

AMPHETAMINE-TYPE STIMULANTS

KEY POINTS

- The weight of amphetamine-type stimulants (ATS) seized globally between 2009 and 2019 increased. This was primarily due to the almost tenfold increase in the weight of methylamphetamine seized, although the weight of seized ecstasy and amphetamine also doubled.
- For Australia, chemical profiling of methylamphetamine seized at both the border and domestically indicates the proportion of methylamphetamine manufactured using P2P-based methods has increased in recent years.
- Indicators of the supply and demand trend for ATS (excluding MDMA) point to a market that was impacted by COVID-19 but remains large.
 - The number of ATS (excluding MDMA) detections at the Australian border increased in 2020–21, while the weight increased slightly to reach a record level.
 - The number and weight of national ATS seizures decreased in 2020–21.
 - Data from the National Wastewater Drug Monitoring Program (NWDMP) indicate the population-weighted average consumption of methylamphetamine in both capital city and regional sites decreased from August 2020 to record low levels in August 2021.
- Indicators of the supply and demand trend for MDMA point to a small market that is contracting.
 - Both the number and weight of MDMA detections at the Australian border decreased in 2020–21.
 - Both the number and weight of national MDMA seizures decreased in 2020–21.
 - The number of MDMA laboratory detections, already relatively low, nearly halved in 2020–21.
 - Data from the NWDMP indicate the population-weighted average consumption of MDMA in both capital city and regional sites decreased from August 2020 to August 2021, with capital city sites decreasing to record low levels.



		2019–20 to 2020–21	2011–12 to 2020–21
Border detections ^a	Number	1 ,377 → 1,753	0 63% 1,077 → 1,753
	Weight	<1% 5,271kg → 5,290kg ^b	 1,423% 347kg → 5,290kg^b
National seizures ^c	Number	U -25% 34,113 → 25,745	13,050 → 25,745
	Weight	U - 37% 9,408kg → 5,891kg	6 575% 872kg → 5,891kg
National arrests		U -26% 44,847 → 33,090	133% 14,186 → 33,090
Price ^d (\$)		\$90.00 → \$92.50	() \$100 → \$92.50
Annual median puri	ty range	 13.4% to 82.9% → 61.9% to 84.0% 	 7.9% to 60.0% → 61.9% to 84.0%
DUMA ^e	Urinalysis	U 51% → 49%	() 23% → 49%
NDSHS ^f	Use in lifetime	○ 6% → 6%	● 7% → 6%
	Recent use	1% → 1%	() 2% → 1%

National methylamphetamine market point in time annual and decade trend comparison

a. National border detection data reflect ATS (excluding MDMA).

b. Highest on record.

c. National seizure and arrest data reflect amphetamines, which includes amphetamine, methylamphetamine, dexamphetamine and amphetamines not elsewhere classified. At this time, it is not possible at a national level to provide a further breakdown of drugs within the amphetamines category. Based on available data, methylamphetamine accounts for the majority of amphetamines seizures and arrests.

d. National median price for a street deal (0.1 grams) of methylamphetamine.

e. Drug Use Monitoring in Australia program. Data reflects the proportion of detainees testing positive to methylamphetamine.

f. National Drug Strategy Household Survey. Data reflects the proportion of the Australian population aged 14 years or older who reported having used meth/amphetamine in 2010 and 2019 (decade trend) and 2016 and 2019 (annual trend).

		2019–20 to 2020–21	2011–12 to 2020–21	
Border detections	Number	U -23% 2,308 → 1,773	 ● 84% 964 → 1,773 	
	Weight	() -92% 1,291kg → 106kg	 785% 12kg → 106kg 	
National seizures	Number	U -48% 4,981→ 2,578	 0 27% 2,036 → 2,578 	
	Weight	U -92% 3,214kg → 249kg	 117% 115kg → 249kg 	
National arrests		() -42% 4,746 → 2,744	19% 2,526 → 2,744	
Price [®] (\$)		\$22.50 → \$25	() \$35 → \$25	
Annual median purity range ^b		 U 39.9% to 76.0% → 31.3% to 63.6% 	 14.9% to 18.1% → 31.3% to 63.6% 	
DUMA ^c	Urinalysis	() 1% → <1%	U 1% → <1%	
NDSHSd	Use in lifetime	() 11% → 13%	() 10% → 13%	
	Recent use	() 2% → 3%	3% → 3%	

National MDMA market point in time annual and decade trend comparison

a. National median price for a street deal (1 tablet) of MDMA.

b. Annual median purity reflects reported phenethylamine purity, the majority of which relates to MDMA.

c. Drug Use Monitoring in Australia program. Data reflects the proportion of detainees testing positive to MDMA.

d. National Drug Strategy Household Survey. Data reflects the proportion of the Australian population aged 14 years or older who reported having used ecstasy in 2010 and 2019 (decade trend) and 2016 and 2019 (annual trend).

MAIN FORMS

- Amphetamine-type stimulants (ATS) is a group of central nervous system stimulants, which include amphetamine, methylamphetamine and 3,4-methylenedioxymethamphetamine (MDMA).
- Amphetamine is most commonly found in powder and tablet form, which can be swallowed, snorted, smoked or (less commonly) injected.
- Owing to differences in chemical composition, methylamphetamine is more potent than amphetamine, resulting in a stronger and quicker central nervous system reaction.
- Methylamphetamine presents in four 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.
- MDMA (also referred to as 'ecstasy'), is most commonly found in tablet form of varying colours, shapes 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 2021a; ADF 2021b; EMCDDA 2015; Degenhardt & Hall 2010).

INTERNATIONAL TRENDS

According to the 2021 World Drug Report, the weight of ATS seized globally increased substantially over the period 2009 to 2019—primarily due to the almost tenfold increase in the weight of methylamphetamine seized over the decade—while the weight of seized ecstasy and amphetamine also doubled. Similar to most years since 1998, the majority of ATS seizures in 2019 was methylamphetamine. In the period between 2015 and 2019, methylamphetamine accounted for 72% of the weight of ATS seized globally, followed by amphetamine (19%) and ecstasy (4%). Over the last decade, the weight of ATS seized globally increased 557%, from 69.4 tonnes in 2009 to a record 456 tonnes in 2019, a 64% increase from 2018 figures (the highest annual growth rate since 2001).

Of the ATS seized globally:

- The weight of methylamphetamine seized increased 948% over the last decade, from 31 tonnes in 2009 to a record 325 tonnes in 2019, a 43% increase from 228 tonnes in 2018.
- The weight of amphetamine seized increased 139% over the last decade, from 33 tonnes in 2009 to a record 79 tonnes in 2019, a 276% increase from 21 tonnes in 2018.
- The weight of ecstasy seized increased 196% over the last decade, from 5.4 tonnes in 2009 to 16 tonnes in 2019 (the second highest on record), a 33% increase from 12 tonnes in 2018 (UNODC 2011; UNODC 2020; UNODC 2021).

- The number of countries reporting methylamphetamine seizures increased between 2005 and 2019, from 79 countries in 2005 and 2009 to 111 countries in 2015 and 2019. Between 2015 and 2019, methylamphetamine seizures were concentrated predominantly in North America (49% of methylamphetamine seized globally) and in East and South-East Asia (43%). Seizures occurred primarily in the United States, followed by Thailand and Mexico; accounting for 47% of the global weight of methylamphetamine seized. Although the total weight of methylamphetamine seized in Europe is comparatively lower than in North America and East and South-East Asia, there was a record fourfold increase in the weight of methylamphetamine seized in Europe in 2019 (and a more than sevenfold increase between 2009 and 2019; UNODC 2021).
- While the number of countries reporting amphetamine seizures remained relatively stable at 92 between 2015 and 2019, the weight of amphetamine seized doubled between 2009 and 2019. Amphetamine seizures are concentrated predominantly in the Near and Middle East/South-West Asia and Europe, accounting for 49% and 26% respectively of the weight of amphetamine seized globally. The 3 countries reporting the greatest proportion of the weight of amphetamine seized between 2015 and 2019 were Saudi Arabia, followed by Guatemala and Turkiye, with the combined weight accounting for 45% of the weight of amphetamine seized globally during that period (UNODC 2021).
- Similar to amphetamine, while the number of countries reporting ecstasy seizures remained relatively stable at 101 between 2015 and 2019, the weight of ecstasy seized doubled between 2009 and 2019. Although European countries continue to account for most of the ecstasy seizures, the region and country with the greatest total weight of seized ecstasy changed quite frequently between 2014 and 2019. Overall, the 3 countries reporting the greatest proportion of the weight of ecstasy seized between 2015 and 2019 were the United States, followed by Australia and Turkiye, with the combined weight accounting for 54% of the weight of ecstasy seized globally during that period. (UNODC 2021).
- According to the World Customs Organisation (WCO), the weight of methylamphetamine seized increased in 2021, while the weight of amphetamine and MDMA seized decreased. Methylamphetamine accounted for the greatest proportion of the weight of psychotropic substances seized in 2021 (56%), followed by captagon (26%) and amphetamine (12%). The United States accounted for the greatest proportion of the number and weight of psychotropic substances seized. Specific data for the number and weight of methylamphetamine, amphetamine and MDMA seized in 2021 were not available (WCO 2022).

DOMESTIC TRENDS

AUSTRALIA BORDER SITUATION

Overall, the number of ATS (excluding MDMA) detections increased 63% over the last decade, from 1,077 in 2011–12 to 1,753 in 2020–21. The number of detections displays a mixed trend over the decade—increasing to a record high in 2014–15 before decreasing for 5 years then increasing again in 2020–21 from 1,377 to 1,753.

The weight of ATS (excluding MDMA) detections fluctuated over the first 7 years of the last decade, before increasing significantly in 2018–19 and then becoming more stable at a high level—the weight detected increased 1,423% from 347.3 kilograms in 2011–12 to a record 5,290.5 kilograms in 2020–21 (see Figure 1).

In 2020–21, 302 of the 1,753 ATS (excluding MDMA) detections (17%) weighed one kilogram or more. With a combined weight of 5,131.6 kilograms, these 302 detections accounted for 97% of the total ATS (excluding MDMA) weight detected in 2020–21.⁴





The number of MDMA detections at the Australian border fluctuated over the last decade, increasing 84% from 964 detections in 2011–12 to 1,773 in 2020–21, although the latter figure is the second lowest over the decade. The number of detections has been decreasing for the past 2 years and decreased 23% this reporting period.

The weight of MDMA detections also fluctuated significantly over the last decade, and has decreased sharply since the high point in 2018–19, including decreasing 92% this reporting period, from 1,291.9 kilograms to 106 kilograms (see Figure 2).

In 2020–21, 26 of the 1,773 MDMA detections (1%) weighed one kilogram or more. With a combined weight of 64.1 kilograms, these 26 detections accounted for 60% of the total MDMA weight detected in 2020–21.⁵

⁴ See Appendix 2 for significant border detections of ATS (excluding MDMA) in 2020–21.

⁵ See Appendix 2 for significant border detections of MDMA in 2020–21.



FIGURE 2: Number and weight of MDMA detections at the Australian border, 2011–12 to 2020–21 (Source: Department of Home Affairs)

IMPORTATION METHODS

In 2020–21, 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 continued to account for the greatest proportion of detections (69%), followed by air cargo (30%), sea cargo (1%) and air passenger/crew (<1%). By weight, air cargo accounted for the greatest proportion of detections (67%), followed by sea cargo (28%), international mail (5%) and air passenger/crew (<1%).

In 2020–21, detections of MDMA at the Australian border occurred in the air cargo and international mail streams. By number, the international mail stream continued to account for the greatest proportion of MDMA detections (98%), followed by air cargo (2%). By weight, the international mail stream continued to account for the greatest proportion of detections (56%), followed by air cargo (44%).

EMBARKATION POINTS

In 2020–21, 43 countries were identified as embarkation points for ATS (excluding MDMA) detected at the Australian border, compared with 42 countries in 2019–20. By weight, Thailand was the primary embarkation point for detections by weight in 2020–21. Other key embarkation points by weight this reporting period include Malaysia, the United States, Mexico, the United Arab Emirates, the Republic of Korea, China (including Hong Kong), South Africa, Canada and the United Kingdom.

In 2020–21, 21 countries were identified as embarkation points for MDMA detected at the Australian border, compared with 32 countries in 2019–20. By weight, the Netherlands was the primary embarkation point for MDMA detected in 2020–21. Other key embarkation points by weight this reporting period include Germany, France, the United Kingdom, Spain, Belgium, Italy, South Africa, Luxembourg and the United States.

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 border⁶ and seizures provided to the AFP by international agencies for the purposes of chemical profiling ⁷⁸.

Between 2020 and June 2021, there continued to be subtle shifts in the precursors used to manufacture methylamphetamine seized in Australia. Throughout 2020, a slightly higher proportion of the total weight of methylamphetamine seized was manufactured via ephedrine/ pseudoephedrine (Eph/PSE) processes. However, a far greater number of seizures contained methylamphetamine manufactured from the 1-phenyl-2-propanone (P2P) precursor (see Tables 1 and 2).

In 2021, there has again been an increase in the proportion of methylamphetamine found to be manufactured from the P2P precursor, with 85% of the total weight seized attributed to P2P based manufacture. In comparison, methylamphetamine manufactured from Eph/PSE represented 59.3 kilograms (4.7%).

- In 2020, the AFP seized and examined a total of 5.5 tonnes of methylamphetamine, across 140 seizures. Of this, samples from 4.2 tonnes of methylamphetamine were sent to NMI for profiling, representing 90 seizures.
- In 2020, the top 11 seizures (all of which were greater than 100 kilograms) by weight contribute to 91% of the overall weight of methylamphetamine seized.
- An increase in liquid concealments was observed throughout 2020, with approximately 1.2 tonnes seized. These shipments were almost certainly destined for use in extraction and recrystallisation laboratories.
- During 2020, an increasing number of methylamphetamine seizures impregnated in resin and plastics originating from Turkiye and the United Arab Emirates were noted. This trend continued into the first 6 months of 2021. These seizures could not be chemically profiled due to interference by the matrix in the profiling analysis.
- It should be noted that single seizures involving a mixture of both P2P and Eph/PSE or P2P and Unclassified or Eph/PSE and Unclassified samples are all listed under the "Mixed/Unclassified" category in Tables 1 and 2.

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

⁷ Data from these samples/seizures have not been included in this summary.

⁸ Profiling data relate to seizures investigated by the AFP between 2012 and June 2021, and from which samples were submitted to the NMI for routine analysis and profiling. For all reporting years, the data represents a snapshot across the applicable reporting period. 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. 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.

TABLE 1: Synthetic route of manufacture of methylamphetamine samples as a proportion of analysed AFP border seizures classified by precursor, 2012–June 2021 (Source: Australian Federal Police, Forensic Drug Intelligence)⁹

	Synthetic Route					
Year	Eph/PSE %	P2P %	Mixed/Unclassified %			
Jan–Jun 2021 ^ª	11.8	68.6	19.6			
2020 ^a	27.2	59.8	13.0			
2019 ^a	38.6	36.8	24.8			
2018 ^a	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			

a. There are a number of seizures for which results are outstanding or did not undergo chemical profiling, and these are not included.

TABLE 2: Synthetic route of manufacture of methylamphetamine samples as a proportion of total bulk weight of analysed AFP border seizures classified by precursor, 2012–June 2021 (Source: Australian Federal Police, Forensic Drug Intelligence)¹⁰

	Synthetic Route				
Year	Eph/PSE %	P2P %	Mixed/Unclassified %		
Jan–Jun 2021°	4.7	85.0	10.3		
2020 ^a	58.2	41.4	0.4		
2019 ^a	34.2	42.9	22.9		
2018 ^a	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		

a. Due to a change in the sampling methodology for large illicit drug seizures (LIDS) made by the AFP, seizure weights cannot be accurately attributed for LIDS with mixed profiling. There are a number of seizures for which results are outstanding or did not undergo chemical profiling, these are not included.

⁹ This data may also include seizures destined for Australia which occurred offshore.

¹⁰ This data may also include seizures destined for Australia which occurred offshore.

The Enhanced National Intelligence Picture on Illicit Drugs (ENIPID) project extends this profiling capability to include seizures made by state and territory law enforcement agencies involving heroin, methylamphetamine and cocaine.¹¹

- Across the methylamphetamine ENIPID dataset (see Appendix 3, Table 1), P2P based methylamphetamine represents a higher proportion of samples compared to Eph/PSE. The slightly higher proportion of P2P based samples submitted in 2020 may be a result of a delay in supplying samples from jurisdictional seizures occurring in 2019, where the prevalence of P2P based methylamphetamine was observed as high at the Australian border.
- The number of mixed/unclassified samples remains steady for ENIPID samples when compared to previous reporting periods. This also remains steady when compared to AFP seizures for the same period.

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 INDICATORS¹²

AMPHETAMINES

The National Drug Strategy Household Survey (NDSHS) collects self-report information on alcohol, tobacco and illicit drug use among the general population and surveys people's attitudes and perceptions in relation to these. Conducted approximately every 3 years, the related report presents estimates derived from survey responses weighted to the appropriate Australian population. According to NDSHS data:

- The proportion of respondents who reported having used meth/amphetamine at least once in their lifetime decreased, from 7% in 2010 to 6% in 2016 and 2019.
- The proportion of respondents who reported having recently¹³ used meth/amphetamine decreased, from 2% in 2010 to 1% in 2016 and 2019.
- The proportion of respondents who reported frequent use (at least once a week) of meth/amphetamine increased, from 9% in 2010 to 17% in 2019. In 2016 this proportion was 20%.

¹¹ 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. ENIPID enables the identification of convergences between supply routes into different jurisdictions, links between different criminal groups, and comparison of trends between jurisdictions.

¹² 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.

¹³ In the NDSHS, recent use refers to reported use in the 12 months preceding the survey.

- In 2010, powder was the main form of methylamphetamine reportedly used in the last 12 months (51%). Crystal/ice replaced powder as the main form used in 2013 and was the main form used in 2016 and 2019. The proportion of respondents who reported crystal/ice as the main form of meth/amphetamine used in the last 12 months more than doubled, increasing from 22% in 2010 to 50% in 2019. In 2016 this proportion was 57%.
 - The proportion of respondents reporting powder/speed as the main form used more than halved, decreasing from 51% in 2010 to 20% in 2019. In 2016 this proportion was 20% (AIHW 2020; AIHW 2017; AIHW 2011).

The National Wastewater Drug Monitoring Program (NWDMP) collects wastewater samples every 2 months in capital city sites and every 4 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. Compared to when the Program began measuring methylamphetamine in August 2016, the population-weighted average consumption of methylamphetamine in August 2021 was lower in both capital city and regional sites, although this was likely impacted by COVID restrictions. According to data from the NWDMP for August 2020 to August 2021:

- Of the substances with available dose data, methylamphetamine remained the most consumed illicit drug by a considerable margin.
- Methylamphetamine consumption was higher per capita in regional sites than in capital city sites.
- The population-weighted average consumption of methylamphetamine in both capital city and regional sites decreased to a record low in August 2021.
- The ACIC estimates that around 8.8 tonnes of methylamphetamine was consumed during the year ended 31 August 2021 in Australia, a decrease from the estimated 11.1 tonnes of methylamphetamine consumed in the previous year (ACIC 2022).

The below data reflect drug use within sentinel¹⁴ 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 IDRS data:

- In 2021, methylamphetamine replaced heroin—which briefly overtook methylamphetamine in 2020—as the drug most injected in the past month.
- The proportion of respondents reporting methylamphetamine as their drug of choice increased, from 21% in 2012 to 45% in 2021. In 2020 this proportion was 33%. For the first time since monitoring began in 2000, methylamphetamine replaced heroin (40%) as the drug of choice in 2021.
- The proportion of respondents reporting weekly or more frequent crystal methylamphetamine use increased, from 20% in 2012 to a record 57% in 2021. In 2020 this proportion was 47%.

- The proportion of respondents reporting the recent use¹⁵ of any form of methylamphetamine increased, from 68% in 2012 to 80% in 2021. In 2020 this proportion was 72%.
- The reported median number of days of use of any form of methylamphetamine in the 6 months preceding interview increased, from 22 days in 2012 to a record 72 days in 2021. In 2020 the reported number of days was 48 (Sutherland et al. 2021a).

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 EDRS data:

- The proportion of respondents reporting the recent use of any form of methylamphetamine decreased, from 61% in 2012 to 26% in 2021. In 2020 this proportion was 24%.
- For the first time since 2003, crystal methylamphetamine replaced powder methylamphetamine as 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 6 months preceding interview increased, from 4 days in 2012 to 5 days in 2021. In 2020 the reported number of days was 4 (Sutherland et al. 2021b).

The Australian Needle and Syringe Program Survey (ANSPS) collects self-report information and capillary blood samples¹⁶ annually to monitor blood borne viral infections and associated risk behaviour among individuals who inject drugs. According to ANSPS data:

- The proportion of respondents reporting methylamphetamine as the drug last injected increased, from 27% in 2011 to 47% in 2020. In 2019 this proportion was 49%.
- Methylamphetamine continued to exceed heroin (22%) as the most commonly reported drug last injected in 2020, a trend consistently observed since 2014 (Heard et al. 2020; Heard et al. 2021).

The Drug Use Monitoring in Australia (DUMA) program collected criminal justice and drug use information on a quarterly basis from police detainees, derived from an interviewer-assisted self-report survey and the voluntary provision of a urine sample, which was tested to detect licit and illicit drug use.¹⁷ According to DUMA data:

- The proportion of detainees testing positive¹⁸ to amphetamines¹⁹ doubled, increasing from 25% in 2011–12 to 50% in 2020–21. In 2019–20 this proportion was 52%.
- Of the detainees testing positive to amphetamines, the majority tested positive to methylamphetamine.
- The proportion of detainees testing positive to methylamphetamine more than doubled, increasing from 23% in 2011–12 to 49% in 2020–21. In 2019–20 this proportion was 51%.
- The self-reported recent use of methylamphetamine increased from 49% in 2013–14 (the first period for which data are available) to 55% in 2020–21. This proportion was 59% in 2019–20 (see Figure 3).

¹⁵ In both the IDRS and EDRS studies, recent use refers to reported use in the 6 months preceding interview.

¹⁶ Individuals participating in the survey are invited to provide a blood sample for HIV and HCV antibody testing.

¹⁷ Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

¹⁸ Amphetamines and their metabolites can be detected in urine up to 2 to 4 days after administration.

¹⁹ Amphetamines in the DUMA program include results for methylamphetamine, MDMA and other amphetamines.





a. Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.

b. Urine was collected in the third quarter of 2014 and the first and second quarter of 2015.

c. Urine was collected in the third quarter of 2015 and the first and second quarter of 2016.

d. Urine was collected in the third quarter of 2016 and the second quarter of 2017.

e. 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.

f. 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.

- g. Urine was collected in the third quarter of 2019 in Adelaide, Brisbane and Perth; the fourth quarter of 2018 in Bankstown; and the first quarter of 2020 in Adelaide, Brisbane, Perth and Surry Hills.
- h. Urine was collected in the second quarter of 2021 in Adelaide, Bankstown, Brisbane and Perth.

MDMA

According to NDSHS data:

- The proportion of respondents who reported having used ecstasy at least once in their life increased, from 10% in 2010 to 13% in 2019. This proportion was 11% in 2016.
- The proportion of respondents who reported having recently used ecstasy remained stable at 3% in 2010 and 2019. This proportion was 2% in 2016.
- The proportion of respondents who reported frequent use (at least once a week) of ecstasy increased, from 3% in 2010 to 7% in 2019. In 2016 this proportion was 2%.
- While historical data is not available, in 2016 pills/tablets were the most common form of ecstasy reportedly used in the past 12 months (51%). Capsules replaced pills/tablets as the main form used in 2019, accounting for 49% of the main forms used (AIHW 2020; AIHW 2017; AIHW 2011).

Compared to when the NWDMP began measuring MDMA in August 2016, the population-weighted average consumption of MDMA in August 2021 was lower in both capital city and regional sites.

According to data from the Program for August 2020 to August 2021:

- MDMA consumption was higher per capita in regional sites than in capital city sites.
- The population-weighted average consumption of MDMA in capital city sites decreased to a record low in August 2021.
- The population-weighted average consumption of MDMA decreased in regional sites.
- The ACIC estimates that around 1.2 tonnes of MDMA was consumed annually in Australia, a decrease from 2.6 tonnes of MDMA consumed in the previous year (ACIC 2022).

According to EDRS data:

- The proportion of respondents reporting ecstasy as their drug of choice decreased, from 32% in 2012 to 24% in 2021. This proportion was 29% in 2020.
- The proportion of respondents reporting the recent use of ecstasy pills decreased, from 95% in 2012 to 42% in 2021. Over the same period the proportion reporting the recent use of powder ecstasy (from 25% to 26%), capsules (from 53% to 70%) and crystal (from 39% in 2013 to 53%) increased.
- The reported median number of days of any ecstasy use in the 6 months preceding interview decreased, from 13 days in 2012 to 7 days in 2021. In 2020, the median number of days was 12 (Sutherland 2021b).

According to DUMA data:

- The proportion of detainees testing positive to MDMA remained low and relatively stable, decreasing from 1% in 2011–12 to <1% in 2020–21. In 2019–20 this proportion was 1%.</p>
- While the proportion of detainees self-reporting recent MDMA use fluctuated over the decade, peaking at 17% in 2016–17, it remained relatively stable at 11% in 2011–12 and 2020–21. This proportion was 14% in 2019–20 (see Figure 4).





a. Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.

b. Urine was collected in the third quarter of 2014 and the first and second quarter of 2015.

c. Urine was collected in the third quarter of 2015 and the first and second quarter of 2016.

d. Urine was collected in the third quarter of 2016 and the second quarter of 2017.

e. 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.

f. 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.

g. Urine was collected in the third quarter of 2019 in Adelaide, Brisbane and Perth; the fourth quarter of 2018 in Bankstown; and the first quarter of 2020 in Adelaide, Brisbane, Perth and Surry Hills.

h. Urine was collected in the second quarter of 2021 in Adelaide, Bankstown, Brisbane and Perth.

CLANDESTINE LABORATORIES

The number of clandestine laboratories detected nationally decreased 65% over the last decade, from 809 in 2011–12 to 284 in 2020–21. Of these, laboratories producing ATS (excluding MDMA) are the most commonly detected laboratories, accounting for 66% of detections in 2011–12 and 51% in 2020–21. This proportion was 48% in 2019–20. Methylamphetamine remains the most commonly produced drug in clandestine laboratories detected nationally over the last decade. The number of ATS (excluding MDMA) clandestine laboratory detections decreased 73% over the last decade, from 552 in 2011–12 to 149 in 2020–21. This number decreased 8% in this reporting period, from 162 in 2019–20.

The proportion of MDMA laboratories increased over the last decade, accounting for <1% of all detections in 2011–12 and 2% in 2020–21. This proportion was 3% in 2019–20. The number of MDMA laboratory detections fluctuated over the last decade, increasing 200% from 2 in 2011–12 to 6 in 2020–21. This number almost halved this reporting period, decreasing 45% from 11 in 2019–20 (see *Clandestine Laboratories and Precursors* chapter).

PRICE

This section includes available price data for crystal methylamphetamine—the most prevalent form 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. Nationally, the price range for a street deal of crystal methylamphetamine remained stable over the last decade, ranging between \$50 and \$200 in 2011–12 and 2020–21. In 2019–20 the price ranged between \$30 and \$300. The national median price for a street deal decreased over the last decade, from \$100 in 2011–12 to \$92.50 in 2020–21. In 2019–20 the national median price was \$90.

- Nationally, the price range for one gram of crystal methylamphetamine decreased over the last decade, ranging between \$300 and \$2,000 in 2011–12 to between \$100 and \$1000 in 2020–21. In 2019–20 the price ranged from \$200 to \$1,775. The national median price for a gram decreased over the last decade, from \$675 in 2011–12 to \$525 in 2020–21. In 2019–20 the national median price was \$450.
- Nationally, the price range for one kilogram of crystal methylamphetamine increased over the last decade, ranging between \$200,000 and \$330,000 in 2011–12 to between \$70,000 and \$533,333 in 2020–21. In 2019–20 the price ranged from \$80,000 to \$372,500. The national median price for a kilogram decreased over the last decade, from \$265,000 in 2011–12 (reported by New South Wales and Victoria) to \$176,250 in 2020–21. In 2019–20 the national median price was \$235,000.
- At the street level, the price for MDMA is measured for individual tablets or in grams.
- Nationally, the price range for a single MDMA tablet/capsule remained relatively stable over the last decade, ranging between \$20 and \$60 in 2011–12 to between \$10 and \$60 in 2020–21. In 2019–20 the price ranged from \$10 to \$30. The national median price for a single MDMA tablet/capsule decreased over the last decade from \$35 in 2011–12 to \$25 in 2020–21. In 2019–20 the national median price was \$22.50.
- No price data were available for one gram of MDMA in 2011–12. Nationally, the price range for one gram of MDMA ranged between \$100 and \$1,000 in 2019–20 to between \$80 and \$800 in 2020–21. The national median price for a gram of MDMA was \$175 in 2019–20 and \$165 in 2020–21.
- No price data were available for one kilogram of MDMA in 2011–12. Nationally, the price range for one kilogram of MDMA ranged between \$18,000 and \$60,000 in 2019–20 to between \$18,000 and \$70,000 in 2020–21. The national median price for one kilogram of MDMA was \$40,000 in 2019–20 and \$55,000 in 2020–21.

PURITY

Since 2011–12, the annual median purity of analysed amphetamine²⁰ samples remained low and relatively stable for most jurisdictions, ranging between less than 1% (reported in 2013–14) and 78% (reported in 2014–15). In 2020–21, the annual median purity ranged from 3% in Western Australia to 27% in Queensland. This reporting period, New South Wales and Queensland reported an increase in the annual median purity of amphetamine, while Western Australia reported a decrease and Victoria remained relatively stable (see Figure 5).

²⁰ Amphetamine is a manufacturing by-product of some commonly used methods of methylamphetamine production. This can result in 2 separate purity figures for a single drug sample—one for methylamphetamine with considerable purity and another for amphetamine with low purity.



FIGURE 5: Annual median purity of amphetamine samples, 2011–12 to 2020–21

Since 2011–12, the annual median purity of analysed methylamphetamine samples has ranged between 8% (reported in 2011–12) and 84% (reported in 2020–21). The annual median purity increased in 2011–12 and has remained high and relatively stable since 2012–13 (with the exception of Tasmania). In 2020–21, the annual median purity ranged from 62% in South Australia to 84% in Victoria. In this reporting period, Tasmania reported an increase in the annual median purity of methylamphetamine, while South Australia reported a decrease and New South Wales, Victoria, Queensland and Western Australia remained relatively stable (see Figure 6).



FIGURE 6: Annual median purity of methylamphetamine samples, 2011–12 to 2020–21

Since 2011–12, the annual median purity of analysed phenethylamine²¹ samples ranged between 2% (reported in 2016–17) and 83% (reported in 2012–13). While fluctuating, the annual median purity of phenethylamine increased over the last decade. In 2020–21, the annual median purity ranged from 31% in Victoria to 64% in Queensland. This reporting period New South Wales, Victoria, Queensland, South Australia and Western Australia all reported a decrease in the annual median purity of phenethylamine (see Figure 7).

FIGURE 7: Annual median purity of phenethylamine samples, 2011–12 to 2020–21



AVAILABILITY

User surveys indicate an increase in the reported availability of crystal methylamphetamine in 2020–21. The same surveys indicate that the availability of ecstasy decreased for all forms (powder, capsules, crystal and pills).

According to IDRS data:

- The proportion of respondents reporting crystal methylamphetamine as 'easy' or 'very easy' to obtain increased, from 48% in 2020 to 86% in 2021. This is an increase from the 84% reported in 2012.
- The proportion of respondents reporting powder methylamphetamine as easy or very easy to obtain was 64% in 2021. This is a decrease from the 89% reported in 2012. Data on availability of methylamphetamine powder in 2020 was not published (Sutherland et al. 2021a).

²¹ Phenethylamines are synthetic drugs similar in composition to amphetamines. The most widely known phenethylamine is MDMA.

According to EDRS data:

- The proportion of respondents reporting crystal methylamphetamine as easy or very easy to obtain increased, from 71% in 2020 to 82% in 2021. This is a decrease from the 90% reported in 2012.
- The proportion of respondents reporting powder methylamphetamine as easy or very easy to obtain decreased, from 66% in 2020 to 59% in 2021. This is a decrease from the 75% in 2012.
- The proportion of respondents reporting ecstasy in all forms as easy or very easy to obtain decreased from 2020 to 2021—from 69% to 68% for powder; from 84% to 75% for capsules; from 80% to 66% for crystal; and from 70% to 64% for pills. Historical data for ecstasy availability in all forms is only available from 2017, with perceived availability decreasing for all forms during this period (Sutherland et al. 2021b).

SEIZURES

The number of national ATS seizures increased 88% from 15,191 in 2011–12 to 28,503 in 2020–21. This reporting period the number of national ATS seizures decreased 27%, from a record 39,204 in 2019–20.

The weight of ATS seized nationally increased 300% from 1,572.6 kilograms in 2011–12 to 6,287.1 kilograms in 2020–21. This reporting period the weight of ATS seized nationally decreased 51%, from a record 12,864.5 kilograms in 2019–20 (see Figure 8).





South Australia reported the greatest percentage increase in the weight of ATS seized in 2020–21 and was the only jurisdiction to report an increase in the number of ATS seizures. This reporting period New South Wales continued to account for the greatest proportion of both the number (36%) and weight of ATS seized nationally (65%; see Table 3).

	Number		Weight (grams)			
State/ lerritory"	2019–20	2020–21	% change	2019–20	2020–21	% change
New South Wales	14,326	10,270	-28.3	9,796,979	4,063,805	-58.5
Victoria	2,258	2,036	-9.8	1,675,125	1,384,962	-17.3
Queensland	11,673	7,110	-39.1	631,292	86,355	-86.3
South Australia	534	573	7.3	49,935	302,526	505.8
Western Australia	8,378	6,997	-16.5	698,721	435,257	-37.7
Tasmania	1,168	1,000	-14.4	8,149	8,735	7.2
Northern Territory	335	200	-40.3	2,482	3,330	34.2
Australian Capital Territory	532	317	-40.4	1,823	2,146	17.7
Total	39,204	28,503	-27.3	12,864,506	6,287,116	-51.1

TABLE 3: Number, weight and percentage change of national ATS seizures, 2019–20 and 2020–21

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

Amphetamines²² have accounted for the greatest proportion of the number of national ATS seizures, increasing from 86% in 2011–12 to 90% in 2020–21. This is followed by MDMA (decreasing from 13% in 2011–12 to 9% in 2020–21) and other ATS (remained relatively stable at 1%).

- This reporting period, the number of national amphetamine seizures decreased 25%, from the record 34,113 in 2019–20 to 25,745 2020–21. The number of national MDMA seizures decreased 48%, from 4,981 in 2019–20 to 2,578 in 2020–21, while the number of other ATS seizures increased 64%, from 110 in 2019–20 to 180 in 2020–21.
- Amphetamines have accounted for the greatest proportion of the weight of ATS seized nationally, increasing from 55% in 2011–12 to 94% in 2020–21. This is followed by MDMA (decreasing from 7% in 2011–12 to 4% in 2020–21) and other ATS (decreasing from 37% in 2011–12 to 2% in 2020–21).
- This reporting period, the weight of national amphetamines seizures decreased 37%, from the record 9,408.1 kilograms in 2019–20 to 5,891.5 kilograms in 2020–21. The weight of MDMA seized decreased 92%, from 3,214.9 kilograms in 2019–20 to 249.5 kilograms in 2020–21. The weight of other ATS seized decreased 39%, from 241.1 kilograms in 2019–20 to 146.0 kilograms in 2020–21.
- The form of national ATS seizures (by number) has changed markedly over the last decade, from a relatively equal number of seizures of all forms of ATS earlier in the decade to predominately crystalline seizures. In 2011–12, seizures in other forms accounted for 52% of national ATS seizures, followed by crystalline (19%), powder (16%) and tablet (13%). In 2020–21, seizures in crystalline form accounted for 71% of national ATS seizures, followed by other forms (15%), powder (11%) and tablet (3%). These proportions were broadly similar to 2019–20.
- This reporting period, with the exception of the tablet form, all forms reported a decrease in the number of seizures. The number of crystalline seizures decreased 29%, from the record 28,289 in 2019–20 to 20,182 in 2020–21. The number of powder seizures decreased 14%, from 3,749 in 2019–20 to 3,240 in 2020–21. The number of other forms decreased 36%, from 6,560 in 2019–20 to 4,216 in 2020–21, while tablet forms increased 43%, from 606 in 2019–20 to 865 in 2020–21.

⁴⁰

²² Amphetamines include amphetamine, methylamphetamine, dexamphetamine and amphetamines not elsewhere classified.

- The form of national ATS seizures (by weight) changed over the last decade, from seizures of other forms to predominately crystalline seizures. Seizures in crystalline form accounted for the greatest proportion of the weight of ATS seized nationally in 2020–21, increasing considerably from 4% in 2011–12 to 54% in 2020–21. This is followed by other (34%), powder (11%) and tablet forms (1%).
- This reporting period, with the exception of the tablet form, all forms reported a decrease in the weight seized. The weight of crystalline seized decreased 62%, from the record 8,988.1 kilograms in 2019–20 to 3,403.9 kilograms in 2020–21. The weight of powder decreased 58%, from 1,693.5 kilograms in 2019–20 to 704.7 kilograms in 2020–21. The weight of other forms decreased 1%, from 2,152.8 kilograms in 2019–20 to 2,131.6 kilograms in 2020–21, while tablet forms increased 56%, from 30.0 kilograms in 2019–20 to 46.8 kilograms in 2020–21.

ARRESTS

The number of national ATS arrests increased 113% over the last decade, from 16,828 in 2011–12 to 35,885 in 2020–21. The number of national ATS arrests decreased 28% from the record 49,638 arrests in 2019–20. Consumer arrests continue to account for the greatest proportion of arrests, accounting for 87% of national ATS arrests in 2020–21 (see Figure 9).



FIGURE 9: Number of national ATS arrests, 2011–12 and 2020–21

Amphetamines continue to account for the greatest proportion of national ATS arrests, accounting for 92% in 2020–21, followed by MDMA (8%) and other ATS (>1%). The number of national amphetamines arrests decreased 26% this reporting period, from a record 44,847 in 2019–20 to 33,090 in 2020–21. The number of MDMA arrests decreased 42% this reporting period, from 4,746 in 2019–20 to 2,744 in 2020–21. The number of other ATS arrests increased 13%, from 45 in 2019–20 to 51 in 2020–21.

The Northern Territory was the only jurisdiction to report an increase in the number of ATS arrests in 2020–21. This reporting period Queensland accounted for the greatest proportion of national ATS arrests (29%; see Table 4).

	Arrests				
State/Territory ^a	2019–20	2020–21	% change		
New South Wales	11,160	7,348	-34.2		
Victoria	11,055	10,188	-7.8		
Queensland	14,975	10,512	-29.8		
South Australia	5,446	2,775	-49.0		
Western Australia	5,977	4,506	-24.6		
Tasmania	753	367	-51.3		
Northern Territory	108	125	15.7		
Australian Capital Territory	164	64	-61.0		
Total	49,638	35,885	-27.7		

TABLE 4: Number and percentage change of national ATS arrests, 2019–20 and 2020–21

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

SUMMARY

The weight of ATS seized globally reached record levels in 2019, with methylamphetamine accounting for the greatest proportion of the weight seized, and the weight of methylamphetamine seized being a record high. Key indicators of ATS supply and demand in Australia show that the methylamphetamine market remains large and showed some signs of further expansion in 2020–21, but the MDMA market is relatively small and potentially retracting.

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