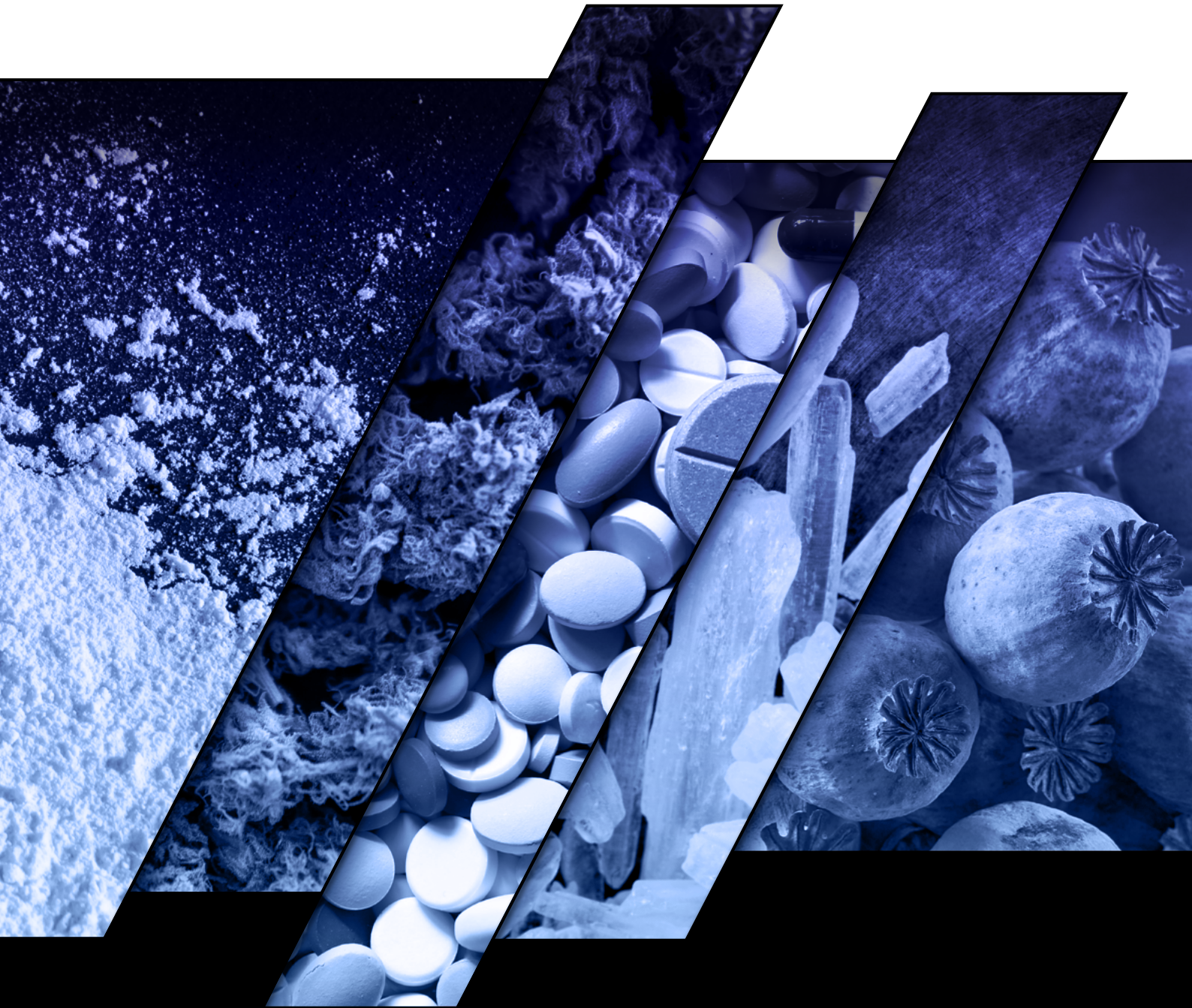




AUSTRALIAN  
**CRIMINAL  
INTELLIGENCE  
COMMISSION**



# ILLICIT DRUG DATA REPORT 2018-19

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**ILLICIT DRUG  
DATA REPORT  
2018-19**

# CEO FOREWORD



The Australian Criminal Intelligence Commission's annual *Illicit Drug Data Report*, now in its 17th edition, continues to provide an authoritative picture of illicit drugs in Australia. It informs policy and operational decisions across government, industry and the not-for-profit sector and focuses efforts to reduce the impact of illicit drugs on our communities.

Serious and organised criminals are at the centre of Australia's illicit drug market, motivated by greed, power and profit. We know serious and organised crime groups continue to generate significant profits from the sale of illicit substances, with the price paid for illicit drugs in Australia among the highest in the world. The estimated street value of the weight of amphetamines, MDMA, cocaine and heroin seized nationally in 2018–19 is around \$3.5 billion, underlining the size of the black economy that relates to illicit drugs alone. It would appear that Australian drug markets continue to grow. As such, the importation, manufacture, cultivation and distribution of illicit drugs and related precursors in Australia remain a focal point of government, law enforcement and intelligence agencies.

Illicit drug use cannot be addressed by law enforcement alone—a multi-faceted approach is needed. This report combines illicit drug data from a variety of sources including law enforcement, forensic services, health and academia, which inform our understanding and assist in focusing our collective efforts to respond to the issue of illicit drugs. The risk and harm posed by illicit drugs to the Australian community is ever-growing, which underscores the need for law enforcement and health agencies to work collaboratively to combat both the supply and demand for illicit drugs in Australia. In 2018–19, new records were set and include:

- 5.1 tonnes of ATS (excluding MDMA) detected at the Australian border
- 5,378 national cocaine seizures
- 5,016 national cocaine arrests
- 1,029 national hallucinogen arrests.

Over the last decade, during which time the Australian population increased around 13 per cent:

- the number of national illicit drug seizures increased 77 per cent (from 63,670 in 2009–10 to 112,474 in 2018–19)
- the weight of illicit drugs seized nationally increased 241 per cent (from 7.8 tonnes in 2009–10 to 26.6 tonnes in 2018–19)
- the number of national illicit drug arrests increased 80 per cent (from 85,252 in 2009–10 to 153,377 in 2018–19).

These upward trends not only highlight the continued vigilance of law enforcement in reducing the supply of all illicit drugs; they also highlight why illicit drugs continue to be a concern for law enforcement and the wider community, and the ongoing need to reduce demand.

The weight of ATS (including MDMA) detected this reporting period is more than double the combined weight of cannabis, heroin and cocaine detections. Methylamphetamine, which accounts for the majority of ATS, remains the most consumed illicit drug of those monitored by the National Wastewater Drug Monitoring Program based on available dose data. It is estimated that 11,516 kilograms of methylamphetamine is consumed annually in Australia, with 4,418 kilograms of amphetamines—the majority of which is methylamphetamine—seized nationally in 2018–19.

It is also important that the Australian Criminal Intelligence Commission and law enforcement continue to look at emerging markets as well as the highest risk markets. Although the markets for other drugs remain relatively small, the anaesthetics market, particularly GHB/GBL and ketamine, appears to be expanding. The number of detections of anaesthetics (including GHB, GBL and ketamine) at the Australian border increased 1,934 per cent over the last decade, from 67 in 2009–10 to a record 1,363 in 2018–19. The number of clandestine laboratories detected nationally manufacturing GHB/GBL has also increased to record levels in recent years, with 200 litres of the GHB precursor 1,4-butanediol also seized in a single jurisdiction this reporting period.

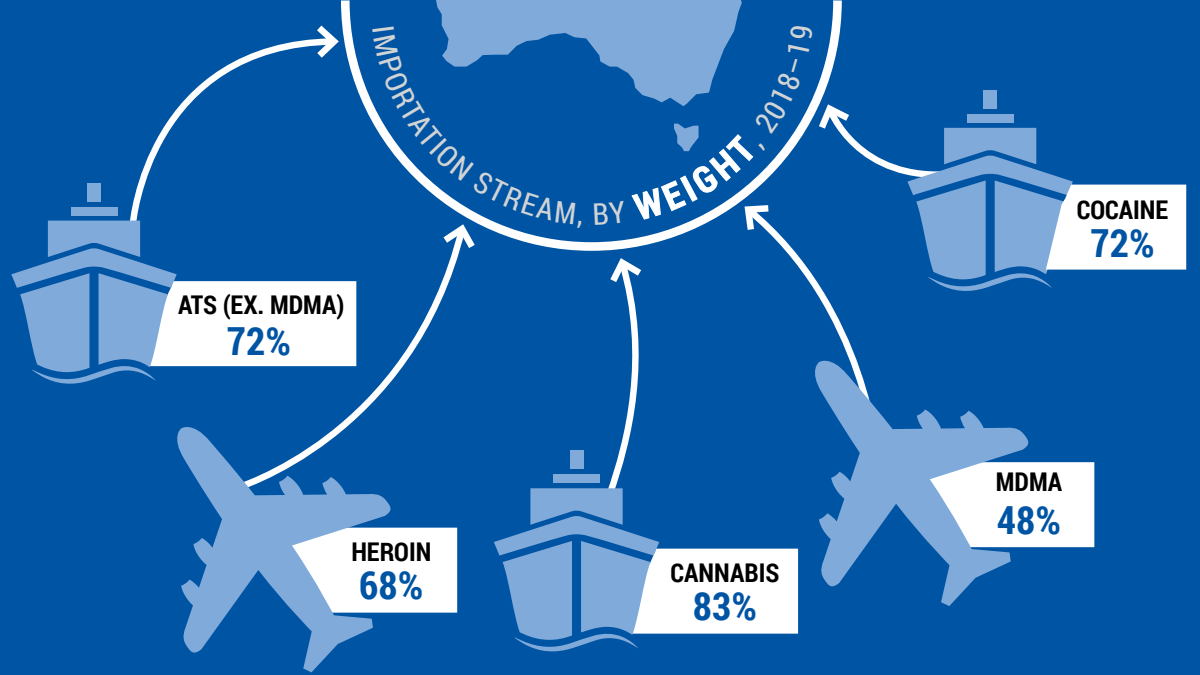
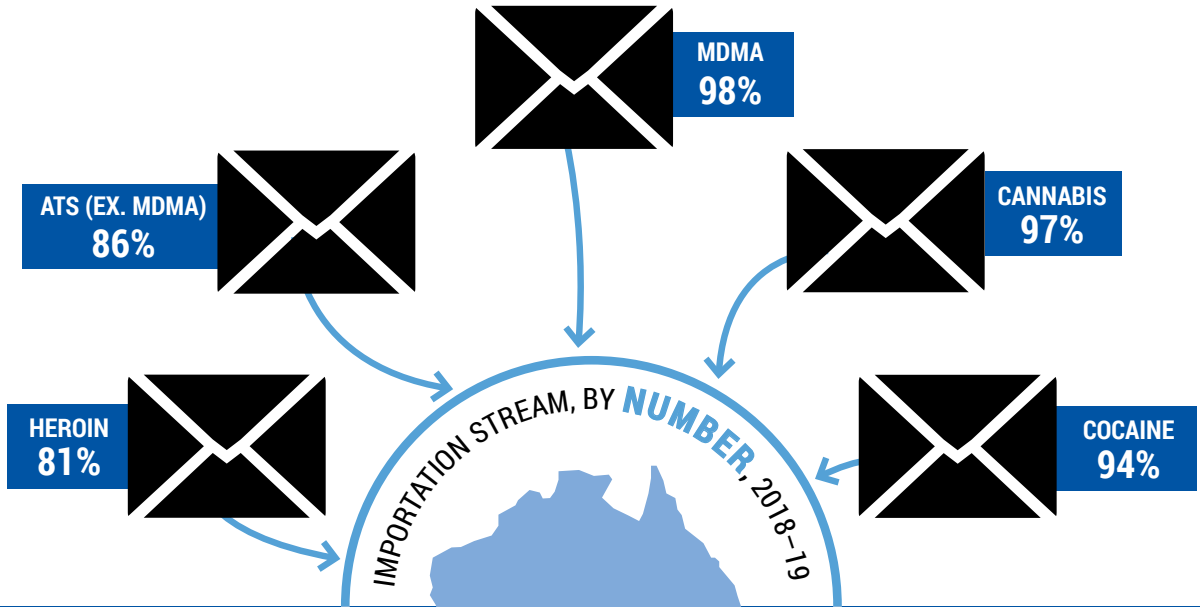
I commend the efforts of all who contributed to this report, from law enforcement, forensic services, academia and the Australian Criminal Intelligence Commission. If not for your vital contributions and continued support, it would not be possible to understand the complex and evolving Australian drug market.



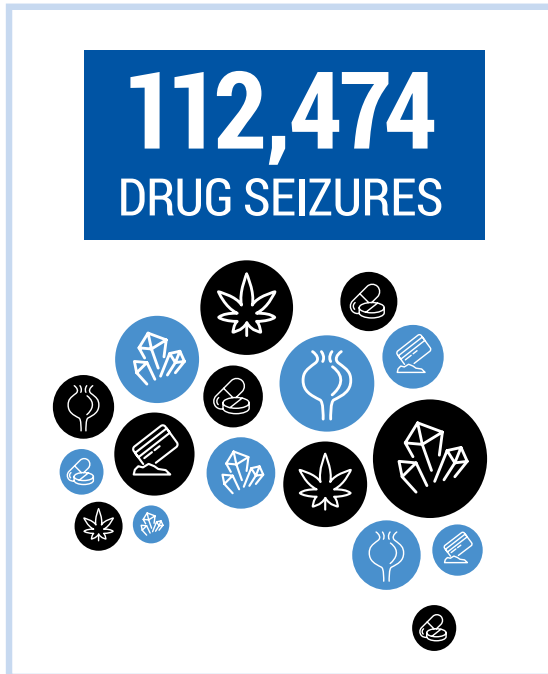
**Michael Phelan APM**  
Chief Executive Officer  
Australian Criminal Intelligence Commission

# IMPORTATION METHODS

## INTERNATIONAL MAIL



## NATIONAL SEIZURES AND ARRESTS





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## ACKNOWLEDGEMENTS

This report contains data and analysis provided by federal, state and territory police, as well as forensic laboratories and the Department of Home Affairs.<sup>1</sup> These agencies provide significant contributions to each report and their expertise and experience, along with their continued support, have been invaluable to the Australian Criminal Intelligence Commission.

Key contributors are listed below:

- Australian Border Force
- Australian Federal Police
- Australian Federal Police, ACT Policing
- Australian Federal Police, Forensic Drug Intelligence
- Australian Institute of Criminology, Drug Use Monitoring in Australia Program
- ChemCentre
- Department of Home Affairs
- Forensic Science Service Tasmania
- Forensic Science South Australia
- National Wastewater Drug Monitoring Program
- New South Wales Ministry of Health, Health System Information and Performance Reporting
- New South Wales Police Force
- Northern Territory Police
- NSW Forensic & Analytical Science Service
- Queensland Health and Forensic Scientific Services
- Queensland Police Service
- South Australia Police
- Tasmania Police
- Victoria Police
- Western Australia Police Force.

<sup>1</sup> Further information about the data, jurisdictional issues and explanatory notes is contained in the *Statistics* chapter.



# INTRODUCTION

The Australian Criminal Intelligence Commission's Illicit Drug Data Report (IDDR) is the only report of its type in Australia, providing governments, law enforcement agencies and interested stakeholders with a national picture of the illicit drug market. The IDDR presents data from a variety of sources and provides an important evidence base to assess current and future illicit drug trends, offers a brief analysis of those trends, and assists decision-makers in the development of strategies to combat the threat posed by illicit drugs.

The Australian Criminal Intelligence Commission collects data annually from all state and territory police services, the Australian Federal Police, the Department of Home Affairs, state and territory forensic laboratories and research centres. Illicit drug data collected and presented in this report for the 2018–19 financial year include:

- arrest
- detection
- seizure
- purity
- profiling
- price.

The purpose of this report is to provide statistics and analysis to assist decision-makers in developing evidence-based illicit drug supply, demand and harm reduction strategies. The data also assist the Australian Government to meet national and international reporting obligations.

The Australian Criminal Intelligence Commission uses the National Illicit Drug Reporting Format (NIDRF) system to standardise the arrest, seizure and purity data received from police services and contributing forensic organisations.

The current format and structure of the IDDR provides a more concise report, while still retaining key illicit drug market information and insights. Similar to previous reports, each chapter in the 2018–19 report provides an overview of changes since the previous reporting period and also includes some longer-term trends in key market indicators—including border detections, national seizures and arrests, price, purity, forensic analysis, wastewater analysis and drug user survey data—which inform and enhance our understanding of Australia's illicit drug markets and the ability to identify changes within them.

## EXECUTIVE SUMMARY<sup>2</sup>

Variations exist in drug markets, both internationally and domestically, within and between states and territories, and over time. No single dataset provides a national picture of Australian illicit drug markets and it is only through the layering of multiple data—both current and historical—that we are able to enhance our understanding of illicit drug markets.

Cannabis and amphetamine-type stimulants (ATS) remain the two primary illicit drug markets in Australia, and their predominance is reflected in most supply and demand indicators. By number, cannabis was the most commonly detected illicit drug at the Australian border in 2018–19, with the weight of ATS (including MDMA) detected this reporting period more than double the combined weight of cannabis, heroin and cocaine detections. Cannabis accounted for the greatest proportion of the number of national illicit drug seizures and arrests this reporting period, with ATS accounting for the greatest proportion of the weight of illicit drugs seized nationally in 2018–19.

Overall, based on supply and demand indicators for the main illicit drug markets in Australia in 2018–19:

- The ATS market, which in Australia is primarily comprised of methylamphetamine, is large and expanding.
- The cannabis market remains large and relatively stable.
- The heroin market remains small but experienced growth in some areas.
- The cocaine market continues to expand.
- Although the markets for other drugs remain relatively small compared to the above drug markets, the anaesthetics market, particularly GHB/GBL, appears to be expanding, with some growth also seen in relation to hallucinogens.

In addition to domestic border detections and seizures, international operations and collaboration also impact Australian drug markets. A summary of some current international operations and initiatives is included in Appendix 1.

## PROFILE OF ILLICIT DRUG DETECTIONS AT THE AUSTRALIAN BORDER

### Number of illicit drug detections—comparison between 2017–18 and 2018–19

Amphetamine-type stimulants (ATS)		Cannabis	Heroin	Cocaine
ATS (excluding MDMA)	MDMA			
↓ -18%	↑ 7%	↓ -36%	↓ -31%	↓ -2%
2,451 → 2,022	3,530 → 3,777	17,383 → 11,133	265 → 184	2,741 → 2,695

Cannabis accounted for the greatest number of border detections in 2018–19, followed by MDMA, cocaine, ATS<sup>3</sup> and heroin.

- The number of ATS, cannabis, heroin and cocaine detections at the Australian border decreased in 2018–19.
- The number of MDMA detections increased this reporting period.

<sup>2</sup> Key for tables in the Executive Summary:

↓ = Decrease   ↔ = Relatively stable   ↑ = Increase   ■ = Highest on record   □ = Highest in last decade

<sup>3</sup> ATS border detection data excludes MDMA, which is reported separately.

### Weight of illicit drug detections—comparison between 2017–18 and 2018–19

Amphetamine-type stimulants (ATS)		Cannabis	Heroin	Cocaine
ATS (excluding MDMA)	MDMA			
<b>↑ 74%</b> 2,952kg → 5,148kg	<b>↑ 50%</b> 1,420kg → 2,124kg	<b>↑ 212%</b> 580kg → 1,811kg	<b>↑ 49%</b> 190kg → 283kg	<b>↑ 13%</b> 926kg → 1,049kg

ATS accounted for the greatest proportion of the weight of border detections in 2018–19, followed by MDMA, cannabis, cocaine and heroin.

- The weight of detected ATS, MDMA, cannabis, heroin and cocaine increased this reporting period, with the weight of ATS detected in 2018–19 the highest on record, the weight of MDMA and cannabis the highest recorded in the last decade, and the weight of cocaine the second highest on record.
- The weight of ATS detected in 2018–19 was almost as much as the combined weight of detected MDMA, cannabis, heroin and cocaine.

### Proportion of illicit drug detections, by importation stream in 2018–19

Drug Type	Importation stream, by number, 2018–19		Importation stream, by weight, 2018–19	
<b>ATS (excluding MDMA)</b>	<b>International mail</b>	<b>86%</b>	<b>Sea cargo</b>	<b>72%</b>
	Air cargo	12%	Air cargo	17%
	Air passenger/crew	2%	International mail	10%
	Sea cargo	<1%	Air passenger/crew	1%
<b>MDMA</b>	<b>International mail</b>	<b>98%</b>	<b>Air cargo</b>	<b>48%</b>
	Air cargo	2%	International mail	28%
	Air passenger/crew	<1%	Sea cargo	24%
	Sea cargo	<1%	Air passenger/crew	<1%
<b>Cannabis</b>	<b>International mail</b>	<b>97%</b>	<b>Sea cargo</b>	<b>83%</b>
	Air cargo	2%	International mail	11%
	Air passenger/crew	1%	Air cargo	6%
	Sea cargo	<1%	Air passenger/crew	<1%
<b>Heroin</b>	<b>International mail</b>	<b>81%</b>	<b>Air cargo</b>	<b>68%</b>
	Air cargo	17%	International mail	21%
	Air passenger/crew	1%	Sea cargo	11%
	Sea cargo	1%	Air passenger/crew	<1%
<b>Cocaine</b>	<b>International mail</b>	<b>94%</b>	<b>Sea cargo</b>	<b>72%</b>
	Air cargo	5%	International mail	12%
	Air passenger/crew	1%	Air cargo	12%
	Sea cargo	<1%	Air passenger/crew	4%

The international mail stream continues to account for the greatest proportion of the number of illicit drug detections at the Australian border, however the importation stream accounting for the greatest proportion of the weight detected varies by drug type.

## PROFILE OF NATIONAL ILLICIT DRUG SEIZURES

### Number of national illicit drug seizures—comparison between 2017–18 and 2018–19

National	ATS	Cannabis	Heroin	Cocaine	Other & unknown drugs
↔ <1%	↗ 3%	↘ -5%	↗ 5%	↗ 6%	↗ 8%
112,827 → 112,474	37,093 → 38,250	59,139 → 56,491	1,977 → 2,080	5,096 → 5,378	9,522 → 10,275

- The number of national illicit drug seizures remained relatively stable this reporting period.
- In 2018–19, cannabis accounted for the greatest proportion of the number of national illicit drug seizures (50 per cent), followed by ATS (34 per cent), other and unknown drugs (9 per cent), cocaine (5 per cent) and heroin and other opioids (2 per cent).
- The number of national cannabis seizures decreased this reporting period.
- The number of national ATS, heroin, cocaine and other and unknown drug seizures increased this reporting period, with the record 5,096 cocaine seizures in 2017–18 further increasing in 2018–19 to a record 5,378 seizures, and the 2,080 heroin seizures this reporting period the second highest number reported in the last decade.

The number of national illicit drug seizures increased 77 per cent over the last decade, from 63,670 in 2009–10 to 112,474 in 2018–19.

### Weight of national illicit drug seizures—comparison between 2017–18 and 2018–19

National	ATS	Cannabis	Heroin	Cocaine	Other & unknown drugs
↘ -13%	↘ -22%	↘ -11%	↘ -14%	↘ -17%	↘ -2%
30.6t → 26.6t	11,205kg → 8,776kg	8,655kg → 7,740kg	229kg → 197kg	1,970kg → 1,638kg	8,540kg → 8,345kg

- The weight of illicit drugs seized nationally decreased this reporting period from a record 30.6 tonnes in 2017–18.
- The weight of ATS, cannabis, heroin, cocaine and other and unknown drugs seized nationally decreased this reporting period.
- In 2018–19, ATS accounted for the greatest proportion of the weight of illicit drugs seized nationally (33 per cent), followed by other and unknown (31 per cent), cannabis (29 per cent), cocaine (6 per cent) and heroin and other opioids (1 per cent).

The weight of illicit drugs seized nationally increased 241 per cent over the last decade, from 7.8 tonnes in 2009–10 to 26.6 tonnes in 2018–19.

## Comparison of the weight of methylamphetamine, MDMA, heroin and cocaine seized nationally in 2018–19 and estimated consumption

Drug	Estimated consumption <sup>a</sup> (kilograms per annum)	2018–19 national seizures (gross kilograms)	Percentage of total estimated consumption seized (%)
<b>Methylamphetamine</b>	11,516	4,418 <sup>b</sup>	38
<b>MDMA</b>	2,226	1,560	70
<b>Heroin</b>	941	197	21
<b>Cocaine</b>	4,636	1,638	35

a. Consumption estimates are based on data derived from Year 3 of the National Wastewater Drug Monitoring Program.

b. At this time it is not possible at a national level to provide a further breakdown of drugs within the amphetamines category. As such national seizure figures reflect the weight of amphetamines seized. Amphetamines include amphetamine, methylamphetamine, dexamphetamine and amphetamine not elsewhere classified. Based on available data, methylamphetamine accounts for the majority of amphetamines seized.

Wastewater analysis provides a measure of licit and illicit drug consumption within a given population. The Australian Criminal Intelligence Commission has used wastewater data collected between August 2018 and August 2019 as part of the National Wastewater Drug Monitoring Program (NWDMP) to estimate the annual weight of methylamphetamine, MDMA, heroin and cocaine consumed nationally.<sup>4</sup> Based on the reported gross weights seized nationally by Australian law enforcement in 2018–19 and consumption estimates from the NWDMP:

- The weight of amphetamines seized equated to 38 per cent of the total estimated weight of methylamphetamine needed to meet national demand.
- The weight of MDMA seized equated to 70 per cent of the total estimated weight of MDMA needed to meet national demand.
- The weight of heroin seized equated to 21 per cent of the total estimated weight of heroin needed to meet national demand.
- The weight of cocaine seized equated to 35 per cent of the total estimated weight of cocaine needed to meet national demand.

## PROFILE OF NATIONAL ILLICIT DRUG ARRESTS

### National illicit drug arrests—comparison between 2017–18 and 2018–19

National	ATS	Cannabis	Heroin & other opioids	Cocaine	Other & unknown drugs
↑ 3%	↑ 4%	↓ -2%	↑ 3%	↑ 16%	↑ 16%
148,363 → 153,377	44,887 → 46,437	72,381 → 71,151	3,029 → 3,129	4,325 → 5,016	23,741 → 27,644

- The number of national illicit drug arrests increased this reporting period.
- In 2018–19, cannabis accounted for the greatest proportion of national illicit drug arrests (46 per cent), followed by ATS (30 per cent), other and unknown drugs (18 per cent), cocaine (3 per cent) and heroin and other opioids (2 per cent).
- The number of national cannabis arrests decreased this reporting period.
- The number of national ATS, heroin and other opioids, cocaine and other and unknown drug arrests increased this reporting period, with the number of cocaine arrests in 2018–19 the highest on record.

<sup>4</sup> The public NWDMP reports are available on the ACIC website. See <<https://www.acic.gov.au/publications/reports/national-wastewater-drug-monitoring-program-reports>>.

The number of national illicit drug arrests increased 80 per cent over the last decade, from 85,252 in 2009–10 to 153,377 in 2018–19.

Arrest data in the IDDR incorporate recorded law enforcement action against a person for suspected unlawful involvement in illicit drugs. It includes action by way of arrest and charge, summons, diversion, infringement and caution. The action taken by law enforcement is influenced by a number of factors, including but not limited to which state or territory the incident occurs in, the drug type and quantity and related legislation/regulation. In 2018–19, summons accounted for the greatest proportion of national drug arrests (44 per cent), followed by charge (33 per cent) and caution/diversion/infringement (23 per cent). These proportions vary between drug type, with charge accounting for the greatest proportion of national heroin and other opioid arrests (60 per cent), summons accounting for the greatest proportion of national hallucinogen arrests (52 per cent) and caution/diversion/infringements accounting for the greatest proportion of national cannabis arrests (37 per cent).

Males accounted for the majority of national illicit drug arrests (76 per cent) in 2018–19, with females accounting for less than one quarter of arrests. While there was some variation in the proportion of arrests involving males across drug types, males consistently accounted for the greatest proportion of arrests across all drug types this reporting period, ranging from 72 per cent of national other and unknown drug arrests to 86 per cent of national cocaine and steroid arrests.

In 2018–19, consumer arrests accounted for the greatest proportion of national illicit drug arrests (90 per cent). While consumer arrests account for the greatest proportion of arrests across all drug types, the proportion attributed to them varies, from 76 per cent of national cocaine arrests to 92 per cent of national cannabis arrests.

## PROFILE OF NATIONAL CLANDESTINE LABORATORIES AND PRECURSORS

### National clandestine laboratory detections—comparison between 2017–18 and 2018–19

No. of detections	Size and production capacity	Location
<p>↓ <b>-29%</b> 432 → 308</p>	<p>↓ Addict-based 53% → <b>47%</b></p> <p>↑ Other small 26% → <b>33%</b></p> <p>↓ Medium 19% → <b>18%</b></p> <p>↔ Industrial 2% → <b>2%</b></p>	<p>↓ Residential 71% → <b>69%</b></p> <p>↑ Commercial/industrial 4% → <b>10%</b></p> <p>↓ Vehicle 10% → <b>9%</b></p> <p>↓ Rural 7% → <b>5%</b></p> <p>↔ Other 5% → <b>5%</b></p> <p>↓ Public place 4% → <b>3%</b></p>

The number of clandestine laboratories detected nationally decreased for the seventh consecutive reporting period in 2018–19.

- The majority of laboratories detected in Australia continue to be addict-based and situated in residential locations.
- The majority of laboratories detected in Australia this reporting period were producing methylamphetamine, with the hypophosphorous method of production the predominant process identified.



- Drug profiling data of both border and domestic seizures indicate ephedrine and pseudoephedrine remain key methylamphetamine precursors, with increases in the proportion of methylamphetamine seizures manufactured using P2P-based methods.

**Number of ATS precursor border detections—comparison between 2017–18 and 2018–19**

ATS Precursors	
ATS (excluding MDMA)	MDMA
<p>↓ <b>-2%</b></p> <p>332 → 325</p>	<p>↑ <b>100%</b></p> <p>1 → 2</p>

The number of ATS precursor detections at the Australian border decreased in 2018–19, while the number of MDMA precursor detections increased.

**Weight of ATS precursor detections—comparison between 2017–18 and 2018–19**

ATS Precursors	
ATS (excluding MDMA)	MDMA
<p>↓ <b>-47%</b></p> <p>4,912kg → 2,621kg</p>	<p>↑ <b>7,700%</b></p> <p>5g → 390g</p>

The weight of ATS precursors detected at the Australian border decreased in 2018–19, while the weight of MDMA precursors detected increased.

- While the weight of ATS precursors detected at the Australian border almost halved this reporting period, the weight detected in 2018–19 is the second highest on record.

## 2018–19 FEATURE—ONLINE MARKETS

**KEY POINTS**

- The ability to buy and sell illicit substances online is an established and resilient feature of global illicit drug markets. Among several platforms and avenues for purchasing illicit drugs online, darknet markets in particular are dynamic and show significant potential for expansion.
- In Australia, while there are limited supply and demand indicators directly linked to online illicit drug purchases, available data suggest that online markets are a relatively niche, but nonetheless established, source of illicit drugs.
- Factors making the online purchase of illicit drugs attractive—particularly from darknet markets—include the ability to undertake transactions remotely, avoidance of direct physical contact while purchasing and selling, the anonymity provided, the variety of substances available, their accessibility and pricing.
- International and domestic mail streams are critical to the importation and/or distribution of illicit drugs purchased online, with Europe a key source region.

## INTRODUCTION

Increasingly, as with many legitimate activities, criminal activities are committed with the assistance of technology either via the online environment or through advances in technological capabilities. The online environment has enabled crime to be committed remotely and with relative anonymity—characteristics that are attractive to serious and organised crime groups and other motivated individuals, making the identification and prosecution of offenders more difficult.

The Australian illicit drug market is best seen as a component of the global market. The internet has facilitated the expansion of the global drug market, with users able to access drugs, information about availability and purity of new drugs, and manufacturing manuals online. Virtual marketplaces are used to sell and traffic various commodities, including illicit drugs and precursor chemicals. The development of these online marketplaces is important as they have created new opportunities for illicit drug trafficking globally and present unique risks for end users and unique challenges for law enforcement.

Over the last decade, the establishment of internet-based markets that connect buyers and sellers of illicit commodities has been an important development in global illicit drug markets. These online markets include both surface websites, often referred to as the ‘clearnet’, which reflect the publicly accessible internet and includes social media platforms and networking applications or ‘apps’ (including Facebook, WhatsApp, Twitter) and dark websites, often referred to as the ‘darknet’, which is not accessible through standard browsers. The latter are typically encrypted and unindexed websites and communications that are accessed using specific software and may utilise cryptocurrencies to facilitate financial transactions.

## INTERNATIONAL TRENDS

The size and global footprint of online illicit drug markets is exceedingly difficult to assess. Contributing to this is the relatively transient nature of darknet markets. However, there are indications that online drug markets are becoming more common.

The United Nations Office on Drugs and Crime assessed that among a cohort of internet users who use illicit drugs, the proportion who reported purchasing drugs via the darknet more than doubled, from 5 per cent in 2014 to 11 per cent in 2019 (UNODC 2019).

Darknet markets offer a variety of goods and services. According to the European Monitoring Centre for Drugs and Drug Addiction, in 2017 it was estimated that 62 per cent of the offers on darknet markets were drug-related. Of these, approximately 77 per cent were illicit drugs, 18 per cent were drug-related chemicals and 5 per cent were pharmaceuticals. New psychoactive substances (NPS) are less commonly sold on darknet markets and tend to represent a small proportion of trade (EMCDDA 2017).

Several studies of online marketplaces for illicit drugs suggest that these markets are expanding and largely mirror the types of illicit drugs bought and sold offline. For example, in an analysis of 63 cryptomarkets<sup>5</sup> over the period February 2014 to January 2020, the National Drug and Alcohol Research Centre noted the following trends:

<sup>5</sup> Defined as ‘anonymous online trading platforms that facilitate the purchasing of illicit goods and services via multiple sellers’.

- The number of drug listings (the total number of substances advertised for sale across the analysed markets) increased, from 11,308 across four markets to 41,880 across five markets.
- Over the period, cannabis accounted for the majority (29 per cent) of drug listings across all analysed markets, followed by MDMA (15 per cent), cocaine (9 per cent), benzodiazepines (8 per cent), NPS (7 per cent) and methyl/amphetamine (6 per cent).
- The greatest increases in the number of drug listings were reported for cannabis and MDMA. Cannabis listings increased from 2,970 in February 2014 to 14,965 in January 2020, with MDMA listings increasing from 1,605 in February 2014 to 7,887 in January 2020 (Mathur et al. 2020).

There does however remain some uncertainty in characterising online markets given that the number of illicit drugs available does not equate to what is sold. For example, while cannabis may be prevalent in drug listings, this may not mean that other illicit drugs are not bought and sold in similar quantities. Some studies suggest that cannabis, MDMA, amphetamines, cocaine, pharmaceutical opioids and performance and image enhancing drugs are equally available on darknet markets (Broadhurst et al. 2020; ADF 2018; Place 2018).

Several characteristics of online markets may explain their attractiveness to both sellers and buyers of illicit drugs. Available price data suggest that illicit drugs may be cheaper to purchase online than in-person. Other aspects may include the ability to avoid physical interactions with local dealers, the perceived anonymity and convenience in purchasing and the variety of substances available. There is also a perception of increased and consistent purity of drugs purchased online and the perceived certainty of receiving the substances, given assurances provided by the sellers (Décary-Héту & Giommoni 2016; Rhumorbarbe et al. 2016).

### DOMESTIC TRENDS

It is almost certain that a significant proportion of online purchases rely on the mail stream for delivery. As such, border detections and domestic seizures of illicit drugs trafficked using international and local mail streams may provide an indication of the extent of drug supply which occurs using online markets and networks.

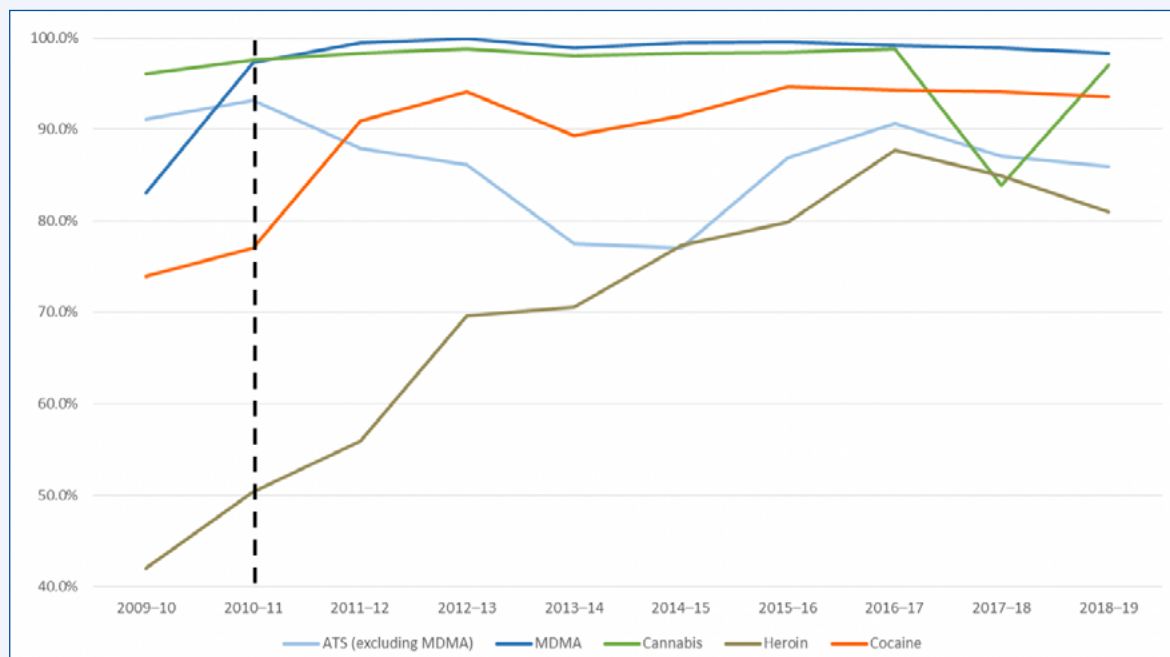
While the detection of illicit drugs in the mail stream does not directly correlate with online purchases, border detection data may provide some insight into the scale of online drug purchasing in Australia, although this would require further analysis. The international mail stream has consistently accounted for the greatest proportion of the number of border detections for key illicit drug types for over a decade, while the importation stream accounting for the greatest proportion of the weight detected varies across drug types and reporting periods. Over the last decade, border detection data for most drugs indicate an increase in the proportion of the number of detections in the international mail stream, while the weight detected decreased. The exceptions are a decrease in the proportion of the number of ATS (excluding MDMA) detections from 2009–10 to 2018–19 and an increase in the weight of cocaine detected (see table below).

### Trends in the proportion of border detections via the international mail stream, by drug type, 2009–10 to 2018–19

	ATS (excluding MDMA)	MDMA	Cannabis	Heroin	Cocaine
Proportion by number	↓	↑	↑	↑	↑
Proportion by weight	↓	↓	↓	↓	↑

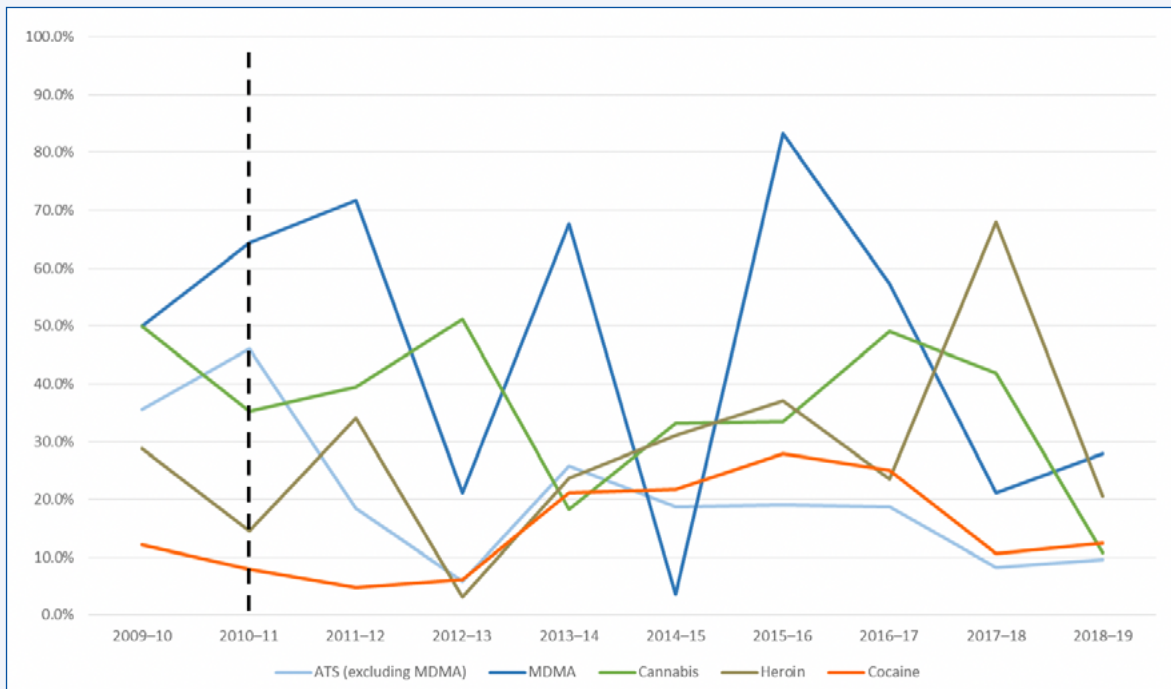
The proportion of detections identified in the international mail stream varies across drug types and reporting periods. For example, by number, heroin reported the greatest increase in the proportion of international mail stream detections over the last decade, which almost doubled from 2009–10 to 2018–19. By weight, the proportion of international mail stream detections of ATS (excluding MDMA), MDMA, heroin and cannabis fluctuated greatly over the last decade, though overall the proportions decreased. The proportion of cocaine detections (by weight) in the international mail stream also fluctuated, though to a lesser extent, and overall remained relatively stable between 2009–10 and 2018–19 (see figures below).

### Number of international mail detections at the Australian border, as a proportion of the total number of detections, by drug type, 2009–10 to 2018–19



Note: Silk Road, considered the first darknet market, was founded in February 2011.

**Weight of international mail detections at the Australian border, as a proportion of the total weight of detections, by drug type, 2009–10 to 2018–19**



Note: Silk Road, considered the first darknet market, was founded in February 2011.

National law enforcement data on embarkation points of illicit drugs purchased online are limited. In 2018–19, the Northern Territory reported that for drugs identified as being linked to darknet markets, the majority were sourced internationally, primarily from Europe.

**DOMESTIC MARKET INDICATORS**

Information on the domestic use of online markets is limited and in most cases does not include historical data. Examples of studies providing insights into the use of online markets in Australia to purchase illicit drugs include the Ecstasy and Related Drugs Reporting System (EDRS) and the Drug Use Monitoring in Australia (DUMA) program.

The EDRS collects self-report information on drug use and related harms annually from individuals in Australian capital cities who regularly use ecstasy and other stimulants. According to this national study in 2019, 73 per cent of respondents arranged the purchase of illicit or non-prescribed drugs via social networking applications in the past year, 10 per cent obtained drugs via the darknet and 5 per cent purchased drugs on the surface web. In the same year, 12 per cent of respondents reported purchasing drugs on the darknet at least once in their lifetime, while 26 per cent reported having accessed the darknet but never purchased from it. Within the EDRS population, 12 per cent of respondents reported receiving illicit drugs via post in the last 12 months (Peacock et al. 2019).

The DUMA program collects criminal justice and drug use information from police detainees. In 2014, the DUMA program interviewed police detainees to examine their access to the internet and frequency of engagement in online activities, including illicit drug purchasing. Thirty one per cent of respondents reported that they sourced information about illicit drugs online, with five per cent of respondents reporting they purchased illicit drugs online. The drugs<sup>6</sup> about which detainees most commonly reported accessing information were methylamphetamine (42 per cent), cannabis (27 per cent), MDMA (27 per cent), pharmaceuticals (20 per cent), heroin (14 per cent) and alcohol (7 per cent; Goldsmid & Patterson 2015).

In 2018, the DUMA program interviewed police detainees to examine the use of mobile phones to buy and sell illicit drugs. Excluding those who had never used a mobile phone, 59 per cent of respondents had used mobile phones to buy, deliver or supply drugs. Of these, 53 per cent used messaging apps for buying or supplying drugs. Findings of this study again illustrate that not all drug dealing using technology involves encrypted communications and how technology may be used to facilitate drug transactions (Sullivan & Voce 2020).

### PRICE

Analysis of available price data for illicit drugs suggests that online markets may offer lower prices than other sources of illicit drugs.

National law enforcement data on darknet drug prices are limited. Victoria was the only jurisdiction to provide darknet prices by Australian vendors in 2018–19.<sup>7</sup> Although prices vary among suppliers based on the drug's 'quality' and market demand, in general drug prices on the darknet—particularly for methylamphetamine and MDMA—are reportedly cheaper than local street prices. In 2018–19, the quoted price for one gram of methylamphetamine on the darknet was \$179 compared to a street price of \$200 in Victoria and a national median street price of \$385. The price for one gram of MDMA on the darknet was \$79 compared to between \$100 and \$200 in Victoria and a national median street price of \$200 in 2018–19. There was not as much variation in prices reported for one gram of heroin on the darknet (\$390) and the Victorian and national median street price (\$400). Similarly, the price for one gram of cocaine on the darknet (\$330) was close to the Victorian (between \$300 and \$400) and national median street price (\$350).

### DOMESTIC ONLINE VENDORS

Information on the location of providers, substances offered, delivery methods and the purchase process is limited. The collection of these data rely on monitoring specific darknet marketplaces, sometimes in combination with forensic analysis, with some studies and jurisdictional cases suggesting Australia-based vendors may have a significant presence in online markets.

6 Detainees could nominate more than one substance.

7 The provided price was converted from Bitcoin to Australian dollars on 21 October 2019.

In Australia, jurisdictional case studies identified several vendors selling a range of drugs using darknet markets. These included methylamphetamine, cocaine, MDMA, cannabis, psilocybin, LSD, fentanyl and benzodiazepines. For example, since 2015, the Western Australia Police Force has conducted over 500 online investigations into illicit drug-related matters linked to online purchasing—the majority of which related to surface web purchases. Based on these investigations, the Western Australia Police Force assesses that the buying or selling of illicit drugs (as opposed to precursor chemicals used in illicit drug manufacture) is more frequent on the surface web—predominantly on social media applications where anonymity is facilitated through temporary and closed groups.<sup>8</sup>

Studies that used data from two (now closed) darknet markets (Evolution and Silk Road 2) from December 2013 to March 2015 to examine the nature and extent of activities on these markets, as well as their links to Australia and Switzerland, found that:

- Of the 48,029 listings identified in Evolution market between January 2014 and March 2015, 3,047 (6 per cent) were listed as shipping from Australia, the fifth most mentioned country after the United States, the United Kingdom, the Netherlands and Germany.
- Australia's illicit drug trafficking on Evolution and Silk Road 2 was mainly domestic and only a small number of foreign vendors were able to ship to Australia. This is likely due to factors such as geographic isolation and the higher price range of illicit drugs when shipping to Australia.
- ATS (particularly MDMA and methylamphetamine) and cannabis were the predominant illicit drugs sold on these virtual markets. Although ATS were the drugs most commonly offered by vendors, according to these studies cannabis was the substance most frequently purchased (Rhumorbarbe et al. 2016; Broseus et al. 2017 and Morelato 2018).

## SEIZURES

The figures below are seizures from Operation Vitreus and Operation Parthenon, and seizures through the domestic mail system that are highly likely to be sourced online.

In 2018–19<sup>9</sup>, 2,890 national seizures were linked to online purchases. Of these, 1,234 seizures (43 per cent) were cannabis, 741 seizures (26 per cent) were methylamphetamine, 410 seizures (14 per cent) were cocaine, 387 seizures (13 per cent) were MDMA and 118 seizures (4 per cent) were heroin.

In 2018–19, 52,956 grams of illicit drugs seized nationally was linked to online purchases. Of this, 41,031 grams (77 per cent) was cannabis, 4,851 grams (9 per cent) was MDMA, 4,704 grams (9 per cent) was cocaine, 2,118 grams (4 per cent) was methylamphetamine and 249 grams (<1 per cent) was heroin.

8 These closed groups are created and dissolved over time, moving clients from one group to another. The majority of these groups are invitation only and require admission via an established and credible online identity.

9 The number and weight of online market-related seizures were provided by ACT Policing, New South Wales Police Force, Northern Territory Police, Queensland Police Service and Western Australia Police Force and reflect seizures where a link to online markets was identified.

The National Forensic Rapid Laboratory (NFRL) is a multi-agency capability, coordinated by the Australian Federal Police, which targets high-frequency, low-volume importations typically through the mail stream. The NFRL aims to identify convergences in concealment methods, drug profiling, embarkation country and other relevant characteristics to assist investigations. Based on NFRL data collected from January 2014 to March 2015, up to 75 per cent of all seized mail items were suspected to contain substances purchased online. MDMA was the most seized illicit drug by the NFRL, followed by methylamphetamine, cocaine and NPS. Cannabis was rarely seized in parcel-post consignments (Morelato 2018).

### LAW ENFORCEMENT ACTION

As a result of the increase in online sales and the use of postal services for illicit drug distribution, Australian law enforcement agencies have developed a range of responses to the threat posed by online markets.

Several law enforcement operations targeting online markets have resulted in the identification and prosecution of providers and consumers using online markets to distribute and purchase drugs. Specific operations aiming to investigate and disrupt the related criminal activity include:

- Operation Vitreus—while not specifically focused on darknet activity, work completed as part of semi-regular weeks of action includes a national mail screening operation to detect and disrupt the flow of illicit drugs through the Australian postal service. By focussing on drug detections in the mail stream, it is possible to disrupt some movement of drugs sourced from darknet markets. Specific operations conducted as part of Operation Vitreus include Operation Detect in Queensland and Operations Outpost and Viridian in Victoria.
- Strike Force Royden (New South Wales Police Force)—to investigate an online darknet vendor.
- Joint Task Force Icarus (Victoria Police in partnership with the AFP, the Australian Border Force (ABF) and the Department of Home Affairs (DHA))—worked closely with Operation Vitreus to target illicit drug distribution through the domestic mail stream.
- Operation Salamanca (Victoria Police)—commenced in June 2018 to target vendors advertising on the darknet ‘Dream Market’.
- Operation Parthenon (Northern Territory in partnership with the AFP, ABF, DHA and ACIC)—established to investigate the use of cryptocurrency and darknet markets to order illicit drugs from international suppliers.
- Joint Agency Ice Strike Team (led by South Australia Police)—a multi-agency taskforce commencing in February 2019 targeting the importation and trafficking of methylamphetamine, its precursors and other high risk and emerging drugs into South Australia via air cargo, sea cargo and the domestic and international mail streams, and the identification of the international origins and supply chains of related significant domestic seizures.

Online drug markets are resilient and again highlight the need for a multi-dimensional approach that targets supply, demand and harm reduction. As it is a global issue, international collaboration is vital to disrupting and impacting these markets. This is best illustrated through the successful take downs of whole markets, such as AlphaBay and Hansa.



In July 2017, the Federal Bureau of Investigation and several international law enforcement agencies collaborated to shut down AlphaBay, one of the largest darknet marketplaces that sold drugs and other contraband goods. Launched in 2014, AlphaBay operated as an online marketplace for drugs, data, computer programs, stolen passwords or user accounts, and other physical or digital goods and was reported to be ‘ten times the size of the Silk Road’, the first darknet black market that was taken down in October 2013.

Lessons learnt from the take down of Silk Road were applied to the take down of AlphaBay and Hansa, in particular the tendency of online users to switch almost immediately from one online market to another. In effect, the international collaboration meant that many AlphaBay users transitioned to Hansa, which was law enforcement controlled at the relevant time. This example demonstrates the scope of the issue and the necessity of close international collaboration to take down online marketplaces of this type. Law enforcement agencies worldwide benefit from such take downs through receipt of data on buyers and sellers, which may generate follow up investigations in Australia and elsewhere.

## REFERENCES

- Alcohol and Drug Foundation (ADF) 2018, *Drugs and the darknet*, viewed 9 April 2020, <<https://adf.org.au/insights/drugs-darknet/>>.
- Broadhurst, R, Ball, M & Trivedi, H 2020, *Fentanyl availability on darknet markets*, Trends and issues in crime and criminal justice no. 590, Australian Institute of Criminology, Canberra, <<https://www.aic.gov.au/publications/sb/sb18>>.
- Broseus, J, Morelato, M, Tahtouh, M & Roux, C 2017, *Forensic drug intelligence and the rise of cryptomarkets. Part I: Studying the Australian virtual market*, Forensic Science International, no. 279, pp 7-14, Elsevier, Sydney.
- Décary-Héту, D, & Giommoni, L 2016, ‘Do police crackdowns disrupt drug cryptomarkets? A longitudinal analysis of the effects of Operation Onymous’, Crime Law Soc Change, no. 67, pp 55–75. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2017, *Drugs and the darknet*, viewed 14 April 2020, <<http://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf>>.
- Goldsmid, S & Patterson, E 2015, *Findings from the DUMA program: Internet access, and frequency and nature of use among police detainees*, Research in Practice no. 42, Australian Institute of Criminology, Canberra, <<https://aic.gov.au/publications/rip/rip42>>.
- Mathur, A, Man, N, Bruno, R, Barratt, M. J, Roxburgh, A, Van Buskirk, J & Peacock, A 2020, *Summary of monitoring of cryptomarkets for drug listings, 1st February 2014 – 31st January 2020*, Drug Trends Bulletin Series, National Drug and Alcohol Research Centre, UNSW, Sydney.
- Morelato, M, Broseus, J, De Grazia, A, Tahtouh, M, Esseiva, P & Roux, C 2018, *Forensic drug intelligence and the rise of cryptomarkets. Part II: Combination of data from the physical and virtual markets*, Forensic Science International, no.288, Elsevier, Sydney.

Peacock, A, Gibbs, D, Karlsson, A, Uporova, J, Sutherland, R, Bruno, R, Dietze, P, Lenton, S, Alati, R, Degenhardt, L & Farrell, M 2018, *Australian Drug Trends 2018: Key findings from the National Ecstasy and Related Drugs (EDRS) interviews*, National Drug and Alcohol Research Centre, University of New South Wales, Sydney.

Place, N 2018, *Out of the darkness: Understanding drugs and the deep web*, *Anex Bulletin* vol. 15 ed. 1, *Anex Bulletin*, viewed 2 March 2020, <<http://www.penington.org.au/anexbulletin/out-of-the-darkness-understanding-drugs-and-the-deep-web/>>.

Rhumorbarbe, D, Staehli, L, Broseus, J, Rossy, Q & Esseiva, P 2016, *Buying drugs on a Darknet market: A better deal? Studying the online illicit drug market through the analysis of digital, physical and chemical data*, *Forensic Science International*, no. 267: 173–182.

Sullivan, T & Voce, A 2020, *Use of mobile phones to buy and sell illicit drugs*, Australian Institute of Criminology (AIC), Canberra.

United Nations Office on Drugs and Crime (UNODC) 2019, *World Drug Report 2019*, Vienna.



## ABBREVIATIONS

<b>1,4-BD</b>	1,4-butanediol
<b>4-MMC</b>	4-methylmethcathinone
<b>AAS</b>	Anabolic-androgenic steroids
<b>ACIC</b>	Australian Criminal Intelligence Commission
<b>ACT</b>	Australian Capital Territory
<b>AFP</b>	Australian Federal Police
<b>ANSPS</b>	Australian Needle and Syringe Program Survey
<b>ASSAD</b>	Australian Secondary Students Alcohol and Drug Survey
<b>ATS</b>	Amphetamine-type stimulants
<b>CEN</b>	Cannabis Expiation Notice
<b>CIR</b>	Cannabis Intervention Requirement
<b>DIN</b>	Drug Infringement Notice
<b>DUMA</b>	Drug Use Monitoring in Australia
<b>EDRS</b>	Ecstasy and Related Drugs Reporting System
<b>ENIPID</b>	Enhanced National Intelligence Picture on Illicit Drugs
<b>Eph</b>	Ephedrine
<b>FDI</b>	Forensic Drug Intelligence
<b>GHB</b>	Gamma-hydroxybutyrate
<b>GBL</b>	Gamma-butyrolactone
<b>IDDR</b>	Illicit Drug Data Report
<b>IDRS</b>	Illicit Drug Reporting System
<b>INCB</b>	International Narcotics Control Board
<b>LSD</b>	Lysergic acid diethylamide
<b>MDMA</b>	3,4-methylenedioxymethamphetamine
<b>NEC</b>	Not elsewhere classified
<b>NMI</b>	National Measurement Institute
<b>NPS</b>	New psychoactive substances
<b>NSW</b>	New South Wales
<b>NT</b>	Northern Territory
<b>NWDMP</b>	National Wastewater Drug Monitoring Program
<b>P2P</b>	Phenyl-2-propanone

<b>PIED</b>	Performance and image enhancing drug
<b>PSE</b>	Pseudoephedrine
<b>Qld</b>	Queensland
<b>SA</b>	South Australia
<b>SCON</b>	Simple Cannabis Offence Notice
<b>Tas</b>	Tasmania
<b>THC</b>	Delta-9-tetrahydrocannabinol
<b>UK</b>	United Kingdom
<b>UNODC</b>	United Nations Office on Drugs and Crime
<b>US</b>	United States
<b>Vic</b>	Victoria
<b>WA</b>	Western Australia
<b>WCO</b>	World Customs Organization