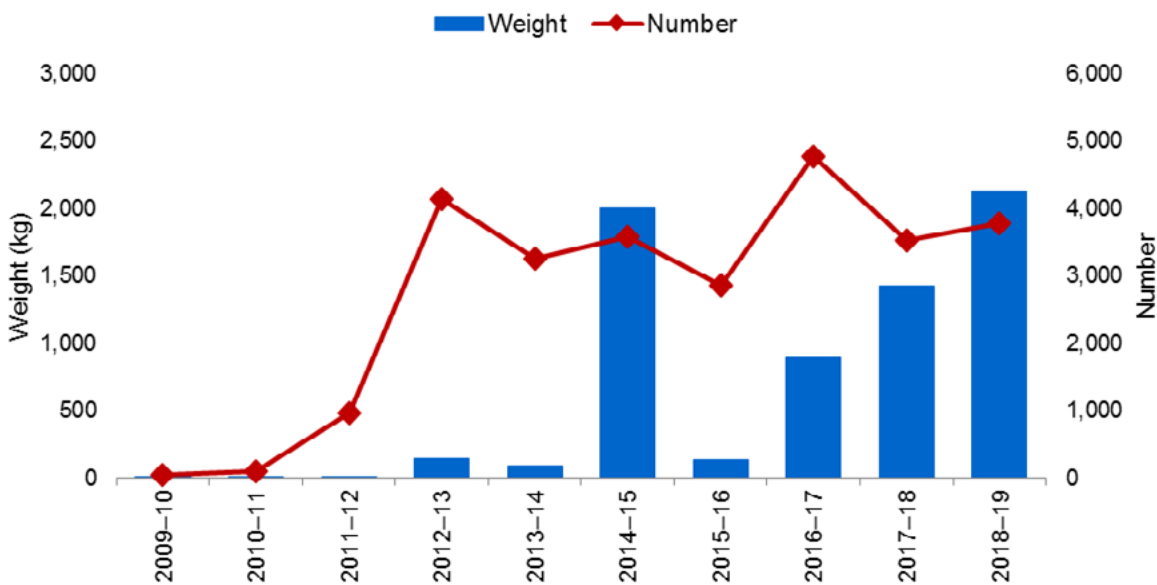
The number of MDMA detections at the Australian border fluctuated over the last decade, but the long-term trend indicates an overall increase—increasing 7,026 per cent from 53 detections in 2009–10 to 3,777 in 2018–19. The number of detections increased 7 per cent this reporting period, from 3,530 in 2017–18.

10 See Appendix 2 for significant border detections of ATS (excluding MDMA) in 2018–19.

The weight of MDMA detections also fluctuated over the last decade, increasing 32,592 per cent from 6.5 kilograms in 2009–10 to 2,124.9 kilograms in 2018–19, the highest recorded weight in the last decade (see Figure 2). The weight detected increased 50 per cent this reporting period, from 1,420.8 kilograms in 2017–18.

In 2018–19, 173 of the 3,777 MDMA detections (5 per cent) weighed one kilogram or more. With a combined weight of 1,988.3 kilograms, these 173 detections accounted for 94 per cent of the weight of MDMA detected in 2018–19.¹¹

FIGURE 2: Number and weight of MDMA detections at the Australian border, 2009–10 to 2018–19
(Source: Department of Home Affairs)



IMPORTATION METHODS

In 2018–19, detections of ATS (excluding MDMA) at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, the international mail stream accounted for the greatest proportion of ATS (excluding MDMA) detections (86 per cent), followed by air cargo (12 per cent), air passenger/crew (2 per cent) and sea cargo (<1 per cent). By weight, sea cargo accounted for the greatest proportion of detections (72 per cent), followed by air cargo (17 per cent), international mail (10 per cent) and air passenger/crew (1 per cent).

In 2018–19, detections of MDMA at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, the international mail stream accounted for the greatest proportion of MDMA detections (98 per cent), followed by air cargo (2 per cent), air passenger/crew (<1 per cent) and sea cargo (<1 per cent). By weight, the air cargo stream accounted for the greatest proportion of detections (48 per cent), followed by international mail (28 per cent), sea cargo (24 per cent) and air passenger/crew (<1 per cent).

¹¹ See Appendix 2 for significant border detections of MDMA in 2018–19.



EMBARKATION POINTS

In 2018–19, 63 countries were identified as embarkation points for ATS (excluding MDMA) detected at the Australian border, compared with 50 countries in 2017–18. By weight, Thailand was the primary embarkation point for ATS (excluding MDMA) detected in 2018–19. Other key embarkation points by weight this reporting period include Mexico, the US, Singapore, Canada, Malaysia, Laos, Germany, India and China (including Hong Kong).

In 2018–19, 33 countries were identified as embarkation points for MDMA detected at the Australian border, compared with 32 countries in 2017–18. By weight, Germany was the primary embarkation point for MDMA detected in 2018–19. Other key embarkation points by weight this reporting period include Turkey, the Netherlands, the United Kingdom, Belgium, France, Austria, Spain, Italy and Poland.

DRUG PROFILING METHYLAMPHETAMINE

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 submitted from seizures made at the Australian border¹² and seizures provided to the AFP by international agencies for the purpose of chemical profiling.¹³ 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 2019 from which samples were submitted to the NMI for routine analysis and profiling.¹⁴

The proportion of methylamphetamine found to be manufactured from a P2P (1-phenyl-2-propanone) precursor increased this reporting period. The proportion of mixed/unclassified seizures also increased in 2018–19. This is largely due to seizures of methylamphetamine being found to have indications of more than one 'type' of methylamphetamine. These are split into their relevant sections by weight in Table 2, highlighting that the unclassified seizures make up a small proportion of the total weight.

- In 2018, 103 seizures of methylamphetamine were sent to NMI for analysis. A total of 78 seizures, representing a bulk weight of 3.2 tonnes, were found to be suitable for profiling. The remaining seizures (totalling 28.4 kilograms) were unsuitable for profiling.
- In 2018, the top four seizures by weight accounted for 79 per cent of the total weight of methylamphetamine seized (see Table 2).
- In 2018, a 993.6 kilogram seizure of methylamphetamine was found to be manufactured from a P2P precursor.
- In the first six months of 2019 there were 39 seizures, totalling a record 4.3 tonnes of methylamphetamine.

¹² This data may also include seizures destined for Australia which occurred offshore.

¹³ Data from this samples/seizures have not been included in this summary.

¹⁴ Profiling data relate to seizures investigated by the AFP between 2010 to June 2019, and from which samples were submitted to the National Measurement Institute (NMI) for routine analysis and profiling. For all reporting years, the data represent 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. Samples from selected state and territory jurisdictions are submitted for chemical profiling as part of the Enhanced National Intelligence Picture on Illicit Drugs (ENIPID) capability.



- Similar to 2018, the top three seizures by weight in the first six months of 2019 accounted for 90 per cent of the total methylamphetamine seized.
- Operation HOTH accounted for 1.7 tonnes of the methylamphetamine seized in 2019, which was found to be synthesised from a P2P precursor.
- It should be noted that single seizures involving a mixture of both P2P and Eph/PSE samples are listed under the “Mixed/Unclassified” category in Table 1. However, when classifying by weight, the bulk weight of these seizures is separated and attributed to the relevant precursor. As such, the “Mixed/Unclassified” category in Table 2 only includes the weight of samples that could not be attributed to either P2P or Eph/PSE. As the 2017 reporting period was the first year FDI employed this method of classification, no conclusions should be drawn from the notable decrease between the 2017 and 2016 figures observed in Table 2.

TABLE 1: Synthetic route of manufacture of methylamphetamine samples as a proportion of analysed AFP border seizures classified by precursor, 2010–June 2019 (Source: Australian Federal Police, Forensic Drug Intelligence)¹⁵

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2019	34.2	42.9	22.9
2018	48.7	35.9	15.4
2017	52.6	36.9	10.5
2016	81.9	7.0	11.1
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

¹⁵ This data may also include seizures destined for Australia which occurred offshore.



TABLE 2: Synthetic route of manufacture of methylamphetamine samples as a proportion of total bulk weight of analysed AFP border seizures classified by precursor, 2010–June 2019 (Source: Australian Federal Police, Forensic Drug Intelligence)¹⁶

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2019	51.1	48.8	0.1
2018 ^a	33.5	66.4	0.1
2017	70.2	28.4	1.4
2016	63.4	1.7	34.9
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

a. Due to a change in the sampling methodology for large illicit drug seizures made by the AFP, seizure weights cannot be accurately attributed for seizures with mixed profiling. The weight has been assigned to the most prevalent chemical profiling determination.

The Enhanced National Intelligence Picture on Illicit Drugs (ENIPID) project extends this profiling to include state and territory seizures involving heroin, methylamphetamine and cocaine. This enables the identification of convergences between supply routes into different jurisdictions, links between different criminal groups, as well as comparison of trends between jurisdictions.¹⁷

- Samples submitted to the ENIPID capability in 2018 and the first six months of 2019 (see Tables 1 and 2 of Appendix 3) show a comparable split between methylamphetamine manufactured from Eph/PSE and P2P. This is comparable to trends seen at the border over a similar period, highlighting the recent increase of methylamphetamine manufactured using P2P.
- The number of mixed/unclassified samples in this reporting period remained stable. It is likely these samples are a result of evolving routes of manufacture.

MDMA

Due to changes in the Memorandum of Understanding between the NMI and the AFP, since November 2016 MDMA is no longer routinely chemically profiled. Historical forensic profiling data for MDMA are available in previous Illicit Drug Data Reports.

¹⁶ This data may also include seizures destined for Australia which occurred offshore.

¹⁷ The Proceeds of Crime Act-funded ENIPID project officially concluded on 30 June 2016. Since then, the ENIPID capability has been integrated into core AFP FDI duties to ensure its continued delivery through AFP Forensics.



DOMESTIC MARKET INDICATORS

No single dataset provides a comprehensive picture of illicit drugs, or the Australian illicit drug market. Each has benefits and limitations, and it is only through the layering of multiple data that we are able to enhance our understanding of the extent of the supply and demand trends in Australia's illicit drug markets.

AMPHETAMINES

The National Wastewater Drug Monitoring Program (NWDMP) collects wastewater samples every two months in capital city sites and every four months in regional sites. Aimed at acquiring data on the population-scale use of substances causing potential harm, the program provides a measure of the consumption of 13 illicit and licit drugs. According to data from the NWDMP for August 2018 to August 2019:

- Of the substances monitored by the program with available dose data, methylamphetamine remains the most consumed illicit drug by a considerable margin.
- Methylamphetamine consumption was higher per capita in regional sites than capital city sites.
- The population-weighted average consumption of methylamphetamine in capital city sites increased.
- The population-weighted average consumption of methylamphetamine in regional sites increased.
- The ACIC estimates that around 11.5 tonnes of methylamphetamine was consumed annually in Australia, an increase from the estimated 9.8 tonnes of methylamphetamine consumed in the previous year (ACIC 2020).

The below data reflect drug use within sentinel groups. As such, they are not representative of all people who use drugs, or drug use in the general population. However, they provide valuable insight into patterns of drug use and market trends and can assist in the identification of emerging issues that require further monitoring.

The Illicit Drug Reporting System (IDRS) collects self-report information on drug use and related harms annually from individuals in Australian capital cities who regularly inject drugs. According to this national study:

- The proportion of respondents reporting methylamphetamine as their drug of choice increased over the last decade, from 16 per cent in 2010 to 33 per cent in 2019. In 2018 this proportion was 35 per cent.
- While heroin remains the reported drug of choice within this user group, over the last decade the proportion of respondents reporting methylamphetamine as the drug most injected in the past month increased, from 19 per cent in 2010 to 42 per cent in 2019. In 2018 this figure was 44 per cent.
- Over the last decade the proportion of respondents reporting weekly or more frequent crystal methylamphetamine use increased, from 11 per cent in 2010 to 48 per cent in 2019. Crystal methylamphetamine was reported as the second most used drug within this user group after cannabis for the second consecutive year.
- The proportion of respondents reporting the recent use¹⁸ of any form of methylamphetamine increased over the last decade, from 60 per cent in 2010 to 78 per cent in 2019. In 2018 this proportion was 77 per cent. Crystal methylamphetamine is the most commonly reported form of methylamphetamine used within this user group.

18 In both the IDRS and EDRS studies, recent use refers to reported use in the six months preceding interview.



- Over the last decade the reported median number of days of use of any form of methylamphetamine in the six months preceding interview increased, from 14 days in 2010 to 48 days in 2018 and 2019 (Stafford & Burns 2011; Peacock et al. 2019a).

The Ecstasy and Related Drugs Reporting System (EDRS) collects self-report information on drug use and related harms annually from individuals in Australian capital cities who regularly use ecstasy and other stimulants. According to this national study:

- The proportion of respondents reporting the recent use of any form of methylamphetamine decreased over the last decade, from 56 per cent in 2010 to 33 per cent in 2019. In 2018 this proportion was 32 per cent.
- Powder methylamphetamine remains the most commonly reported form of methylamphetamine used within this user group.
- The reported median number of days of use of any form of methylamphetamine in the six months preceding interview remained relatively stable over the last decade, increasing from 4 days in 2010 to 5 days in 2019. In 2018 the reported number of days was 4 (Sindicich & Burns 2011; Peacock et al. 2019b).

The Australian Needle and Syringe Program Survey (ANSPS) collects self-report information and capillary blood samples¹⁹ annually to monitor blood borne viral infections and associated risk behaviour among individuals who inject drugs. According to the ANSPS National Data Report:

- The proportion of respondents reporting methylamphetamine as the drug last injected increased over the last decade, from 24 per cent in 2009 to 48 per cent in 2018. In 2017 this proportion was 41 per cent.
- Between 1995 and 2014 heroin was the most commonly reported drug last injected; however since 2015, the proportion of respondents reporting methylamphetamine as the drug last injected has exceeded heroin (Iversen & Maher 2015; Heard et al. 2019).

The Drug Use Monitoring in Australia (DUMA) program collects criminal justice and drug use information on a quarterly basis from police detainees, comprising an interviewer-assisted self-report survey and the voluntary provision of a urine sample, which is tested to detect licit and illicit drug use.²⁰ According to data from the DUMA program:

- Over the last decade the proportion of detainees testing positive²¹ to amphetamines²² and methylamphetamine increased, reaching record levels in 2018–19.
- The proportion of detainees testing positive to amphetamines increased over the last decade, from 15 per cent in 2009–10 to 57 per cent in 2018–19. In 2017–18 this proportion was 48 per cent.
- Of the detainees testing positive to amphetamines, the majority tested positive to methylamphetamine.
- The proportion of detainees testing positive to methylamphetamine increased over the last decade, from 13 per cent in 2009–10 to 56 per cent in 2018–19. In 2017–18 this proportion was 46 per cent.
- The self-reported recent use of methylamphetamine increased from 49 per cent in 2013–14 (the first period for which data are available) to 59 per cent in 2018–19. This proportion was 56 per cent in 2017–18 (see Figure 3).

19 Individuals participating in the survey are invited to provide a blood sample for HIV and HCV antibody testing.

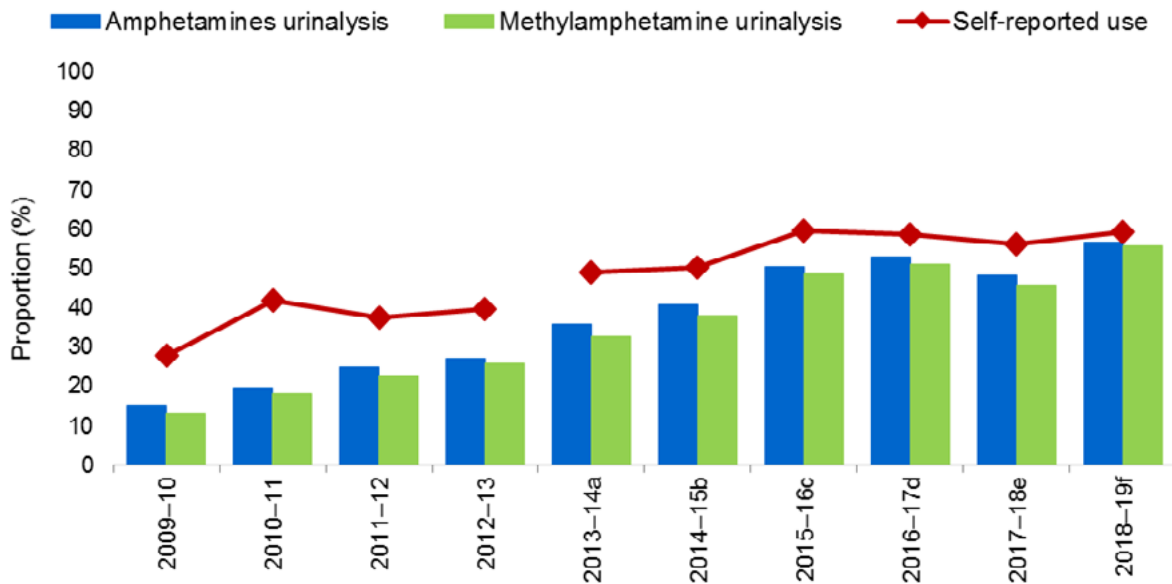
20 Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

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

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



FIGURE 3: National proportion of detainees testing positive for amphetamines/methylamphetamine compared with self-reported recent use, 2009–10 to 2018–19²³ (Source: Australian Institute of Criminology)



- Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.
- Urine was collected in the third quarter of 2014 and the first and second quarter of 2015.
- Urine was collected in the third quarter of 2015 and the first and second quarter of 2016.
- Urine was collected in the third quarter of 2016 and the second quarter of 2017.
- Urine was collected in the third quarter of 2017 in Adelaide, Brisbane and Perth; the fourth quarter of 2017 in Bankstown; and the first quarter of 2018 in Adelaide, Brisbane, Perth and Surry Hills.
- Urine was collected in the third quarter of 2018 in Adelaide, Brisbane and Perth; the fourth quarter of 2018 in Bankstown; and the first quarter of 2019 in Adelaide, Brisbane, Perth and Surry Hills.

The Australian Secondary Students Alcohol and Drug (ASSAD) Survey collects self-report information on alcohol, tobacco, over-the-counter drugs and illicit substance use among Australian secondary school students (aged 12 to 17) and is conducted every three years. According to the 2017 ASSAD survey:

- 2 per cent of respondents reported having used methylamphetamine at least once in their lifetime.
- 1 per cent of respondents reported having used methylamphetamine in the past month.²⁴
- ASSAD data collected between 1996 and 2017 indicates that amphetamine use among secondary school students was low and declining (Guerin & White 2018; Guerin & White 2019).

MDMA

According to data from the NWDMP from August 2018 to August 2019:

- MDMA consumption was higher per capita in regional sites than capital city sites.
- The population-weighted average consumption of MDMA in capital cities increased.
- The population-weighted average consumption of MDMA in regional sites increased.
- The ACIC estimates that around 2.2 tonnes of MDMA was consumed annually in Australia, an increase from the estimated 1.1 tonnes of MDMA consumed in the previous year (ACIC 2020).

²³ From 2013–14, the self-report question changed from including 'amphetamine/speed/methylamphetamine' to 'methylamphetamine/speed/ice'.

²⁴ Due to changes in the ASSAD questionnaire (which previously focused on amphetamines), data specific to methylamphetamine are not available prior to 2017. Data for reported amphetamines use for both recent use and use in lifetime in 2014 were 1 per cent and 2 per cent respectively.

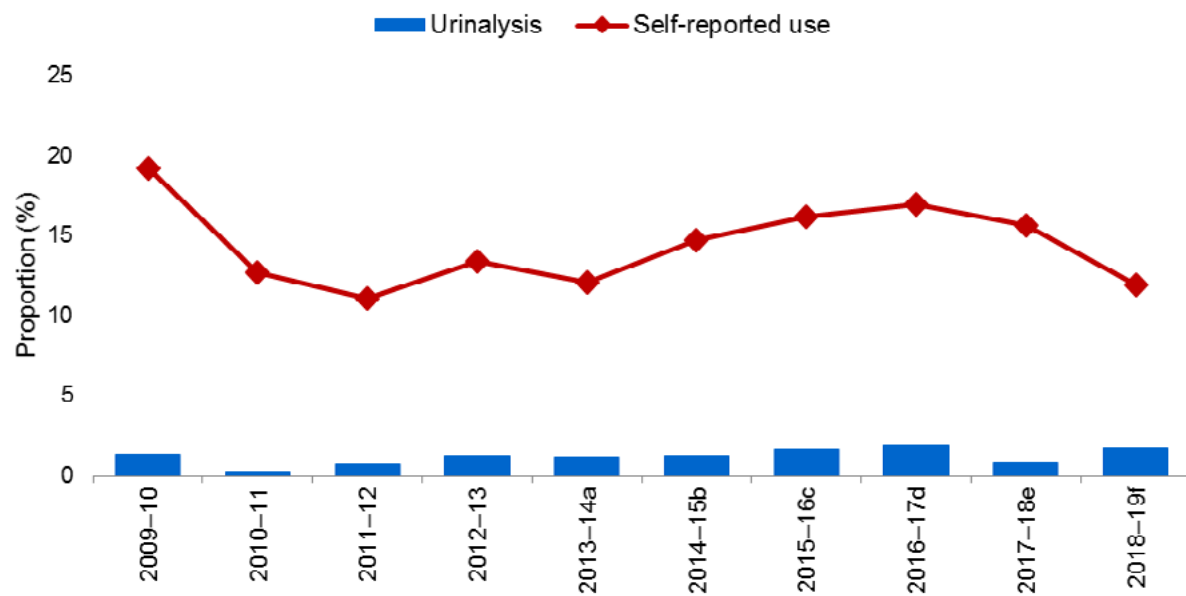
According to the EDRS study:

- The proportion of respondents reporting ecstasy as their drug of choice decreased over the last decade, from 37 per cent in 2010 to 32 per cent in 2019. This proportion was 36 per cent in 2018.
- The proportion of respondents reporting the recent use of ecstasy pills decreased over the last decade, from 98 per cent in 2010 to 67 per cent in 2019. Over the same period the proportion reporting the recent use of powder ecstasy (from 17 per cent to 29 per cent), capsules (from 47 per cent to 77 per cent) and crystal (from 28 per cent in 2013 to 63 per cent) increased.
- For the first time since the study commenced in 2003, capsules were the most common form of ecstasy recently used in 2019.
- Over the last decade the reported median number of days of any ecstasy use in the six months preceding interview remained relatively stable at 12 days in 2010, 2018 and 2019 (Sindicich & Burns 2011; Peacock et al. 2019b).

According to data from the DUMA program:

- Over the last decade the proportion of detainees testing positive to MDMA remained low and relatively stable, increasing from 1 per cent in 2009–10 to 2 per cent in 2018–19. In 2017–18 this proportion was less than 1 per cent.
- While the proportion of detainees self-reporting recent MDMA use fluctuated over the decade, it decreased from 19 per cent in 2009–10 to 12 per cent in 2018–19. This proportion was 16 per cent in 2017–18 (see Figure 4).

FIGURE 4: National proportion of detainees testing positive for MDMA compared with self-reported recent use, 2009–10 to 2018–19 (Source: Australian Institute of Criminology)



- Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.
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- Urine was collected in the third quarter of 2018 in Adelaide, Brisbane and Perth; the fourth quarter of 2018 in Bankstown; and the first quarter of 2019 in Adelaide, Brisbane, Perth and Surry Hills.



According to data from the 2017 ASSAD survey:

- The proportion of respondents reporting ecstasy use at least once in their lifetime increased, from 2 per cent in 2008 to 6 per cent in 2017.
- The proportion of respondents reporting ecstasy use at least once in the past month remained relatively stable, increasing from 1 per cent in 2008 to 2 per cent in 2017.
- Data collected between 1996 and 2017 indicate that most secondary school students surveyed had never used ecstasy, with lifetime use increasing with age (Guerin & White 2018; Guerin & White 2019).

CLANDESTINE LABORATORIES

The number of clandestine laboratories detected nationally decreased over the last decade, from 694 in 2009–10 to 308 in 2018–19. Methylamphetamine remains the main drug produced in clandestine laboratories detected nationally over the last decade.

The number of ATS (excluding MDMA) clandestine laboratory detections decreased 72 per cent over the last decade, from 585 in 2009–10 to 164 in 2018–19. The number of MDMA laboratory detections fluctuated over the last decade, decreasing from 17 in 2009–10 to 6 in 2018–19 (see *Clandestine laboratories and precursors* chapter).

PRICE

This section includes available price data for crystal methylamphetamine—the prevalent form of methylamphetamine available in Australia—and MDMA. Price data for amphetamine and non-crystal methylamphetamine are reported in the *Statistics* chapter.

At the street level, methylamphetamine is measured as a street deal (0.1 grams) or in grams.

According to price data provided by the jurisdictions:

- Nationally, the price for a street deal of crystal methylamphetamine remained relatively stable over the last decade, ranging between \$50 and \$200 in 2009–10 to between \$20 and \$200 in 2018–19. In 2017–18 the price ranged from \$20 to \$100. The national median price for a street deal decreased over the last decade, from \$82.50 in 2009–10 to \$62.50 in 2018–19. In 2017–18 the median price was \$75.
- Nationally, the price for 1 gram of crystal methylamphetamine decreased over the last decade, ranging between \$300 and \$1,000 in 2009–10 to between \$140 and \$800 in 2018–19. In 2017–18 the price ranged from \$150 to \$1,000. The national median price for a gram almost halved over the last decade, from \$750 in 2009–10 to \$385 in 2018–19. In 2017–18 the median price was \$350.
- Nationally, the price for 1 kilogram of crystal methylamphetamine decreased over the last decade, ranging between \$160,000 and \$325,000 in 2009–10 to between \$50,000 and \$140,000 in 2018–19. In 2017–18 the price ranged from \$75,000 to \$300,000.

At the street level, the price for MDMA is measured as individual tablets or in grams. According to price data provided by the jurisdictions:

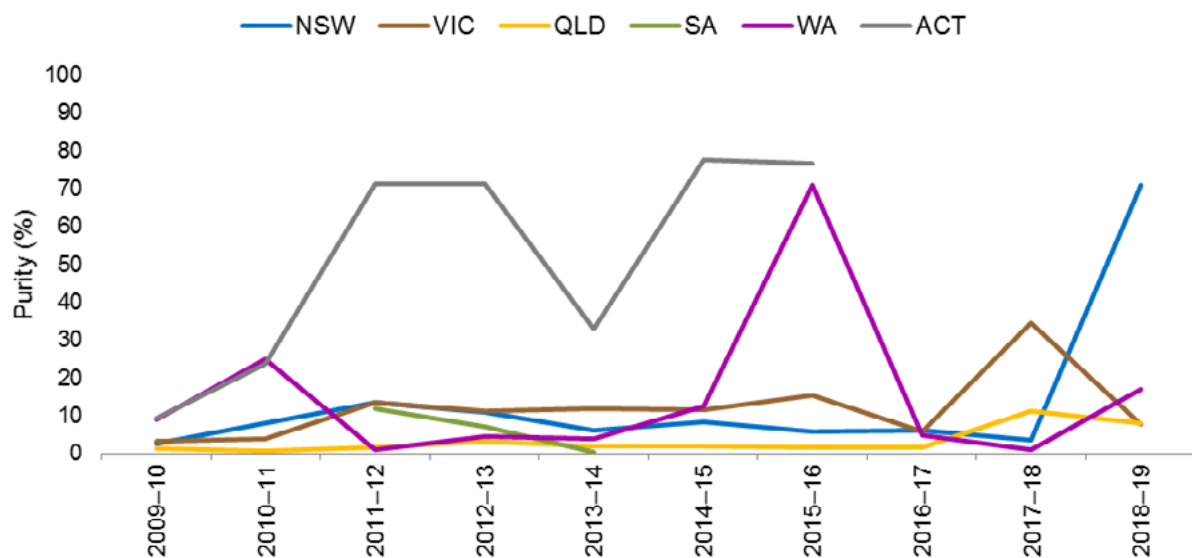
- Nationally, the price for a single MDMA tablet/capsule remained relatively stable over the last decade, ranging between \$10 and \$50 in 2009–10 to between \$9 and \$50 in 2018–19. In 2017–18 the price ranged from \$15 to \$45. The national median price for a single MDMA tablet/capsule decreased over the last decade from \$29.50 in 2009–10 to \$25 in 2018–19. In 2017–18 the median price was \$27.50.

- No price data were available for 1 gram of MDMA in 2009–10. Nationally, the price for 1 gram of MDMA ranged between \$100 and \$300 in 2017–18 to between \$100 and \$350 in 2018–19. The national median price for a gram of MDMA was \$200 in 2017–18 and 2018–19.
- No price data were available for 1 kilogram of MDMA in 2009–10. New South Wales and Queensland were the only jurisdictions to report the price for 1 kilogram of MDMA in 2018–19, which ranged between \$35,000 and \$60,000, compared with a national price range of \$37,000 to \$80,000 in 2017–18.

PURITY

Since 2009–10, with the exception of the Australian Capital Territory, the annual median purity of analysed amphetamine²⁵ samples remained low and relatively stable for most jurisdictions, ranging between less than 1 per cent and 78 per cent. In 2018–19, the annual median purity ranged from 8 per cent in Victoria to 71 per cent in New South Wales. This reporting period New South Wales and Western Australia reported increases in the annual median purity of amphetamine, while Victoria and Queensland reported decreases (see Figure 5).

FIGURE 5: Annual median purity of amphetamine samples, 2009–10 to 2018–19

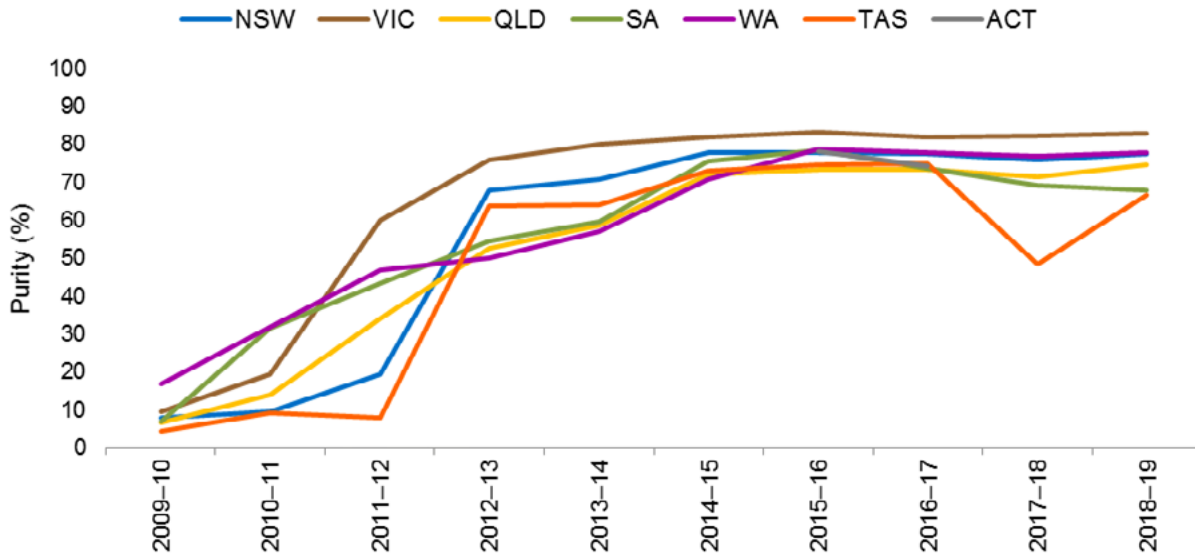


Since 2009–10, the annual median purity of analysed methylamphetamine samples ranged between 4 per cent and 83 per cent. The annual median purity increased over the last decade and since 2012–13, has remained high and relatively stable. In 2018–19, the annual median purity ranged from 67 per cent in Tasmania to 83 per cent in Victoria. With the exception of South Australia which decreased, all states reported an increase in the annual median purity of methylamphetamine this reporting period (see Figure 6).

25 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 for methylamphetamine with considerable purity and another for amphetamine with low purity.

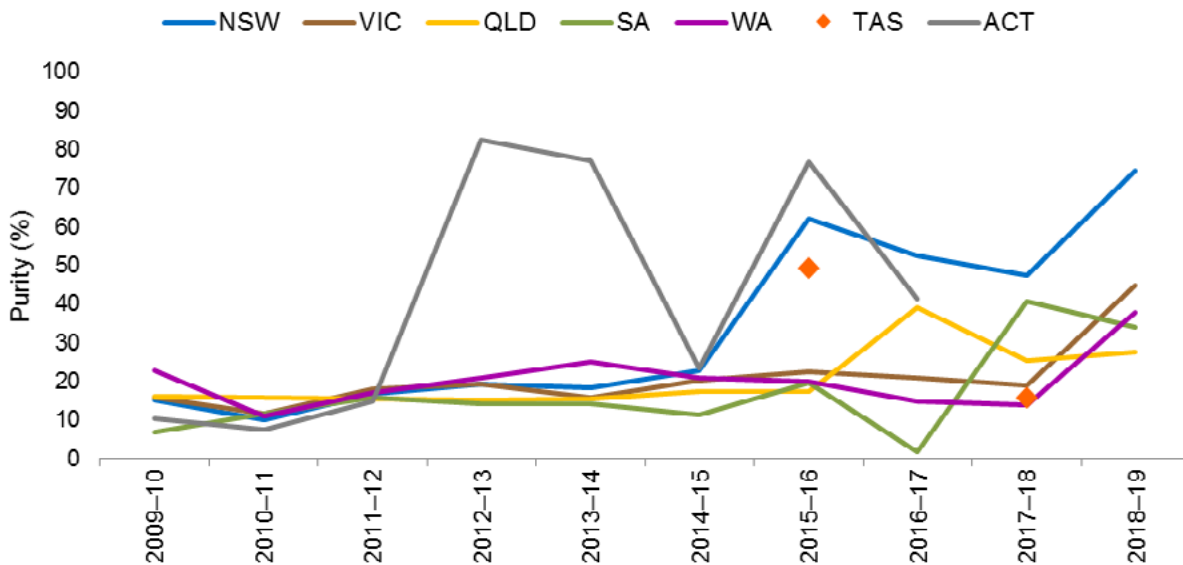


FIGURE 6: Annual median purity of methylamphetamine samples, 2009–10 to 2018–19



Since 2009–10, the annual median purity of analysed phenethylamine²⁶ samples ranged between 2 per cent and 83 per cent. While fluctuating, the annual median purity of phenethylamine increased over the last decade, particularly in New South Wales. In 2018–19, the annual median purity ranged from 28 per cent in Queensland to 75 per cent in New South Wales. With the exception of South Australia which reported a decrease, all states reported an increase in annual median phenethylamine purity this reporting period (see Figure 7).

FIGURE 7: Annual median purity of phenethylamine samples, 2009–10 to 2018–19



²⁶ Phenethylamines are synthetic drugs similar in composition to amphetamines. The most widely known phenethylamine is MDMA.



AVAILABILITY

User surveys provide mixed results for the availability of methylamphetamine. The reported availability of crystal methylamphetamine remained relatively stable while the availability of powder methylamphetamine decreased. The same surveys indicate that the availability of ecstasy increased for all forms (powder, capsules and crystal) except pills.

In a 2019 national study of people who regularly inject drugs:

- The proportion of respondents reporting crystal methylamphetamine as ‘easy’ or ‘very easy’ to obtain increased, from 94 per cent in 2018 to 95 per cent in 2019. This is an increase from the 75 per cent reported 2010.
- The proportion of respondents reporting powder methylamphetamine as easy or very easy to obtain decreased, from 80 per cent in 2018 to 77 per cent in 2019. This figure is similar to the proportion reported in 2010 (79 per cent).
- The proportion of respondents reporting base methylamphetamine as easy or very easy to obtain decreased, from 69 per cent in 2018 to 67 per cent in 2019. This is a decrease from 81 per cent in 2010 (Stafford & Burns 2011; Peacock at al. 2019a).

In a 2019 national study of people who regularly use ecstasy and other stimulants:

- The proportion of respondents reporting crystal methylamphetamine as easy or very easy to obtain remained stable at 94 per cent. This is an increase from the 78 per cent reported in 2010.
- The proportion of respondents reporting powder methylamphetamine as easy or very easy to obtain increased, from 65 per cent in 2018 to 68 per cent in 2019. This is a decrease from the 80 per cent reported in 2010.
- The proportion of respondents reporting ecstasy in powder, capsule or crystal form as easy or very easy to obtain increased from 2018 to 2019—from 68 per cent to 76 per cent for powder; from 85 per cent to 92 per cent for capsules; and from 74 per cent to 81 per cent for crystal.
- The proportion of respondents reporting ecstasy pills as easy or very easy to obtain decreased, from 83 per cent in 2018 to 81 per cent in 2019 (Sindicich & Burns 2011; Peacock at al. 2019b).

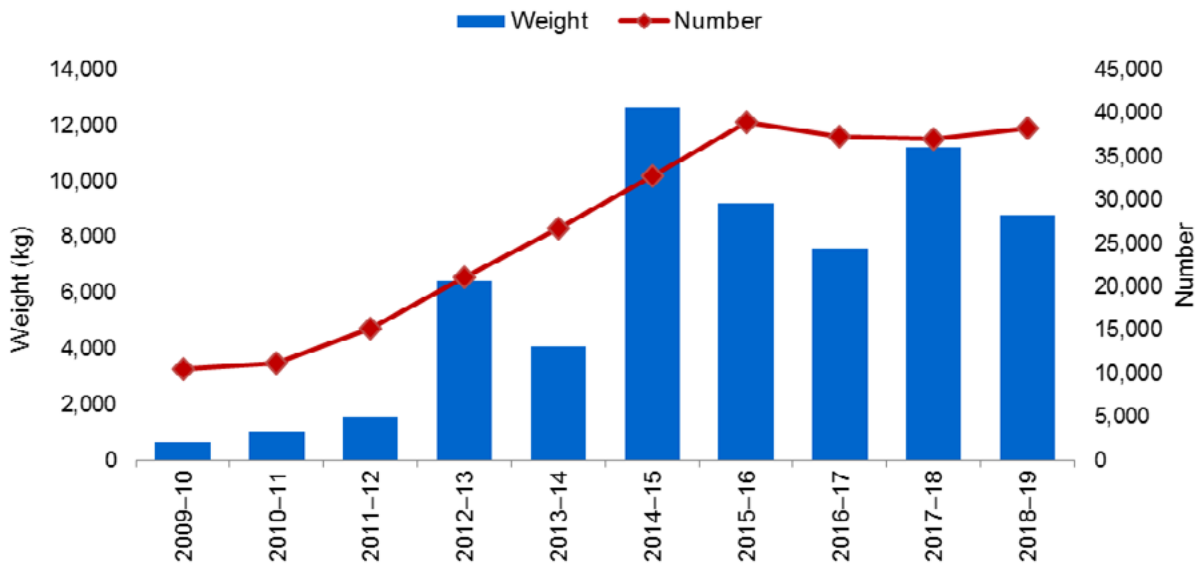
SEIZURES

The number of national ATS seizures increased 263 per cent over the last decade, from 10,543 in 2009–10 to 38,250 in 2018–19. The number of national ATS seizures increased between 2009–10 and 2015–16 and has since remained high and relatively stable. This reporting period the number of national ATS seizures increased 3 per cent, from 37,093 in 2017–18 to 38,250 in 2018–19.

The weight of ATS seized nationally increased 1,206 per cent over the last decade from 671.7 kilograms in 2009–10 to 8,776.5 kilograms in 2018–19. This reporting period the weight of ATS seized nationally decreased 22 per cent, from 11,205.2 kilograms to 8,776.5 kilograms in 2018–19 (see Figure 8).



FIGURE 8: National ATS seizures, by number and weight, 2009–10 to 2018–19



Tasmania reported the greatest percentage increase in the number of ATS seizures in 2018–19, while Victoria reported the greatest percentage increase in the weight of ATS seized. This reporting period New South Wales accounted for the greatest proportion of both the number (36 per cent) and weight of ATS seized nationally (51 per cent; see Table 3).

TABLE 3: Number, weight and percentage change of national ATS seizures, 2017–18 and 2018–19

State/Territory ^a	Number			Weight (grams)		
	2017–18	2018–19	% change	2017–18	2018–19	% change
New South Wales	12,582	13,865	10.2	8,315,935	4,448,119	-46.5
Victoria	2,364	2,360	-0.2	254,642	2,109,855	728.6
Queensland ^b	8,440	10,000	18.5	944,919	1,601,445	69.5
South Australia	912	1,007	10.4	31,513	242,411	669.2
Western Australia ^c	11,295	9,439	-16.4	1,642,992	351,458	-78.6
Tasmania	613	743	21.2	3,913	7,722	97.3
Northern Territory	444	442	-0.5	7,014	4,815	-31.4
Australian Capital Territory	443	394	-11.1	4,337	10,724	147.3
Total	37,093	38,250	3.1	11,205,265	8,776,549	-21.7

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

b. The 2018–19 data provided by the Queensland Police Service reflects improvements made to the quality of the drug seizure dataset. As a result, caution should be exercised in comparing data from previous reporting periods.

c. The 2018–19 data provided by the Western Australia Police Force reflects improvements made to the quality of the drug seizure dataset. As a result, caution should be exercised in comparing data from previous reporting periods.

Of the 263 per cent increase in the number of national ATS seizures over the last decade (from 10,543 in 2009–10 to 38,250 in 2018–19), the increase was most marked for amphetamines²⁷ (320 per cent), followed by MDMA (114 per cent) and other ATS (85 per cent).

27 Amphetamines include amphetamine, methylamphetamine, dexamphetamine and amphetamines not elsewhere classified.



Over the last decade amphetamines accounted for the greatest proportion of the number of national ATS seizures, increasing from 72 per cent in 2009–10 to 84 per cent in 2018–19. This was followed by MDMA seizures (27 per cent in 2009–10 to 16 per cent in 2018–19) and other ATS (1 per cent in 2009–10 and <1 per cent in 2018–19).

- This reporting period, the number of national amphetamines seizures increased 3 per cent, from 31,204 in 2017–18 to 32,021 in 2018–19. The number of national MDMA seizures increased 7 per cent, from 5,719 in 2017–18 to 6,103 in 2018–19, while the number of other ATS seizures decreased 26 per cent, from 170 in 2017–18 to 126 in 2018–19.

Of the 1,206 per cent increase in the weight of national ATS seizures over the last decade (from 671.7 kilograms in 2009–10 to 8,776.5 kilograms in 2018–19), the weight of amphetamines seized increased 1,387 per cent, with the weight of MDMA seized increasing 1,244 per cent and the weight of other ATS increasing 982 per cent.

Over the last decade amphetamines accounted for the greatest proportion of the weight of ATS seized nationally, increasing from 44 per cent in 2009–10 to 50 per cent 2018–19, followed by other ATS (decreasing from 39 per cent in 2009–10 to 32 per cent in 2018–19) and MDMA (remaining relatively stable at 17 per cent in 2009–10 and 18 per cent in 2018–19).

- The weight of amphetamines seized decreased 13 per cent this reporting period, from 5,064.9 kilograms in 2017–18 to 4,418.0 kilograms in 2018–19. The weight of MDMA seized decreased 23 per cent this reporting period, from 2,033.0 kilograms in 2017–18 to 1,560.0 kilograms in 2018–19, with the weight of other ATS seized decreasing 32 per cent this reporting period, from 4,107.2 kilograms in 2017–18 to 2,798.4 kilograms in 2018–19.

The form of national ATS seizures (by number) changed markedly over the last decade, from a relatively equal number of seizures of all forms of ATS earlier in the decade to predominantly seizures of crystalline ATS from 2013–14 onwards.

- The number of national seizures of ATS in crystalline form increased 1,045 per cent from 2009–10 to 2018–19, with the weight seized increasing 3,100 per cent over the same period.

Proportionally, in 2009–10, national ATS seizures in crystalline, powder, tablet and other forms were broadly similar (ranging between 22 and 29 per cent). In 2018–19, seizures in crystalline form accounted for 69 per cent of the number of national ATS seizures, followed by other²⁸ (18 per cent), powder (10 per cent) and tablet (3 per cent).

By weight, the form of national ATS seizures fluctuated over the last decade, though the proportion of national seizures in crystalline form increased from 19 per cent in 2009–10 to 47 per cent in 2018–19.

- Seizures in crystalline form accounted for the greatest proportion of the weight of ATS seized nationally in 2018–19 (47 per cent), followed by powder (41 per cent), other (11 per cent) and tablet (<1 per cent).

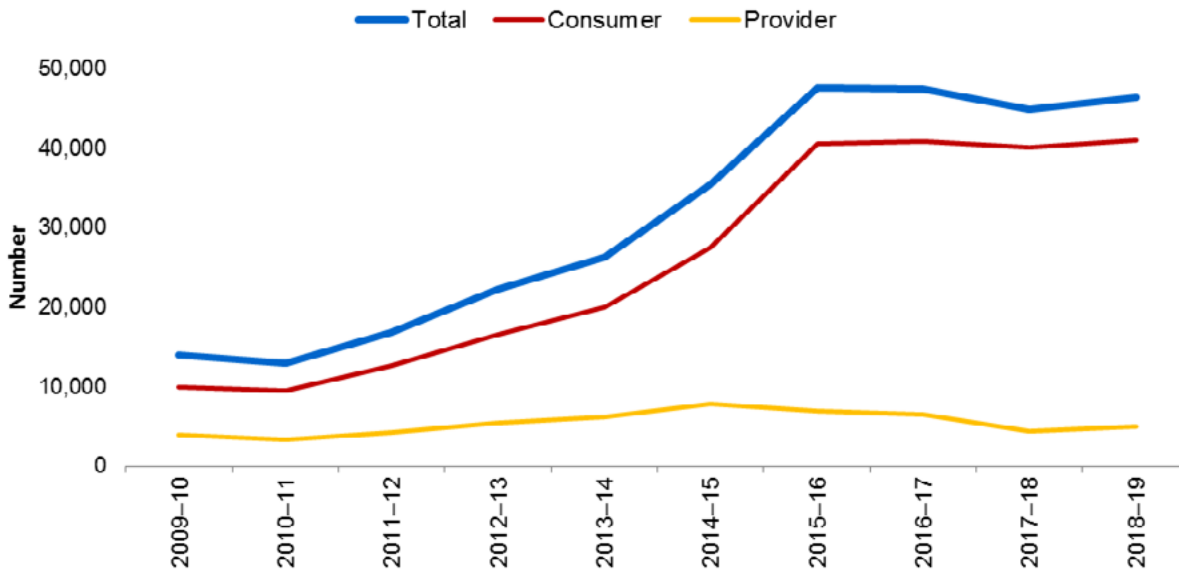
ARRESTS

The number of national ATS arrests increased 232 per cent over the last decade, from 13,982 in 2009–10 to 46,437 in 2018–19—an increase of 4 per cent from the 44,887 arrests in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, accounting for 88 per cent of national ATS arrests in 2018–19 (see Figure 9).

28 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.

Amphetamines continue to account for the greatest proportion of national ATS arrests, accounting for 87 per cent in 2018–19, followed by MDMA (13 per cent) and other ATS (<1 per cent). The number of national amphetamines arrests increased 4 per cent this reporting period, from 39,065 in 2017–18 to 40,487 in 2018–19. The number of MDMA arrests increased 3 per cent this reporting period, from 5,739 in 2017–18 to 5,890 in 2018–19. The number of other ATS arrests decreased 28 per cent, from 83 in 2017–18 to 60 in 2018–19.

FIGURE 9: Number of national ATS arrests, 2009–10 to 2018–19



Tasmania reported the greatest percentage increase in the number of ATS arrests in 2018–19. This reporting period Queensland accounted for the greatest proportion of national ATS (28 per cent; see Table 4).

TABLE 4: Number and percentage change of national ATS arrests, 2017–18 and 2018–19

State/Territory ^a	Arrests		
	2017–18	2018–19	% change
New South Wales	9,784	10,355	5.8
Victoria	10,153	10,598	4.4
Queensland	11,511	12,926	12.3
South Australia	5,852	4,390	-25.0
Western Australia	6,631	7,031	6.0
Tasmania	551	718	30.3
Northern Territory	217	270	24.4
Australian Capital Territory	188	149	-20.7
Total	44,887	46,437	3.5

a. The arrest data for each state and territory include Australian Federal Police data.



NATIONAL IMPACT

The weight of global ATS seizures increased from 2016 to 2017, with methylamphetamine accounting for the greatest proportion of the weight of ATS seized. Over the same period, the weight of methylamphetamine seized globally increased, the weight of amphetamine seized decreased and the weight of ecstasy seized remained stable. The number and weight of methylamphetamine and amphetamine seized globally by WCO agencies increased in 2018, while number and weight of MDMA seized decreased.

Several indicators of ATS supply and demand in Australia suggest that the markets for both methylamphetamine and MDMA are expanding.

Indicators of demand for amphetamines include surveys of people who regularly use drugs, police detainees and wastewater analysis.

- Data from surveys of people who regularly inject drugs point to an increase in methylamphetamine use in 2019. While heroin remains the drug of choice within this population, weekly or more frequent methylamphetamine use in the past six months in 2019 was higher than heroin for the second consecutive year.
- According to a national study of people who regularly inject drugs and of people who regularly use ecstasy and other stimulants, the availability of crystal methylamphetamine increased in 2019.
- According to a national study of police detainees, both the proportion of detainees testing positive to amphetamines—the majority of which continues to be methylamphetamine—and the proportion of detainees self-reporting recent methylamphetamine use increased.
- According to historical national studies of secondary students, amphetamine use among secondary school students is low and declining.
- The NWDMP identified that, of the substances monitored by the program with available dose data, methylamphetamine remains the most consumed illicit drug, with regional consumption exceeding capital city consumption. The population-weighted average consumption of methylamphetamine increased in both capital city and regional sites.

Indicators of ATS (excluding MDMA) supply include border detection, seizure, arrest, price, purity and clandestine laboratory data. Compared to 2017–18, in 2018–19:

- The number of ATS (excluding MDMA) detections at the Australian border decreased, while the weight detected increased to record levels.
- The number of national ATS seizures increased, while the weight of ATS seized nationally decreased.
- Amphetamines accounted for the greatest proportion of the number and weight of national ATS seizures in 2018–19.
- The number of national ATS arrests increased, with amphetamines accounting for the greatest proportion of national ATS arrests in 2018–19.
- The national median price for a street deal of crystal methylamphetamine decreased.
- The annual median purity of analysed amphetamine samples fluctuated, while the annual median purity of analysed methylamphetamine samples increased in all states except South Australia.



- While methylamphetamine manufactured from ephedrine/pseudoephedrine (Eph/PSE) remains prominent in the Australian market, drug profiling data indicates the proportion of methylamphetamine manufactured using P2P has increased. The proportion of mixed/unclassified seizures has also increased, suggesting the use of new routes of methylamphetamine manufacture.
- Methylamphetamine remains the main drug produced in clandestine laboratories detected nationally.

Indicators of MDMA demand include surveys of people who regularly use drugs, police detainees and wastewater analysis.

- According to a national study of people who regularly use ecstasy and other stimulants, ecstasy remains the drug of choice within this user population, with the median days of use in the past six months remaining stable. For first time since the program began in 2003, recent use of capsules overtook recent use of ecstasy pills.
- The same survey reported that the availability of ecstasy increased for all forms of the drug (powder, capsules and crystal) except pills.
- According to a national study of police detainees, the proportion of detainees testing positive to MDMA increased, while the proportion of detainees self-reporting MDMA use decreased.
- According to a national study of secondary students, the majority of secondary students surveyed had never used ecstasy, with use increasing with age.
- The NWDMP indicates that average MDMA consumption is higher in regional sites than capital city sites. The population-weighted average consumption of MDMA decreased in capital city sites and increased in regional sites over the life of the program.

Indicators of MDMA supply include border detections, seizure, arrest, price, purity and clandestine laboratory data. Compared to 2017–18, in 2018–19:

- Both the number and weight of MDMA detections at the Australian border increased. The weight of MDMA detected in 2018–19 is the highest recorded in the last decade.
- The number of national MDMA seizures increased this reporting period, while the weight of MDMA seized nationally decreased.
- The number of national MDMA arrests decreased.
- The national median price for a single MDMA tablet/capsule decreased.
- The annual median purity of analysed phenethylamine samples—the majority of which related to MDMA—increased in all states except South Australia.
- The number of MDMA laboratory detections decreased.



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