

# AMPHETAMINE-TYPE STIMULANTS

## KEY POINTS

- The weight of ATS seized globally increased around 20 per cent from 2015 to 2016.
  - While methylamphetamine comprised the majority of global ATS seizures, increases were also recorded in the weight of amphetamine and MDMA seized.
- Indicators of ATS supply and demand in Australia provide a mixed picture. While there is variation within different types of ATS, the indicators point to a large, relatively stable market.
  - While the number of ATS (excluding MDMA) detections at the Australian border continued to decrease in 2017–18, the weight detected increased to the second highest reported in the last decade.
  - While the number of MDMA detections at the Australian border decreased this reporting period, the weight detected in 2017–18 increased and is the second highest reported in the last decade.
  - Drug profiling data of analysed border and domestic seizures indicate ephedrine and pseudoephedrine remain the predominant methylamphetamine precursors.
  - The number of national ATS seizures remained high and relatively stable this reporting period, with the 11.2 tonnes of ATS seized in 2017–18 the second highest weight on record.
  - While the number of national ATS arrests decreased this reporting period, the 44,887 ATS arrests in 2017–18 is the third highest on record.
  - Amphetamines continue to account for the greatest proportion of national ATS seizures and arrests.
  - Of the substances tested by the National Wastewater Drug Monitoring Program, methylamphetamine was the most consumed illicit drug in regional and capital city sites, with MDMA one of the least consumed drugs.
  - Using data from the National Wastewater Drug Monitoring Program, the ACIC estimates more than 9.8 tonnes of methylamphetamine and more than 1.1 tonnes of MDMA is consumed in Australia each year, with the estimated weight of methylamphetamine consumed nationally increasing from the first to the second year of the program, while the estimated weight of MDMA consumed nationally decreased.



## 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.
- Amphetamine is most commonly found in powder and tablet form, which can be swallowed, snorted, smoked or (less commonly) injected.
- Methylamphetamine has four common forms: tablet, crystalline (often referred to as 'ice' and considered the most potent form of the drug<sup>18</sup>), base (also referred to as 'paste') and powder (also referred to as 'speed'). Methylamphetamine can be swallowed, snorted, smoked or injected.
- MDMA (also referred to as 'ecstasy'), is a derivative of amphetamine, but has an important difference in chemical structure which provides MDMA's hallucinogenic (in addition to stimulant) properties.
- MDMA 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 2018a; ADF 2018b; EMCDDA 2019; Degenhardt & Hall 2010).

## INTERNATIONAL TRENDS

The weight of ATS seized globally continues to increase, from 205 tonnes in 2015 to 247 tonnes in 2016. Methylamphetamine comprised the majority of these ATS seizures, with the weight of methylamphetamine seized globally increasing by 12.0 per cent in 2016 (to 158 tonnes). Increases were also recorded in the weight of amphetamine (35.0 per cent) and ecstasy (37.0 per cent) seized in 2016, weighing 70 tonnes and 14 tonnes respectively (UNODC 2018).

North America (including Mexico) and East and South-East Asia remained the two primary regions worldwide for methylamphetamine seizures. A total of 87 tonnes of methylamphetamine was seized in North America in 2016 and close to 61 tonnes was seized in East and South-East Asia. Since 2013, crystal methylamphetamine has become particularly prevalent in these two regions: East and South-East Asia recorded a tripling in the weight of crystal methylamphetamine seized between 2013 and 2016 (reaching 30 tonnes), while in North America, the weight of methylamphetamine seized increased from 30 to 52 tonnes over the same period. The weight of amphetamine seized in the regions of the Near and Middle East and South-West Asia more than doubled (increasing from 20 tonnes in 2015 to 46 tonnes in 2016) and accounted for 65.0 per cent of the weight of amphetamine seized globally in 2016. A regional breakdown for ecstasy seizures was not available (UNODC 2018).

<sup>18</sup> 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.





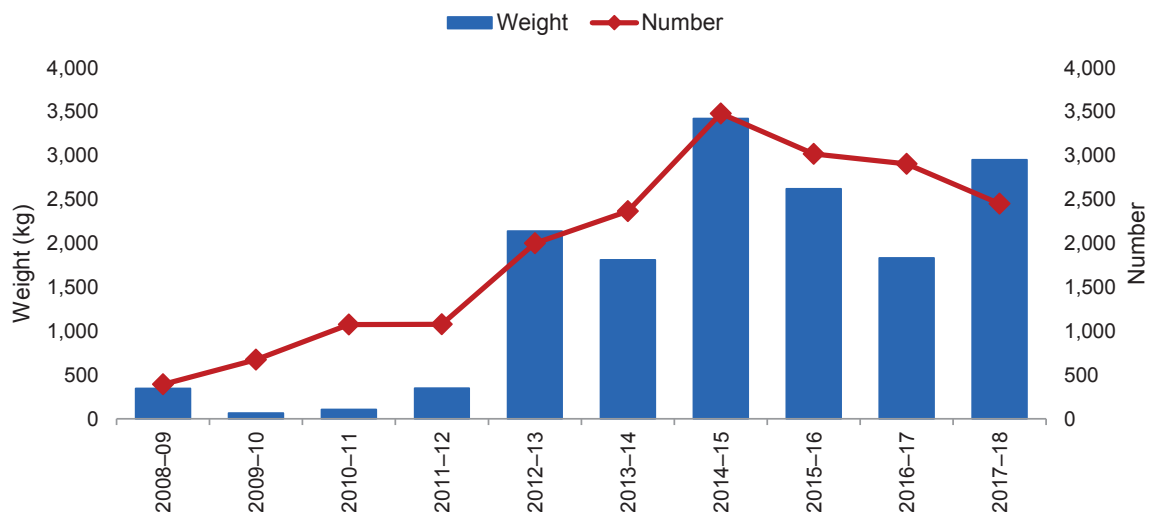
According to the World Customs Organization (WCO), methylamphetamine accounted for the greatest proportion of seizures, both by number and weight, within the ‘psychotropic substances’ category. The number of methylamphetamine seizures reported by WCO agencies increased 22.0 per cent, from 2,422 in 2016 to 2,956 in 2017. While the specific weight of methylamphetamine seized in 2016 is not available, the weight of methylamphetamine seized increased in 2017 to 36,464.6 kilograms. WCO agencies reported a decrease in the number of MDMA seizures in 2017 (to 2,590), while the weight of MDMA seized increased (to 3,298.5 kilograms). The number of amphetamine seizures reported by WCO agencies increased in 2017 (to 1,368), while there was a small decrease in the weight of amphetamine seized (weight not specified; WCO 2018).

## DOMESTIC TRENDS

### AUSTRALIAN BORDER SITUATION

Large quantities of ATS, particularly methylamphetamine, continue to be detected at the Australian border. The number of ATS (excluding MDMA) detections decreased 15.6 per cent this reporting period, from 2,905 in 2016–17 to 2,451 in 2017–18. The weight detected increased 61.0 per cent this reporting period, from 1,833.9 kilograms in 2016–17 to 2,952.4 kilograms in 2017–18 (the second highest on record, see Figure 1). In 2017–18, 168 ATS (excluding MDMA) detections (or 6.9 per cent), weighed one kilogram or more. With a combined weight of 2,837.7 kilograms, these 168 detections account for 96.1 per cent of the weight of ATS (excluding MDMA) detected in 2017–18.<sup>19</sup>

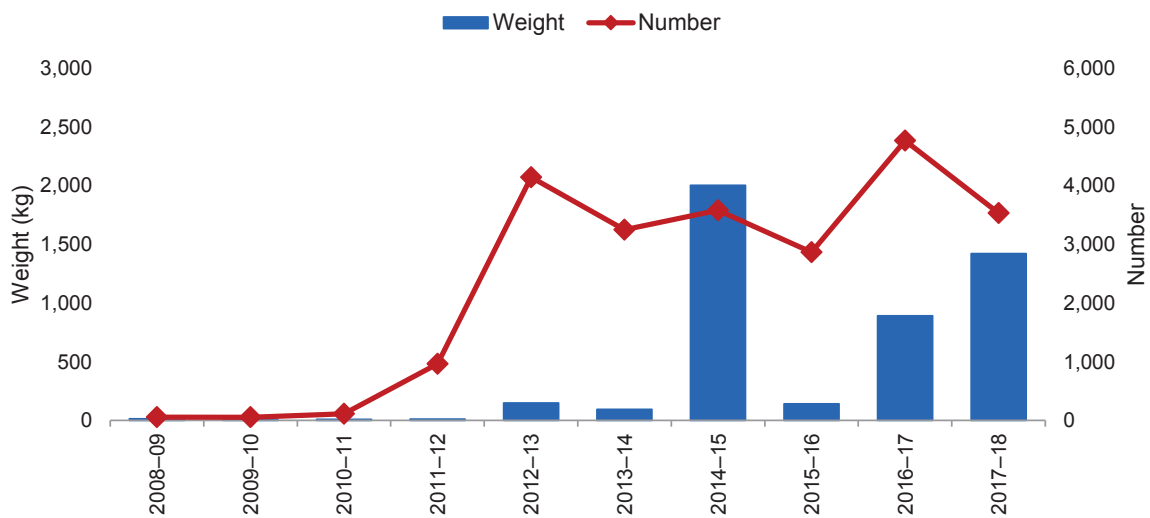
**FIGURE 1: Number and weight of ATS (excluding MDMA) detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)**



<sup>19</sup> See Appendix 1 for significant border detections of ATS (excluding MDMA) in 2017–18.

The number of MDMA detections at the Australian border decreased 25.9 per cent this reporting period, from 4,763 in 2016–17 to 3,530 in 2017–18. The weight of MDMA detected this reporting period increased 59.6 per cent, from 890.2 kilograms in 2016–17 to 1,420.8 kilograms in 2017–18 (the second highest weight detected in the past decade, see Figure 2). In 2017–18, 92 MDMA detections (or 2.6 per cent), weighed one kilogram or more. With a combined weight of 1,328.4 kilograms, these 92 detections account for 93.5 per cent of the weight of MDMA detected in 2017–18.<sup>20</sup>

**FIGURE 2: Number and weight of MDMA detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)**



## IMPORTATION METHODS

In 2017–18, detections of ATS (excluding MDMA) occurred in the international mail, air cargo and sea cargo, and air passenger/crew streams. This reporting period the international mail stream accounted for 87.1 per cent of the number ATS (excluding MDMA) detections at the Australian border, followed by air cargo (11.5 per cent), air passenger/crew (1.1 per cent) and sea cargo (0.2 per cent). By weight, sea cargo accounted for the greatest proportion of ATS (excluding MDMA) detected at the Australian border (63.9 per cent), followed by air cargo (27.0 per cent), international mail (8.2 per cent) and air passenger/crew (0.8 per cent).<sup>21</sup>

In 2017–18, MDMA detections at the Australian border occurred in the international mail, air passenger/crew, air cargo and sea cargo streams. This reporting period the international mail stream accounted for the greatest proportion of the number of MDMA detections at the Australian border (98.9 per cent), followed by air cargo (0.7 per cent), air passenger/crew (0.4 per cent) and sea cargo (0.1 per cent). By weight, the air cargo stream accounted for the greatest proportion of MDMA detected at the Australian border (72.4 per cent), followed by international mail (21.1 per cent), sea cargo (6.4 per cent) and air cargo (<0.1 per cent).<sup>22</sup>

<sup>20</sup> See Appendix 1 for significant border detections of MDMA in 2017–18.

<sup>21</sup> Figures for importation methods of ATS (excluding MDMA) detections in 2017–18 will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.

<sup>22</sup> Figures for importation methods of MDMA detections in 2017–18 will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.



## EMBARKATION POINTS

In 2017–18, 50 countries were identified as embarkation points for ATS (excluding MDMA) detected at the Australian border, compared with 52 countries in 2016–17. By weight, the United States (US) continued to be the primary embarkation point for ATS (excluding MDMA) detected in 2017–18. Other key embarkation points by weight this reporting period include Thailand, Malaysia, United Arab Emirates, Canada, China (including Hong Kong), Mexico, Lebanon, Vietnam and India.

In 2017–18, 32 countries were identified as embarkation points for MDMA detected at the Australian border, compared with 28 countries in 2016–17. By weight, the Netherlands was the primary embarkation point for MDMA detected in 2017–18. Other key embarkation points by weight this reporting period include Germany, France, Spain, the United Kingdom, Belgium, China, Austria, Switzerland and Italy.

## 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 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 2018 from which samples were submitted to the NMI for routine analysis and profiling.<sup>23</sup>

Consistent with previous reporting periods, ephedrine/pseudoephedrine (Eph/PSE) remain the dominant precursors for methylamphetamine seized at the Australian border, however, the weight of methylamphetamine manufactured from P2P (1-phenyl-2-propanone) increased in the first six months of 2018 (see Tables 1 and 2).

- In 2017, 115 methylamphetamine seizures, representing a bulk weight of 3.7 tonnes, were sent to NMI for analysis.
- In 2017, 1.1 tonnes of methylamphetamine manufactured from Eph/PSE was seized during Operation LIGAR. This was the largest AFP seizure of methylamphetamine on record and accounted for over 30.0 per cent of the total bulk weight analysed in 2017.
- During the first six months of 2018 there were 27 seizures of methylamphetamine, weighing over 1.6 tonnes.

<sup>23</sup> Profiling data relate to seizures investigated by the AFP between 2010 to June 2018, 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) project.

- On the basis of the number of seizures, data for the first six months of 2018 show a continuation of the Eph/PSE trend for methylamphetamine manufacture, while P2P has proven the dominant precursor on the basis of bulk weight. A single large seizure made in 2018, which was manufactured from P2P, accounted for 95.6 per cent of the bulk weight. This highlights the impact one large seizure can have on the overall picture for methamphetamine production in Australia, which should be taken into consideration when interpreting these trends.

**TABLE 1: Synthetic route of manufacture of methylamphetamine samples as a proportion of analysed AFP border seizures classified by precursor, 2010–June 2018**  
 (Source: Australian Federal Police, Forensic Drug Intelligence)<sup>24,25</sup>

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2018	59.3	25.9	14.8
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

**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 2018**  
 (Source: Australian Federal Police, Forensic Drug Intelligence)<sup>24,25</sup>

Year	Synthetic Route		
	Eph/PSE %	P2P %	Mixed/Unclassified %
Jan–Jun 2018	35.7	64.3	<0.0
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

<sup>24</sup> This data may also include seizures destined for Australia which occurred offshore.

<sup>25</sup> 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 in Table 2.





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 detection of similarities between supply routes into different jurisdictions, links between different criminal groups, as well as comparison of trends between jurisdictions. The Proceeds of Crime Act (POCA) 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.

Consistent with AFP border data and previous reporting periods, Eph/PSE remain the dominant precursors for methylamphetamine seized by jurisdictions and submitted to the ENIPID project.<sup>26</sup>

- ENIPID data for the first six months of 2018 continue to reflect AFP border data, noting a considerable increase in P2P-based methylamphetamine samples (see Tables 1 and 2 in Appendix 2).

### 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 is available in previous Illicit Drug Data Reports.

## DOMESTIC MARKET INDICATORS

No single data set 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 Drug Strategy Household Survey (NDSHS) collects self-report information on alcohol, tobacco and illicit drug use among the general population and also surveys people's attitudes and perceptions in relation to these. Conducted approximately every three years, the related report presents estimates derived from survey responses weighted to the appropriate Australian population. According to the 2016 NDSHS:

- The proportion of the Australian population aged 14 years or older who reported having used meth/amphetamine at least once in their lifetime decreased, from 7.0 per cent in 2013 to 6.3 per cent in 2016.
- The proportion of the Australian population aged 14 years or older who reported having recently<sup>27</sup> used meth/amphetamine decreased, from 2.1 per cent in 2013 to 1.4 per cent in 2016.
- The proportion of respondents who reported recent meth/amphetamine use at least once a week increased from 15.5 per cent in 2013 to 20.4 per cent in 2016.

<sup>26</sup> Low numbers of ENIPID samples were collected and analysed for Western Australia in 2017–18. As a result, consideration should be given when drawing conclusions on national trends from Appendix 2 (Tables 1 and 2).

<sup>27</sup> In the NDSHS, recent use refers to reported use in the previous 12 months.

- Crystal/ice remained the main form of methylamphetamine reportedly used in the last 12 months, increasing from 50.4 per cent in 2013 to 57.3 per cent in 2016.
  - The proportion of respondents reporting powder/speed as the main form used continued to decrease, from 28.5 per cent in 2013 to 20.2 per cent in 2016 (AIHW 2017).

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 12 illicit and licit drugs.<sup>28</sup> According to data from the NWDMP:

- Of all the substances tested by the program, methylamphetamine remains the most consumed illicit drug by a large margin.
- The population-weighted average consumption of methylamphetamine increased when comparing data from August 2017 and August 2018.
- Using data derived from the NWDMP, the ACIC estimates more than 9.8 tonnes of methylamphetamine is consumed in Australia each year, with the estimated weight of methylamphetamine consumed nationally increasing from the first to the second year of the program (ACIC 2019).

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 the national study of injecting drug users:

- The proportion of respondents reporting methylamphetamine as their drug of choice increased, from 32.0 per cent in 2017 to 35.0 per cent in 2018.
- While heroin remains the reported drug of choice within this population, in 2018 methylamphetamine was reported as the drug injected most often in the last month.
- The proportion of respondents reporting the recent use<sup>29</sup> of any form of methylamphetamine increased, from 71.0 per cent in 2017 to 77.0 per cent in 2018.
- The reported median number of days of any form of methylamphetamine use in the six months preceding interview increased, from 38 days in 2017 to 48 days in 2018.<sup>30</sup>
- The proportion of respondents reporting the recent use of crystal methylamphetamine increased, from 68.0 per cent in 2017 to 75.0 per cent in 2018.

28 The public NWDMP reports are available on the ACIC website. See <<https://www.acic.gov.au/publications/intelligence-products/national-wastewater-drug-monitoring-program-report>>.

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

30 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.







- The proportion of respondents reporting the recent use of speed<sup>31</sup> in 2018 remained unchanged from 20.0 per cent in 2017.
- The proportion of respondents reporting the recent use of methylamphetamine base decreased, from 10.0 per cent in 2017 to 7.0 per cent in 2018 (Peacock et al. 2018a).

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 the national study of regular ecstasy users:

- The proportion of respondents reporting the recent use of any form of methylamphetamine increased, from 31.0 per cent in 2017 to 32.0 per cent in 2018.
- The reported median number of days of any form of methylamphetamine use in the six months preceding interview increased, from 3 days in 2017 to 4 days in 2018.<sup>32</sup>
- While 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 22.0 per cent in 2017 to 21.0 per cent in 2018.
- The proportion of respondents reporting the recent use of crystal methylamphetamine increased, from 13.0 per cent in 2017 to 17.0 per cent in 2018.
- The proportion of respondents reporting the recent use of base increased, from 3.0 per cent in 2017 to 4.0 per cent in 2018 (Peacock et al. 2018b).

The Australian Needle and Syringe Program Survey (ANSPS) collects self-report information and capillary blood samples<sup>33</sup> annually to monitor blood borne viral infections and associated risk behaviour among individuals who inject drugs. According to the ANSPS National Data Report 2013–17, methylamphetamine (41.0 per cent) continued to exceed heroin (30.0 per cent) as the most commonly reported drug last injected in 2017 (Heard et al. 2018).

The Drug Use Monitoring in Australia (DUMA) program collects criminal justice and drug use information on a quarterly basis from police detainees and 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.<sup>34</sup> According to data from the DUMA program:

- The proportion of detainees testing positive<sup>35</sup> for amphetamines<sup>36</sup> decreased, from 52.9 per cent in 2016–17 to 48.2 per cent in 2017–18.
- Of the detainees testing positive for any amphetamines, the majority tested positive for methylamphetamine.
- The proportion of detainees testing positive for methylamphetamine continues to be higher than the proportion of detainees testing positive for MDMA, heroin, cocaine, benzodiazepines and opiates (excluding heroin).

31 The term speed refers to methylamphetamine in powder form and is used in only this instance for consistency with the IDRS and EDRS studies.

32 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.

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

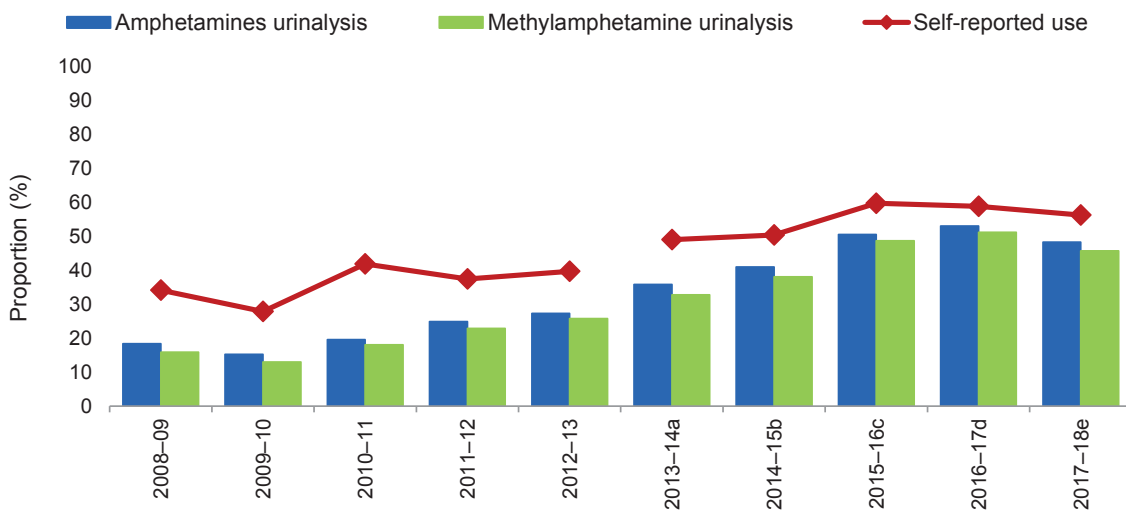
34 Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

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

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

- Following seven consecutive increases in the proportion of detainees testing positive to methylamphetamine, the proportion of detainees testing positive for methylamphetamine decreased this reporting period, from 51.3 per cent in 2016–17 to 45.6 per cent in 2017–18.
- In 2017–18, 56.2 per cent of detainees self-reported recent<sup>37</sup> methylamphetamine use, a decrease from the 58.7 per cent reported in 2016–17 (see Figure 3).

**FIGURE 3: National proportion of detainees testing positive for amphetamines/ methylamphetamine compared with self-reported recent use, 2008–09 to 2017–18<sup>38</sup>**  
 (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.

The Australian Secondary Students Alcohol and Drug Survey (ASSAD) 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:

- 2.0 per cent of respondents reported having used methylamphetamine at least once in their lifetime.
- 1.0 per cent of respondents reported having used methylamphetamine in the past month (Guerin & White 2018).<sup>39</sup>

<sup>37</sup> Recent use in the DUMA program refers to self-reported use in the 12 months prior to arrest.

<sup>38</sup> From 2013–14, the self-report question changed from including ‘amphetamine/speed/methylamphetamine’ to ‘methylamphetamine/speed/ice.’

<sup>39</sup> Due to changes in the related questionnaire, data specific to methylamphetamine is not available for previous reporting periods, which previously focused on amphetamines. Reported amphetamines use data for both recent and use in lifetime in 2014 was 1.0 per cent and 2.0 per cent respectively.





## MDMA

According to the 2016 NDSHS:

- The proportion of the Australian population aged 14 years or older who reported having used ecstasy at least once in their lifetime increased, from 10.9 per cent in 2013 to 11.2 per cent in 2016.
- The proportion of the Australian population aged 14 years or older who reported having recently used ecstasy decreased, from 2.5 per cent in 2013 to 2.2 per cent in 2016.

According to the NWDMP:

- With the exception of new psychoactive substances, MDMA was consistently the lowest consumed substance of those tested nationally.
- The population-weighted average consumption of MDMA increased when comparing data from August 2017 and August 2018.
- Using data derived from the NWDMP, the ACIC estimates more than 1.1 tonnes of MDMA is consumed in Australia each year, with the estimated weight of MDMA consumed nationally decreasing from the first to the second year of the program (ACIC 2019).

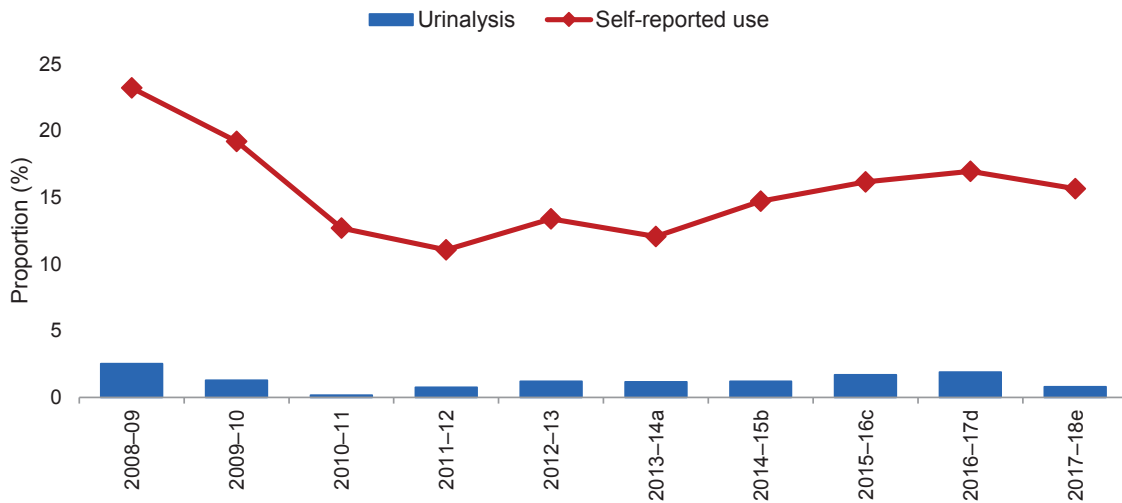
According to the EDRS study:

- The reported median days of any ecstasy use in the six months preceding interview decreased, from 14 days in 2017 to 12 days in 2018.
- Within this user population, the proportion of respondents reporting the recent use of tablets decreased, from 78.0 per cent in 2017 to 75.0 per cent in 2018.
- The proportion of respondents reporting the recent use of crystals decreased, from 67.0 per cent in 2017 to 62.0 per cent in 2018.
- The proportion of respondents reporting the recent use of capsules increased, from 71.0 per cent in 2017 to 72.0 per cent in 2018.
- The proportion of respondents reporting the recent use of powder increased, from 30.0 per cent in 2017 to 31.0 per cent in 2018.
- Within this user population, the proportion reporting ecstasy as their drug of choice remained stable at 36.0 per cent in 2018 (Peacock et al. 2018b).

According to data from the DUMA program:

- Following three consecutive increases in the proportion of detainees testing positive to MDMA, the proportion of detainees testing positive to MDMA decreased this reporting period, from 2.0 per cent in 2016–17 to 0.8 per cent in 2017–18.
- Following three consecutive increases in the proportion of detainees self-reporting recent MDMA use, the proportion of detainees self-reporting MDMA use decreased this reporting period, from 16.9 per cent in 2016–17 to 15.6 per cent in 2017–18 (see Figure 4).

**FIGURE 4: National proportion of detainees testing positive for MDMA compared with self-reported recent use, 2008–09 to 2017–18 (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.

According to data from the ASSAD survey:

- The proportion of respondents who reported having used ecstasy at least once in their lifetime increased, from 3.0 per cent in 2014 to 5.0 per cent in 2017.
- The proportion of respondents who reported having used ecstasy at least once in the past month increased, from 1.0 per cent in 2014 to 2.0 per cent in 2017 (Guerin & White 2018).

## CLANDESTINE LABORATORIES

The number of clandestine laboratories detected nationally decreased 6.7 per cent this reporting period, from 463 in 2016–17 to 432 in 2017–18. Methylamphetamine remains the main drug produced in clandestine laboratories detected nationally. The number of laboratories detected producing MDMA more than doubled, from 8 in 2016–17 to 20 in 2017–18 (see *Clandestine laboratories and precursors* chapter).

## PRICE

Nationally, the price for a street deal (0.1 grams) of amphetamine ranged between \$30 and \$100 in 2017–18, compared with a price range of \$50 to \$500 in 2016–17 (reported in Western Australia and Tasmania). Nationally, the price for 1 gram of amphetamine ranged between \$200 and \$1,000 in 2017–18, compared with a price range of \$200 to \$300 in 2016–17 (reported in Tasmania and the Australian Capital Territory). Queensland was the only jurisdiction to report a price for 1 kilogram of amphetamine in 2017–18, which ranged between \$70,000 and \$120,000.





Queensland was the only jurisdiction to report price data for non-crystal methylamphetamine this reporting period. The price for a street deal (0.1 grams) of non-crystal methylamphetamine ranged between \$50 and \$100 in 2017–18, identical to the price range reported in Queensland in 2016–17. The price for 1 gram of non-crystal methylamphetamine ranged between \$250 and \$550 in 2017–18, compared to a price range of \$300 to \$1,000 in 2016–17 (reported in Queensland).

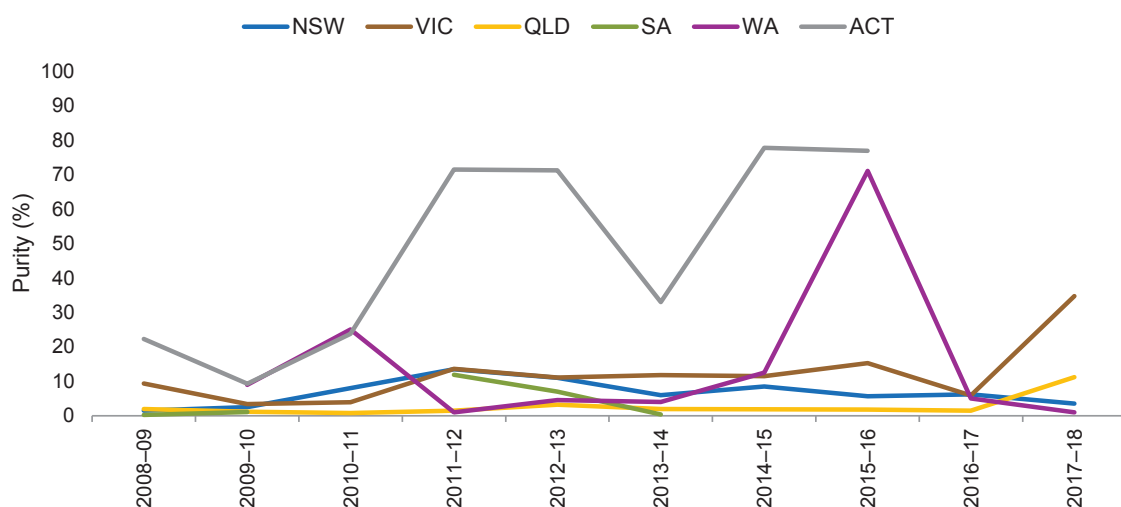
Nationally, the price for a street deal (0.1 grams) of crystal methylamphetamine ranged between \$20 and \$100 in 2017–18, compared with a price range of \$17 to \$150 in 2016–17. Nationally, the price for 1 gram of crystal methylamphetamine ranged between \$150 and \$1,000 in 2017–18, compared to a price range of \$250 to \$1,000 in 2016–17. Nationally, the price for 1 kilogram of crystal methylamphetamine ranged between \$75,000 and \$300,000 in 2017–18, compared to a price range of \$50,000 to \$280,000 in 2016–17.

Nationally, the price for a single MDMA tablet/capsule ranged between \$15 and \$45 in 2017–18, compared with a price range of \$4 to \$50 in 2016–17. Nationally, the price for 1 gram of MDMA powder ranged between \$100 and \$300 in 2017–18, compared with a price range of \$96 to \$500 in 2016–17. Nationally, the price for 1 kilogram of MDMA ranged between \$37,000 and \$80,000 in 2017–18, compared with a price range of \$30,000 to \$60,000 in 2016–17.

## PURITY

Since 2008–09, the annual median purity of analysed amphetamine<sup>40</sup> samples has ranged between less than 1.0 per cent and 77.7 per cent (see Figure 5). In 2017–18, the annual median purity ranged from 1.0 per cent in Western Australia to 34.7 per cent in Victoria. This reporting period Victoria and Queensland reported an increase in the annual median purity of amphetamine, while New South Wales and Western Australia reported a decrease. In 2017–18, the quarterly median purity of amphetamine ranged between less than 1.0 per cent in Queensland in the third quarter of 2017 and 45.0 per cent in the first quarter of 2018 in Victoria.<sup>41</sup>

**FIGURE 5: Annual median purity of amphetamine samples, 2008–09 to 2017–18**

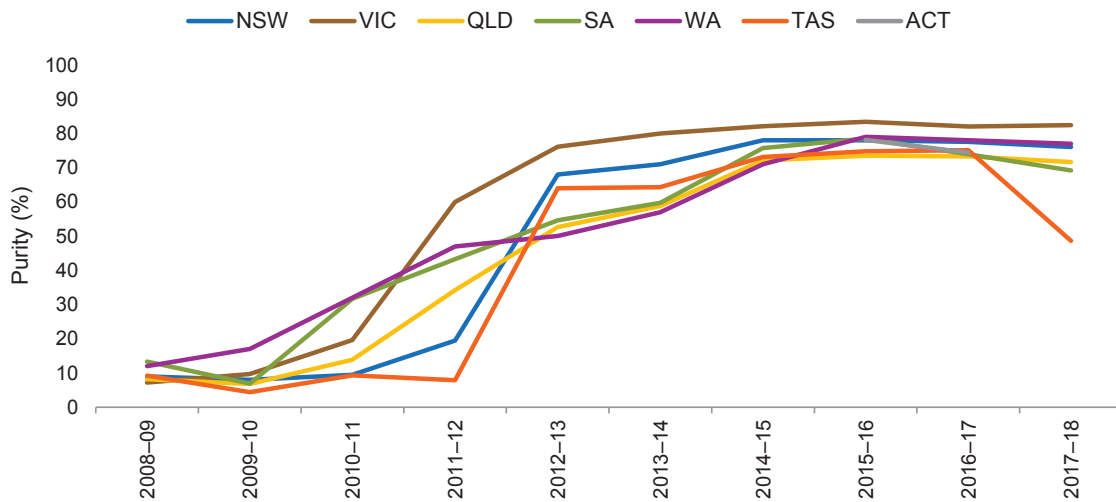


<sup>40</sup> Amphetamine is a manufacturing by-product of some commonly used methods of methylamphetamine production. This can result in two separate purity figures for a single drug sample—one for methylamphetamine with considerable purity and another for amphetamine with low purity.

<sup>41</sup> A figure for this data will be available on the Crime Statistics Australia website. See <<http://www.crimestats.aic.gov.au/IDDR/>>.

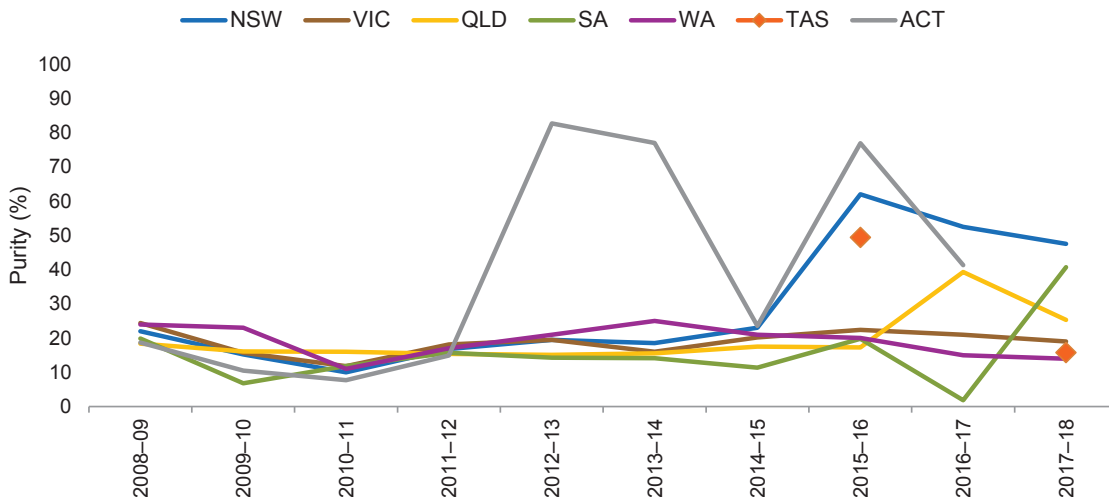
Since 2008–09, the annual median purity of analysed methylamphetamine samples has ranged between 4.4 per cent and 83.4 per cent (see Figure 6). In 2017–18, the annual median purity ranged from 48.6 per cent in Tasmania to 82.4 per cent in Victoria. With the exception of Victoria, where the annual median purity of methylamphetamine has remained relatively stable, all states reported a decrease in annual median purity this reporting period. In 2017–18, the quarterly median purity of methylamphetamine ranged between 45.0 per cent in the fourth quarter of 2017 in Tasmania and 83.1 per cent in the second quarter of 2018 in Victoria.<sup>42</sup>

**FIGURE 6: Annual median purity of methylamphetamine samples, 2008–09 to 2017–18**



Since 2008–09, the annual median purity of analysed phenethylamine<sup>43</sup> samples has ranged between 1.8 per cent and 82.7 per cent (see Figure 7). In 2017–18, the annual median purity of phenethylamine ranged from 14.0 per cent in Western Australia to 47.5 per cent in New South Wales. With the exception of South Australia, which reported an increase in median phenethylamine purity, all states reported a decrease in annual median purity this reporting period. In 2017–18, the quarterly median purity of phenethylamine ranged between 5.2 per cent in Tasmania in the second quarter of 2018 and 68.0 per cent in New South Wales in the fourth quarter of 2017.<sup>44</sup>

**FIGURE 7: Annual median purity of phenethylamine samples, 2008–09 to 2017–18**



42 A figure for this data will be available on the Crime Statistics Australia website. See <<http://www.crimestats.aic.gov.au/IDDR/>>.

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

44 A figure for this data will be available on the Crime Statistics Australia website. See <<http://www.crimestats.aic.gov.au/IDDR/>>.



## AVAILABILITY

In a 2018 national study of regular injecting drug users, the proportion of respondents reporting crystal methylamphetamine as easy or very easy to obtain decreased, from 95.0 per cent in 2017 to 94.0 per cent in 2018. The proportion of respondents reporting speed as easy or very easy to obtain increased, from 72.0 per cent in 2017 to 81.0 per cent in 2018. The proportion of respondents reporting base as easy or very easy to obtain increased, from 68.0 per cent in 2017 to 69.0 per cent in 2018 (Peacock et al. 2018a).

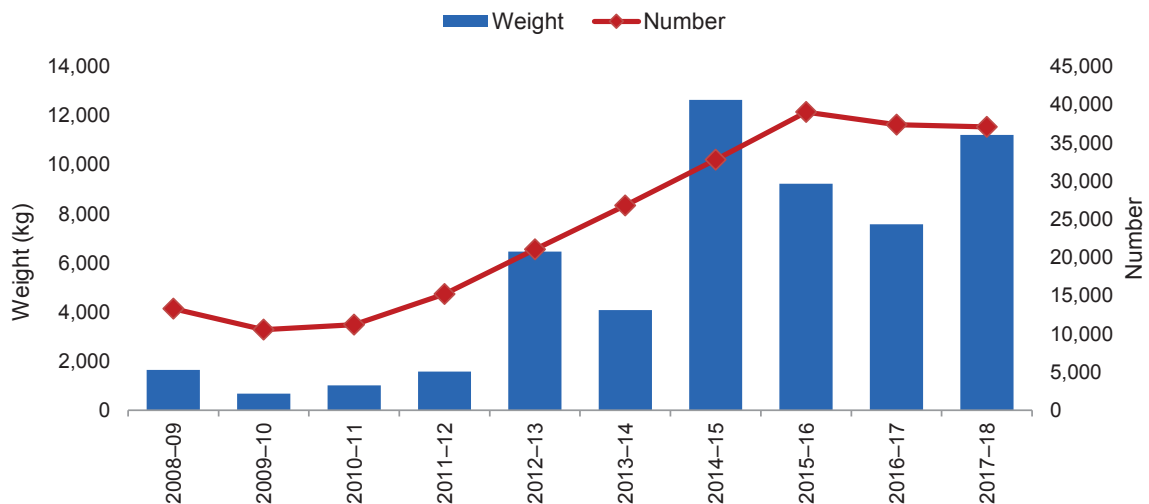
In a 2018 national study of regular ecstasy users, the proportion of respondents reporting crystal methylamphetamine as easy or very easy to obtain increased, from 90.0 per cent in 2017 to 94.0 per cent in 2018. The proportion of respondents reporting speed as easy or very easy to obtain remained stable at 65.0 per cent in 2017 and 2018 (Peacock et al. 2018b).

In the same 2018 study, the proportion of respondents reporting ecstasy tablets, powder, capsules and crystal as easy or very easy to obtain decreased from 88.0 per cent (tablets), 70.0 per cent (powder), 86.0 per cent (capsules) and 78.0 per cent (crystal) in 2017 to 83.0 per cent (tablets), 68.0 per cent (powder), 85.0 per cent (capsules) and 74.0 per cent (crystal) in 2018 (Peacock et al. 2018b).

## SEIZURES AND ARRESTS

The number of national ATS seizures remained relatively stable this reporting period, with the 37,093 seizures in 2017–18 the third highest number on record. The weight of ATS seized nationally increased 48.0 per cent this reporting period, from 7,571.9 kilograms in 2016–17 to 11,205.2 kilograms in 2017–18 and is the second highest weight on record (see Figure 8).

**FIGURE 8: National ATS seizures, by number and weight, 2008–09 to 2017–18**



Western Australia reported the greatest percentage increase in both the number and weight of ATS seized this reporting period. New South Wales accounted for the greatest proportion of both the number (33.9 per cent) and weight (74.2 per cent) of national ATS seizures in 2017–18 (see Table 3).

**TABLE 3: Number, weight and percentage change of national ATS seizures, 2016–17 and 2017–18**

State/Territory <sup>a</sup>	Number			Weight (grams)		
	2016–17	2017–18	% change	2016–17	2017–18	% change
New South Wales	13,787	12,582	-8.7	4,780,255	8,315,935	74.0
Victoria	2,355	2,364	0.4	2,388,794	254,642	-89.3
Queensland	8,421	8,440	0.2	229,486	944,919	311.8
South Australia	1,143	912	-20.2	39,785	31,513	-20.8
Western Australia <sup>b</sup>	9,872	11,295	14.4	118,906	1,642,992 <sup>c</sup>	1,281.8
Tasmania	650	613	-5.7	4,875	3,913	-19.7
Northern Territory	543	444	-18.2	5,231	7,014	34.1
Australian Capital Territory	580	443	-23.6	4,657	4,337	-6.9
<b>Total</b>	<b>37,351</b>	<b>37,093</b>	<b>-0.7</b>	<b>7,571,989</b>	<b>11,205,265</b>	<b>48.0</b>

- a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.
- b. The 2017–18 data provided by the Western Australia Police Force reflects improvements made to the quality of the drug seizure and offender dataset. As a result, caution should be exercised in comparing data from previous reporting periods.
- c. The majority of the weight of ATS seized in Western Australia in 2017–18 relates to a single significant methylamphetamine seizure.

Amphetamines<sup>45</sup> accounted for 84.1 per cent of the number of national ATS seizures in 2017–18, followed by MDMA (15.4 per cent) and other ATS (0.5 per cent). The number of national amphetamines seizures increased 2.3 per cent this reporting period, from 30,513 in 2016–17 to 31,204 in 2017–18. The number of national MDMA seizures decreased 12.7 per cent this reporting period, from 6,550 in 2016–17 to 5,719 in 2017–18, with the number of other ATS seizures decreasing 41.0 per cent this reporting period, from 288 in 2016–17 to 170 in 2017–18. ATS seizures in crystalline form accounted for 69.5 per cent of the number of national seizures in 2017–18, followed by other<sup>46</sup> (14.4 per cent), powder (10.2 per cent) and tablet (6.0 per cent).<sup>47</sup>

Amphetamines accounted for 45.2 per cent of the weight of ATS seized nationally in 2017–18, followed by other ATS (36.7 per cent) and MDMA (18.1 per cent). The weight of amphetamines seized increased 32.6 per cent this reporting period, from 3,821.0 kilograms in 2016–17 to 5,064.9 kilograms in 2017–18. The weight of MDMA seized increased 42.5 per cent this reporting period, from 1,426.7 kilograms in 2016–17 to 2,033.0 kilograms in 2017–18, with the weight of other ATS seized increasing 76.7 per cent this reporting period, from 2,324.1 kilograms in 2016–17 to 4,107.2 kilograms in 2017–18. ATS seizures in crystalline form accounted for the greatest proportion of the weight of ATS seized nationally in 2017–18 (47.8 per cent), followed by other (42.7 per cent), tablet (5.2 per cent) and powder (4.3 per cent).<sup>48</sup>

The number of national ATS arrests decreased 5.6 per cent this reporting period, from 47,531 in 2016–17 to 44,887 in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, comprising 90.0 per cent of national ATS arrests in 2017–18 (see Figure 9).

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

46 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.

47 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.

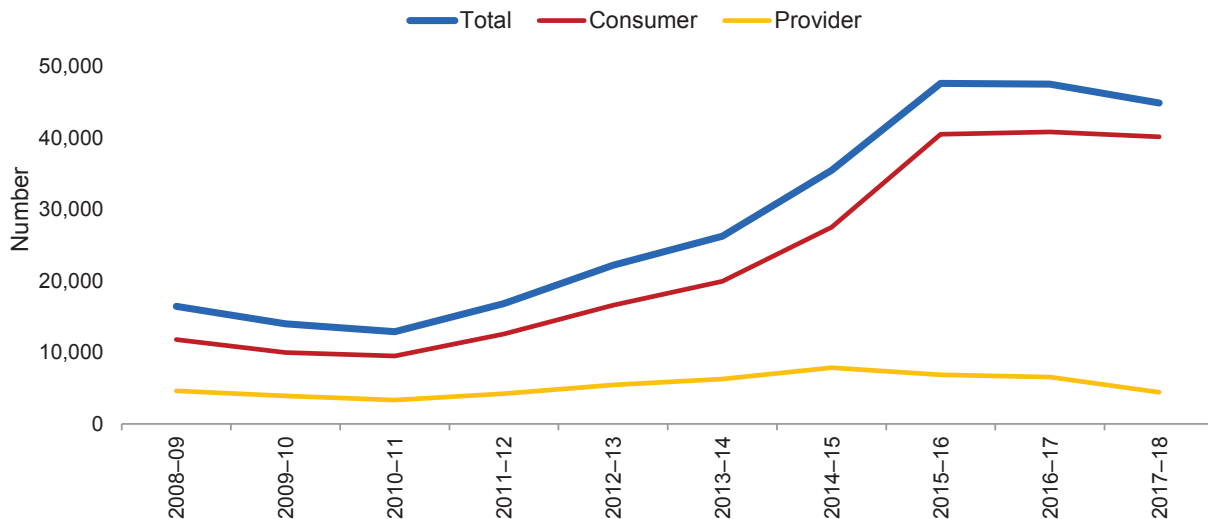
48 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.





All states and territories reported more ATS consumer than provider arrests this reporting period. Amphetamines continue to account for the greatest proportion of National ATS arrests, accounting for 87.0 per cent in 2017–18, followed by MDMA (12.8 per cent) and other ATS (0.2 per cent).<sup>49</sup> The number of national amphetamines arrests decreased 4.6 per cent this reporting period, from 40,961 in 2016–17 to 39,065 in 2017–18. The number of MDMA arrests decreased 10.7 per cent, from 6,424 in 2016–17 to 5,739 in 2017–18. The number of other ATS arrests decreased 43.2 per cent, from 146 in 2016–17 to 83 in 2017–18.

**FIGURE 9: Number of national ATS arrests, 2008–09 to 2017–18**



Tasmania reported the greatest percentage increase in the number of ATS arrests in 2017–18. Queensland accounted for the greatest proportion of national ATS arrests this reporting period (25.6 per cent), followed by Victoria (22.6 per cent) and New South Wales (21.8 per cent). Combined, these three states account for 70.1 per cent of national ATS arrests in 2017–18 (see Table 4).

**TABLE 4: Number and percentage change of national ATS arrests, 2016–17 and 2017–18**

State/Territory <sup>a</sup>	Arrests		% change
	2016–17	2017–18	
New South Wales	9,636	9,784	1.5
Victoria	10,817	10,153	-6.1
Queensland	12,023	11,511	-4.3
South Australia	6,146	5,852	-4.8
Western Australia <sup>b</sup>	7,882	6,631	-15.9
Tasmania	510	551	8.0
Northern Territory	281	217	-22.8
Australian Capital Territory	236	188	-20.3
<b>Total</b>	<b>47,531</b>	<b>44,887</b>	<b>-5.6</b>

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

b. The 2017–18 data provided by the Western Australia Police Force reflects improvements made to the quality of the drug seizure and offender dataset. As a result, caution should be exercised in comparing data from previous reporting periods.

<sup>49</sup> A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/IDDR/>>.

## NATIONAL IMPACT

The weight of ATS seized globally continued to increase between 2015 and 2016. While methylamphetamine comprised the majority of these ATS seizures, increases were also recorded in the weight of amphetamine and MDMA seized globally.

Indicators of ATS demand and supply provide a mixed picture of for ATS use in Australia. While there is variation within different types of ATS, the indicators point to a large, relatively stable market.

Indicators of demand for amphetamines include surveys of drug users, police detainees and wastewater analysis.

- According to the 2016 NDSHS, the reported recent use of meth/amphetamine and lifetime use decreased, however, the frequency of reported use increased, with the crystal form of the drug remaining the most commonly used.
- According to a national study of police detainees, both the proportion of detainees testing positive to methylamphetamine and the proportion self-reporting recent methylamphetamine use decreased in 2017–18. Despite this decrease, methylamphetamine use remains high compared to other substances monitored by this study.
- The NWDMP identified that of the drugs tested, methylamphetamine continues to be the most consumed illicit drug in both regional and city sites. While consumption has fluctuated over the reporting period, when comparing wastewater data from August 2016 to August 2018, the population-weighted average consumption of methylamphetamine in both capital city and regional sites increased.

Indicators of ATS (excluding MDMA) supply include border detection, seizure, arrest, purity and clandestine laboratory data.

- In 2017–18, the number of ATS (excluding MDMA) detections at the Australian border decreased for the third consecutive reporting period, while the weight detected increased.
- Amphetamines continue to account for the greatest proportion of national ATS seizures and arrests.
- The number and weight of national amphetamines seizures increased this reporting period.
- The number of national amphetamines arrests decreased in 2017–18.
- Although there were some decreases in the annual median purity of analysed methylamphetamine samples in 2017–18, purity remained relatively high and stable this reporting period.
- Drug profiling data indicated the continued prominence of methylamphetamine manufactured from Eph/PSE.
- Clandestine laboratories manufacturing methylamphetamine continue to account for the greatest proportion of national detections.





Indicators of MDMA demand include surveys of drug users, police detainees and wastewater analysis.

- According to the 2016 NDSHS, the reported lifetime use of ecstasy increased, while reported recent use decreased.
- According to a national study of police detainees, both the proportion of detainees testing positive to MDMA and the proportion self-reporting MDMA use decreased in 2017–18.
- The NWDMP identified that MDMA consumption remains low compared to other substances tested by the program. When comparing wastewater data from August 2016 to August 2018, the population-weighted average consumption of MDMA in both capital city and regional sites decreased.

Indicators of MDMA supply include border detection, seizure, arrest, purity and clandestine laboratory data.

- In 2017–18, the number of MDMA detections at the Australian border decreased, while the weight detected increased.
- The number of national MDMA seizures decreased this reporting period, while the weight of MDMA seized nationally increased.
- The number of national MDMA arrests decreased in 2017–18.
- The annual median purity of analysed phenethylamine samples—the majority of which relate to MDMA—fluctuated this reporting period.
- In 2017–18, the number of clandestine laboratories detected nationally producing MDMA more than doubled.

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