# OTHER DRUGS

# **EXECUTE KEY POINTS**

- While substances which comprise the other drugs category have smaller supply and demand trends than other traditional illicit drugs, they represent diverse and dynamic markets, and include substances with very high harm potential.
- Indicators of demand and supply for other drugs in Australia in 2017–18 provide a mixed picture.
  - The number of detections of PIEDs at the Australian border decreased. The number of national steroid seizures and arrests also decreased, with the weight of steroids seized nationally increasing this reporting period.
  - The number of tryptamine detections at the Australian border decreased—the majority of which were LSD. The number and weight of national hallucinogen seizures also decreased this reporting period, while the number of national hallucinogen arrests increased.
  - The number of anaesthetic detections at the Australian border decreased. While the majority
    of border detections this reporting period related to ketamine, other indicators—including the
    number of clandestine laboratories—point to a potential expansion of the GBL/GHB market.
  - The weight of other opioids seized nationally increased.
  - Forensic profiling of NPS indicate that while cathinone-type substances have traditionally accounted for the greatest proportion of the number of analysed border seizures, amphetamine-type substances accounted for the greatest proportion of both the number and weight this reporting period.
  - There was a record number of national other and unknown drug arrests. The number of national other and unknown drug seizures remained relatively stable this reporting period, while the related weight seized increased.



## OTHER DRUGS

Other drugs and substances—collectively referred to in this report as 'other drugs'—are recognised as part of Australia's illicit drug market. This chapter focuses on the main drugs and substances in this category:

- anabolic agents and selected hormones
- anaesthetics
- new psychoactive substances (NPS)<sup>89</sup>
- pharmaceuticals
- tryptamines
- other drugs not elsewhere classified (NEC).

# ANABOLIC AGENTS AND OTHER SELECTED HORMONES

#### MAIN FORMS

The Australian Standard Classification of Drugs of Concern distinguishes four classes of substances as anabolic agents and selected hormones: anabolic-androgenic steroids (AAS); beta-2 agonists; peptide hormones, mimetics and analogues; and other anabolic agents and selected hormones. More generally, this group of substances is referred to as performance and image enhancing drugs (PIEDs; ABS 2011).

AAS, commonly referred to as steroids, are derivatives of testosterone—a naturally occurring male sex hormone.

- Anabolic refers to the muscle-building effects of the drug, while androgenic refers to their masculinising effects.
- AAS are most commonly administered orally (as liquid or tablets), injected intramuscularly, absorbed using suppositories or cream, gel or patches on the skin, or via nasal sprays.

Beta-2 agonists, induce both anabolic and catabolic (body fat reduction) effects.

- A common beta-2 agonist misused in Australia is clenbuterol.
- Beta-2 agonists are usually sold in tablet form (ADF 2018a; DEA 2017; NDS 2006a).

Although AAS remain the most prevalent substance in the PIEDs category, a number of other substances exist which manipulate or interfere with the body's hormonal system. Key substances in this category include erythropoietin (EPO), human growth hormone (hGH) and human chorionic gonadotrophin (hCG; ADF 2018b; NDS 2006b; NDS 2006c; NDS 2006d; Larance et al. 2005).

<sup>89</sup> NPS have been referred to as drug analogues and new psychoactive substances (DANPS) in previous Illicit Drug Data Reports.

#### INTERNATIONAL TRENDS

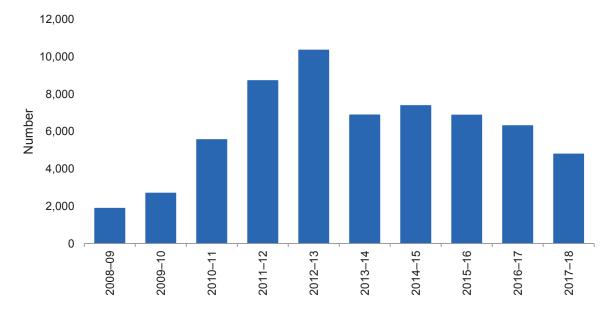
INTERPOL and the Permanent Forum on International Pharmaceutical Crime (PFIPC) initiated Operation Pangea (Pangea) in 2008. Pangea is an annual international operation coordinated by INTERPOL and supported by the World Customs Organization, the PFIPC, the Heads of Medicines Agencies Working Group of Enforcement Officers, Europol and the Pharmaceutical Security Institute which targets the online advertising, sale and supply of illicit and counterfeit medicines and medical devices that pose a threat to public health and safety. Activity is in the form of an international week of action and continues to evolve and build upon best practice. The most recent iteration, Pangea XI, took place over 9–16 October 2018 and involved police, customs and health regulatory authorities from 116 countries. The operation resulted in 859 arrests worldwide and the seizure of 500 tonnes of illicit pharmaceuticals—including anabolic steroids—worth an estimated USD 14 million (INTERPOL 2018).

#### DOMESTIC TRENDS

#### AUSTRALIAN BORDER SITUATION

The number of PIED detections at the Australian border decreased 24.1 per cent this reporting period, from 6,308 in 2016–17 to 4,790 in 2017–18 (see Figure 24).<sup>90</sup>

FIGURE 24: Number of performance and image enhancing drug detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)

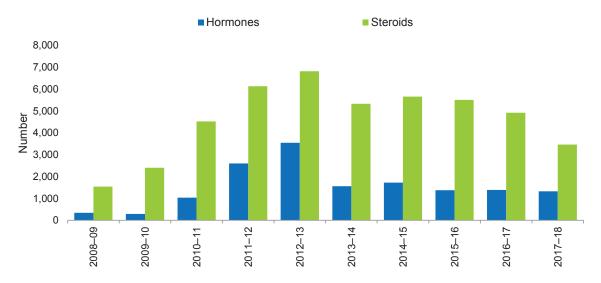


Of the 4,790 PIED detections in 2017–18, 72.3 per cent were steroids and 27.7 per cent were hormones (see Figure 25).

- The number of steroid border detections decreased 29.6 per cent this reporting period, from 4,918 in 2016–17 to 3,462 in 2017–18.
- The number of hormone border detections decreased 4.5 percent this reporting period, from 1,390 in 2016–17 to 1,328 in 2017–18.

<sup>90</sup> The Department of Home Affairs is unable to provide statistical data on the weight of drugs in this category due to differences in drug form, which includes liquid, vials and tablets.

FIGURE 25: Number of performance and image enhancing drug detections, by category, at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)



The number of clenbuterol detections at the Australian border decreased 43.4 per cent this reporting period, from 463 in 2016–17 to 262 in 2017–18.

#### **IMPORTATION METHODS**

In 2017–18, detections of PIEDs occurred in the international mail, air cargo, air passenger/crew and sea cargo streams. The international mail stream accounted for 86.0 per cent of the number of PIED detections at the Australian border this reporting period, followed by air cargo (8.6 per cent), air passenger/crew (5.3 per cent) and sea cargo (0.1 per cent).<sup>91</sup>

In 2017–18, detections of clenbuterol occurred in the international mail, air cargo and air passenger/crew streams. The international mail stream accounted for 86.3 per cent of the number of clenbuterol detections at the Australian border this reporting period, followed by air passenger/crew (10.3 per cent) and air cargo (3.4 per cent).

#### **EMBARKATION POINTS**

In 2017–18, 59 countries were identified as embarkation points for PIED detections at the Australian border, the same number of countries reported in 2016–17. By number, the United States (US) was the primary embarkation point for PIED detections in 2017–18. Other key embarkation points by number this reporting period include the United Kingdom (UK), China (including Hong Kong), Thailand, India, Philippines, Singapore, Turkey, Poland and the United Arab Emirates.

In 2017–18, 31 countries were identified as embarkation points for clenbuterol detections at the Australian border, compared with 26 countries in 2016–17.

<sup>91</sup> A figure for importation methods of PIEDs detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

#### DOMESTIC MARKET INDICATORS

The National Drug Strategy Household Survey (NDSHS) collects self-report information on alcohol, tobacco and illicit drug use among the general population and also surveys people's attitudes and perceptions in relation to these. Conducted approximately every three years, the related report presents estimates derived from survey responses weighted to the appropriate Australian population. According to the 2016 NDSHS:

- The proportion of the Australian population aged 14 years or older reporting the non-medical use of steroids at least once in their lifetime increased, from 0.5 per cent in 2013 to 0.6 per cent in 2016.
- The proportion of the Australian population aged 14 years or older who reported having recently used<sup>92</sup> steroids for non-medical purposes remained stable at 0.1 per cent in 2016 (AIHW 2017a).

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

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

- Seven per cent of respondents reported having used steroids at least once in their lifetime in 2017. No data were available for 2018.
- The proportion of respondents reporting the recent use<sup>93</sup> of steroids increased, from 2.0 per cent in 2017 to 3.0 per cent in 2018 (Peacock et al. 2018a).

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

- Three per cent of respondents reported having used steroids at least once in their lifetime in 2017. No data were available for 2018.
- One per cent of respondents reported the recent use of steroids in 2017. No data were available for 2018 (Stafford & Breen 2017a).

<sup>92</sup> In the NDSHS, recent use refers to reported use in the 12 months preceding interview.

<sup>93</sup> In both the Illicit Drug Reporting System (IDRS) and Ecstasy and Related Drugs Reporting System (EDRS), recent use refers to reported use in the six months preceding interview.

The Australian Needle and Syringe Program Survey (ANSPS) collects self-report information and capillary blood samples94 annually to monitor blood borne viral infections and associated risk behaviour among individuals who inject drugs. According to the ANSPS National Data Report 2013-17:

- Nationally, the proportion of respondents reporting PIEDs as the drug last injected increased, from 4.0 per cent in 2016 to 5.0 per cent in 2017.
- New South Wales and Queensland had the highest reported prevalence of PIEDs as the drug last injected, ranging from 6.0 per cent to 14.0 per cent over the period 2013 to 2017 in Queensland and between 10.0 per cent and 12.0 per cent in New South Wales.
- In 2017, the proportion of respondents reporting the injection of PIEDs remained stable at 2.0 per cent or less in all other states and territories.
- In 2017, of the respondents who recently initiated<sup>95</sup> injecting drug use, one in four (26.0 per cent) reported PIEDs as the drug last injected (Heard et al. 2018).

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

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

#### **PRICE**

National law enforcement data on the price of PIEDs is limited (see Table 47, Statistics chapter).

#### SEIZURES AND ARRESTS

The number of national steroid seizures decreased 5.5 per cent this reporting period, from 474 in 2016–17 to 448 in 2017–18. The weight of steroids seized nationally increased 24.8 per cent this reporting period, from 60.6 kilograms in 2016-17 to 75.7 kilograms in 2017–18 (see Figure 26).

<sup>94</sup> Individuals participating in the survey are invited to provide a blood sample for HIV and HCV antibody testing.

<sup>95</sup> Less than three years since first injection.

FIGURE 26: National steroid seizures, by number and weight, 2008-09 to 2017-18



Western Australia reported the greatest percentage increase in the number of steroid seizures this reporting period, while New South Wales recorded the greatest percentage increase in the weight of steroids seized in 2017–18. New South Wales accounted for the greatest proportion of both the number (60.3 per cent) and weight (77.7 per cent) of national steroid seizures this reporting period (see Table 15).

TABLE 15: Number, weight and percentage change of national steroid seizures, 2016–17 and 2017–18

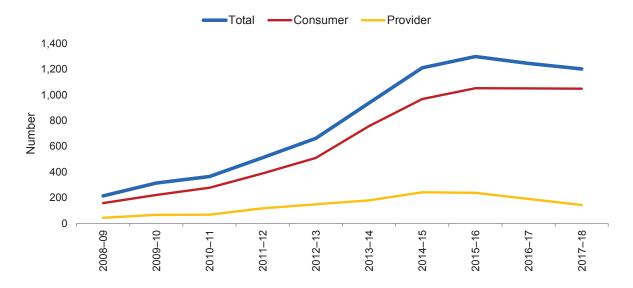
	Number			Weight (grams)		
State/Territory <sup>a</sup>	2016–17	2017–18	% change	2016–17	2017–18	% change
New South Wales	266	270	1.5	10,720	58,857	449.0
Victoria	27	9	-66.7	16,759	845	-95.0
Queensland	63	73	15.9	29,210	10,557	-63.9
South Australia	0	0	0.0	0	0	0.0
Western Australia <sup>b</sup>	33	49	48.5	1,647	2,034	23.5
Tasmania	6	0	-100.0	163	0	-100.0
Northern Territory	23	30	30.4	1,009	1,909	89.2
Australian Capital Territory	56	17	-69.6	1,151	1,527	32.7
Total	474	448	-5.5	60,659	75,729	24.8

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

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

The number of national steroid arrests decreased 3.5 per cent this reporting period, from 1,244 in 2016–17 to 1,201 in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, comprising 88.0 per cent of national steroid arrests in 2017–18 (see Figure 27).

FIGURE 27: Number of national steroid arrests, 2008–09 to 2017–18



Although starting from a low base, South Australia reported the greatest percentage increase in the number of steroid arrests in 2017–18, with Queensland accounting for the greatest proportion of national steroid arrests this reporting period (55.8 per cent; see Table 16).

TABLE 16: Number and percentage change of national steroid arrests, 2016-17 and 2017-18

	Arrests					
State/Territory <sup>a</sup>	2016–17	2017–18	% change			
New South Wales	164	178	8.5			
Victoria	124	102	-17.7			
Queensland	694	670	-3.5			
South Australia	3	7	133.3			
Western Australia <sup>b</sup>	220	211	-4.1			
Tasmania	9	19	111.1			
Northern Territory	15	10	-33.3			
Australian Capital Territory	15	4	-73.3			
Total	1,244	1,201	-3.5			

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



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

# **TRYPTAMINES**

#### MAIN FORMS

Tryptamines are hallucinogenic substances which act upon the central nervous system, producing altered states of perception, sensation, cognition and consciousness, often accompanied by visual or auditory hallucinations. Some are found naturally in a variety of flowering plants, leaves, seeds and some spore-forming plants, while others are synthetically produced. The following section covers lysergic acid diethylamide (LSD) and psilocybin-containing mushrooms, the two most common tryptamines used in Australia (ADF 2018c; EMCDDA 2017a; UNODC 2016).

### LYSERGIC ACID DIETHYLAMIDE (LSD)

LSD, commonly referred to as 'acid', is a semi-synthetic hallucinogen derived from lysergic acid, a chemical found in a fungus which grows on certain types of grain.

- In pure form, LSD is a white, water-soluble and odourless powder.
- LSD is most commonly consumed orally, ingested on LSD-impregnated paper blotters (tabs<sup>96</sup>), miniature tablets (microdots) or gelatine sheets (window panes).
- In liquid form, LSD can be administered by intravenous or intramuscular injection, or through consumption of LSD-impregnated sugar cubes (ADF 2018c; UNODC 2016).

#### PSILOCYBIN-CONTAINING MUSHROOMS

Psilocybin is the primary psychoactive and hallucinogenic chemical present in certain species of mushroom within the *Psilocybe* genus, commonly referred to as 'magic mushrooms'.

- Approximately 20 species of psilocybin-containing mushrooms are found in Australia. In addition to variation in the psilocybin content across species of mushroom, their potency is affected by their origin, growing conditions, harvest period and form.
- Hallucinogenic mushrooms are consumed as fresh fungi, preserved (dried, cooked and/or frozen) or as dry powders or capsules. These forms can be consumed orally (raw, cooked or brewed into a beverage), smoked or injected intravenously (EMCDDA 2017a; UNODC 2016).

#### INTERNATIONAL TRENDS

According to UNODC data, the weight of hallucinogens seized globally continued to decrease, with over 500.0 kilograms seized in 2016. The weight of global seizures of LSD—the predominant drug type within the hallucinogens drug group—more than doubled in 2016, largely due to the increase in the quantity of LSD seized in Europe and North America (UNODC 2018).

Small increases in the number of LSD and psilocybin-containing substance seizures were reported by World Customs Organization (WCO) agencies in 2017. No data was reported for the weight of LSD and psilocybin seized in 2017 (WCO 2018).

<sup>96</sup> Small squares of absorbent paper generally decorated with artwork or designs and impregnated with LSD.

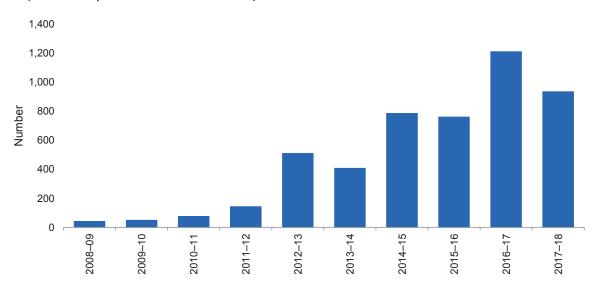
#### DOMESTIC TRENDS

#### AUSTRALIAN BORDER SITUATION

The number of tryptamine detections at the Australian border decreased 22.8 per cent this reporting period, from a record 1,211 in 2016–17 to 935 in 2017–18, the second highest number on record (see Figure 28). The majority of tryptamine detections this reporting period were LSD.

- Of the 935 detections in 2017–18, 749 were LSD, a 15.6 per cent decrease from the 887 detections reported in 2016–17.
- There were 77 psilocybin detections, a 60.5 per cent decrease from the 195 detections in 2016–17.
- The remaining 109 detections this reporting period were reported as 'other'.

FIGURE 28: Number of tryptamine detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)



#### **IMPORTATION METHODS**

In 2017–18, detections of tryptamines occurred in the air cargo, air passenger/crew and international mail streams. The international mail stream accounted for 99.7 per cent of the number of tryptamine detections at the Australian border this reporting period, followed by air cargo (0.2 per cent) and air passenger/crew (0.1 per cent).<sup>97</sup>

#### **EMBARKATION POINTS**

By number, the Netherlands was the primary embarkation point for tryptamine detections at the Australian border in 2017–18. Other key embarkation points by number this reporting period include Poland, Canada, Germany, the UK, Spain, Belgium, the US, Russia and Ukraine.

By number, Canada was the primary embarkation point for psilocybin detections at the Australian border in 2017–18. Other key embarkation points by number this reporting period include the Netherlands, Poland, the UK, Czech Republic, Bosnia and Herzegovina, Hungary and Austria.

<sup>97</sup> A figure for importation methods of tryptamines detected in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

#### DOMESTIC MARKET INDICATORS

According to the 2016 NDSHS, the proportion of the Australian population aged 14 years or older who reported having used hallucinogens at least once in their lifetime remained stable at 9.4 per cent, while the reported recent use of hallucinogens decreased, from 1.3 per cent in 2013 to 1.0 per cent in 2016 (AIHW 2017a).

While no data are available for 2018, in a 2017 national study of regular injecting drug users, the proportion of respondents reporting the recent use of hallucinogens remained stable at 6.0 per cent. LSD was the main hallucinogen reportedly used within this user group in 2017, followed by magic mushrooms (Karlsson & Burns 2018; Stafford & Breen 2017b; Peacock et al. 2018a).

In a 2018 national study of regular ecstasy users, the proportion of respondents reporting the recent use of LSD increased, from 50.0 per cent in 2017 to 51.0 per cent in 2018. The reported recent use of magic mushrooms decreased, from 27.0 per cent in 2017 to 26.0 per cent in 2018 (Peacock et al. 2018b).

According to data from the 2017 ASSAD survey, the proportion of respondents who reported having used any hallucinogen98 at least once in their lifetime increased, from 3.0 per cent in 2014 to 4.0 per cent in 2017, while the reported use of any hallucinogen at least once in the past month remained stable at 1.0 per cent (Guerin & White 2018).

#### **PRICE**

Nationally, the price per tab of LSD ranged between \$5 and \$50 in 2017-18, compared with a price range of \$8 to \$50 in 2016–17. Queensland was the only state to report a price (\$800) for a single 20 millilitre vial of LSD this reporting period. South Australia was the only state to report a price for 1 gram of psilocybin in 2017–18, which ranged between \$10 and \$15.

#### AVAILABILITY

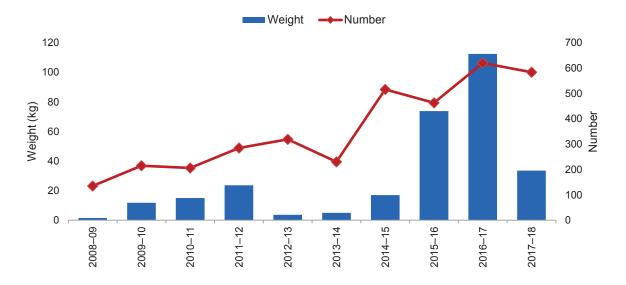
In a 2018 national study of regular ecstasy users, the proportion of respondents reporting LSD as easy or very easy to obtain decreased, from 62.0 per cent in 2017 to 61.0 per cent in 2018 (Peacock et al. 2018b).

#### SEIZURES AND ARRESTS

The number of national hallucinogen seizures decreased 5.8 per cent this reporting period, from a record 620 in 2016-17 to 584 in 2017-18. The weight of hallucinogens seized nationally decreased 70.2 per cent this reporting period, from a record 112.4 kilograms in 2016–17 to 33.5 kilograms in 2017–18 (see Figure 29).

<sup>98</sup> In the 2017 ASSAD survey, 'hallucinogen' refers to LSD or magic mushrooms.

FIGURE 29: National hallucinogen seizures, by number and weight, 2008-09 to 2017-18



The Australian Capital Territory reported the greatest percentage increase in both the number and weight of hallucinogen seizures in 2017–18. New South Wales accounted for the greatest proportion of the number of national hallucinogen seizures this reporting period (56.2 per cent), while Victoria accounted for the greatest proportion of the weight of hallucinogens seized nationally (47.2 per cent; see Table 17).

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

	Number			Weight (grams)		
State/Territory <sup>a</sup>	2016–17	2017–18	% change	2016–17	2017–18	% change
New South Wales	416	328	-21.2	15,914	6,365	-60.0
Victoria	53	92	73.6	68,709	15,832	-77.0
Queensland	41	33	-19.5	9,186	3,763	-59.0
South Australia	5	6	20.0	11,900	2,340	-80.3
Western Australia <sup>b</sup>	59	74	25.4	5,686	3,328	-41.5
Tasmania	9	14	55.6	217	190	-12.4
Northern Territory	27	17	-37.0	422	17	-96.0
Australian Capital Territory	10	20	100.0	429	1,711	298.8
Total	620	584	-5.8	112,463	33,546	-70.2

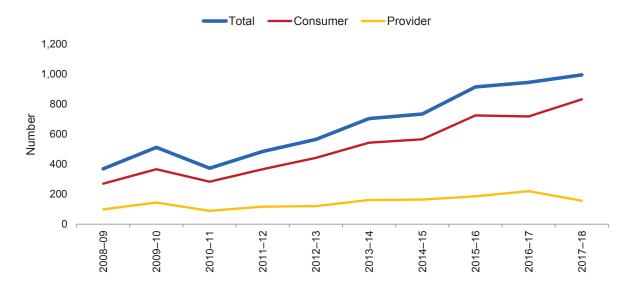
a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.

The number of national hallucinogen arrests increased 5.3 per cent this reporting period, from 945 in 2016–17 to 995 in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, comprising 84.2 per cent of national hallucinogen arrests in 2017–18 (see Figure 30). However, the Northern Territory reported the same number of hallucinogen consumer and provider arrests in 2017–18.



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

FIGURE 30: Number of national hallucinogen arrests, 2008-09 to 2017-18



The Australian Capital Territory reported the greatest percentage increase in the number of hallucinogen arrests in 2017–18. Queensland accounted for the greatest proportion of national hallucinogen arrests this reporting period (33.5 per cent), followed by New South Wales (23.8 per cent; see Table 18).

TABLE 18: Number and percentage change of national hallucinogen arrests, 2016–17 and 2017–18

	Arrests					
State/Territory <sup>a</sup>	2016–17	2017–18	% change			
New South Wales	200	237	18.5			
Victoria	138	139	0.7			
Queensland	283	333	17.7			
South Australia	43	56	30.2			
Western Australia <sup>b</sup>	251	183	-27.1			
Tasmania	10	25	150.0			
Northern Territory	19	9	-52.6			
Australian Capital Territory	1	13	1,200.0			
Total	945	995	5.3			

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

# **ANAESTHETICS**

#### MAIN FORMS

While anaesthetics and their precursors have many legitimate uses in the medical, veterinary, plastics and chemical industries, they are also diverted for illicit use. This section covers ketamine, gamma-hydroxybutyrate (GHB) and related substances, the most prevalent anaesthetics used illicitly in Australia (ADF 2018d; WHO 2014).

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

#### **KETAMINE**

Ketamine is a central nervous system depressant used as an anaesthetic and analgesic in medical and veterinary settings.

- Ketamine is commonly found in three forms—liquid, powder and tablet.
- It is most commonly snorted, swallowed or injected. It can also be combined with other substances, such as cannabis or tobacco, and smoked (ADF 2018d; DrugWise 2017; UNODC 2017a; UNODC 2016).

#### GAMMA-HYDROXYBUTYRATE (GHB) AND RELATED SUBSTANCES

GHB is a naturally occurring substance found in the central nervous system and may also be synthetically produced.

- GHB is commonly consumed as a water soluble salt and appears as a colourless and odourless liquid solution usually sold in small bottles or vials.
- Gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-BD) are analogues and precursors of GHB which, upon ingestion, metabolise into GHB in the body, producing identical effects (ADF 2018d; DrugWise 2017; UNODC 2016; WHO 2014).

#### INTERNATIONAL TRENDS

According to the 2018 World Drug Report, there was a sevenfold increase in the weight of sedatives and tranquilizers seized globally in 2016. The report attributes this to the marked increase in the weight of methaqualone<sup>99</sup>, benzodiazepines and GHB seized in 2016. In contrast, both the number of countries reporting ketamine seizures and the weight of ketamine seized globally decreased in 2016. After continuous increases in the weight of ketamine seized globally since 2012, the weight seized decreased from 22.0 tonnes in 2015 to 12.2 tonnes in 2016. This decrease is largely attributable to the significant decrease in the weight of ketamine seized in China (including Hong Kong), with East and South-East Asia continuing to account for the greatest proportion of the weight of ketamine seized globally (over 12 tonnes in 2016; UNODC 2018).

WCO data for ketamine and GHB were not available in 2017. WCO agencies reported 1,032 seizures of GBL in 2017 (WCO 2018).

#### DOMESTIC TRENDS

#### AUSTRALIAN BORDER SITUATION

Detections of anaesthetics by the Department of Home Affairs include GHB, GBL and ketamine. The number of anaesthetic detections at the Australian border decreased 20.2 per cent this reporting period, from 1,151 in 2016–17 to 919 in 2017–18 (see Figure 31).

The number of ketamine detections decreased 37.7 per cent this reporting period, from 973 detections in 2016–17 to 606 detections in 2017–18 and account for 65.9 per cent of the number of anaesthetic detections at the Australian border this reporting period.

<sup>99</sup> A sedative and hypnotic medication.

- The number of GHB detections increased 20.9 per cent this reporting period, from 43 detections in 2016–17 to 52 detections in 2017–18 and account for 5.7 per cent of the number of anaesthetic detections at the Australian border this reporting period.
- The number of GBL detections increased 29.6 per cent this reporting period, from 135 detections in 2016–17 to 175 detections in 2017–18 and account for 19.0 per cent of the number of anaesthetic detections at the Australian border this reporting period.

FIGURE 31: Number of anaesthetic detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)



#### IMPORTATION METHODS

In 2017–18, detections of anaesthetics occurred in the air cargo, air passenger/crew and international mail streams. The international mail stream accounted for 85.4 per cent of the number of anaesthetic detections at the Australian border this reporting period, followed by air cargo (13.7 per cent) and air passenger/crew (0.9 per cent).<sup>100</sup>

In 2017–18, GHB/GBL detections occurred in the air cargo, air passenger/crew and international mail streams. The international mail stream accounted for 85.0 per cent of the number of GHB/GBL detections at the Australian border this reporting period, followed by air cargo (12.8 per cent) and air passenger/crew (2.2 per cent).<sup>101</sup>

In 2017–18, ketamine detections occurred in the air cargo, air passenger/crew and international mail streams. The international mail stream accounted for 97.7 per cent of the number of ketamine detections at the Australian border this reporting period, followed by air cargo (1.8 per cent) and air passenger/crew (0.5 per cent).<sup>102</sup>

<sup>100</sup> A figure for importation methods of anaesthetics detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

<sup>101</sup> A figure for importation methods of GHB and GBL detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>.

<sup>102</sup> A figure for importation methods of ketamine detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

#### **EMBARKATION POINTS**

In 2017–18, China (including Hong Kong) was the primary embarkation point for the number of GHB and GBL detections at the Australian border. Other key embarkation points by number this reporting period include the Netherlands, Lithuania, the US, Germany, Belgium, Canada, Thailand, the UK and Austria.

In 2017–18, the Netherlands was the primary embarkation point for the number of ketamine detections at the Australian border. Other key embarkation points by number this reporting period include the UK, Italy, Germany, India, Malaysia, France, Canada, Belgium and China (including Hong Kong).

#### DOMESTIC MARKET INDICATORS

According to the 2016 NDSHS, the proportion of the Australian population aged 14 years or older reporting GHB use at least once in their lifetime increased, from 0.9 per cent in 2013 to 1.0 per cent in 2016, with the reported recent use of GHB increasing from <0.1 per cent to 0.1 per cent (AIHW 2017a).

In the same survey, the proportion of the Australian population aged 14 years or older reporting ketamine use at least once in their lifetime increased, from 1.7 per cent in 2013 to 1.9 per cent in 2016, with reported recent ketamine use also increasing, from 0.3 per cent to 0.4 per cent (AIHW 2017a).

In a 2018 national study of regular ecstasy users, the proportion of respondents reporting recent GHB use decreased, from 7.0 per cent in 2017 to 6.0 per cent in 2018. Within this user group the proportion of respondents reporting the recent use of ketamine also decreased, from 37.0 per cent in 2017 to 35.0 per cent in 2018 (Peacock et al. 2018b).

#### CLANDESTINE LABORATORIES

The number of GBL/GHB clandestine laboratories detected nationally doubled this reporting period, from 11 in 2016–17 to a record 22 in 2017–18 (see Clandestine Laboratories and Precursors chapter).

#### **PRICE**

Nationally, the price for 1 gram of ketamine powder ranged between \$100 and \$250 in 2017–18, compared with a price range of \$150 to \$200 in 2016–17. Nationally, the price for 1-1.5 millilitres of GHB/GBL ranged between \$3 and \$10 in 2017-18, compared with a price range of \$4 to \$8 (reported by Queensland and South Australia) in 2016-17. Nationally, the price of a litre of GHB/GBL ranged between \$600 and \$3,500 in 2017–18, compared with a price range of \$800 to \$3,000 in 2016-17.

#### AVAILABILITY

In a 2018 national study of regular ecstasy users, the proportion of respondents reporting ketamine as easy or very easy to obtain increased, from 64.0 per cent in 2017 to 65.0 per cent in 2018. Data relating to the availability of GHB were unavailable for 2018 (Peacock et al. 2018b).



# **PHARMACEUTICALS**

#### MAIN FORMS

In Australia, the importation, manufacture, distribution and supply of pharmaceuticals is controlled under various legislation and regulations. Despite these controls, many pharmaceutical drugs continue to be diverted for non-medical use, including dependence, self-medication, improved performance, substitution or withdrawal from other drugs and to enhance or counter the effects of illicit drugs. Pharmaceutical drugs are obtained for nonmedical purposes through a range of means, including:

- family and friends with legitimate prescriptions
- forged prescriptions
- over prescribing by health-care professionals
- online pharmacies
- theft from hospitals or pharmacies
- doctor shopping
- healthcare professionals self-prescribing or misappropriating medication (UNODC 2011).

This section focuses on benzodiazepines and opioids, the pharmaceutical drugs most commonly misused in Australia (AIHW 2017b).

#### BENZODIAZEPINES

The term benzodiazepine covers a range of synthetic substances which act as central nervous system depressants.

 Benzodiazepines are most commonly found in tablet or capsule form, stamped with a brand name for oral ingestion and may also be injected (ADF 2018e; EMCDDA 2017c; UNODC 2016).

#### **OPIOIDS**

Opioid is a generic term which covers both naturally occurring opiates extracted from the opium poppy, as well as semi or fully synthetic analogues.

Opioids are available in tablet, capsule, liquid, lozenge, powder and skin patch forms (ADF 2018f; UNODC 2016).

#### INTERNATIONAL TRENDS

The UNODC notes the increasing concern of law enforcement and public health officials globally over the non-medical use of pharmaceutical opioids. Hydrocodone, oxycodone, codeine and tramadol are the primary pharmaceutical opioids consumed for non-medical purposes in North America. In Europe the main substances are methadone, buprenorphine and fentanyl, and among people reporting the non-medical use of pharmaceutical opioids in West and North Africa and the Near and Middle East, tramadol is the primary substance used (UNODC 2018).

According to the World Drug Report, 87 tonnes of pharmaceutical opioids were seized in 2016, comprising 68 tonnes of tramadol, 18 tonnes of codeine, 1 tonne of oxycodone and 400 kilograms of fentanyl. With the exception of tramadol, methadone and hydromorphone, the UNODC reported increases in the weight of pharmaceutical opioids seized from 2015 and 2016. The most significant increases in the weight seized were recorded for codeine, oxycodone, fentanyl (and its analogues) and buprenorphine. As in 2015, Africa accounted for the greatest proportion of the weight of pharmaceutical opioids seized globally in 2016 (87.0 per cent), in particular West, Central and North Africa (UNODC 2018).

#### DOMESTIC TRENDS

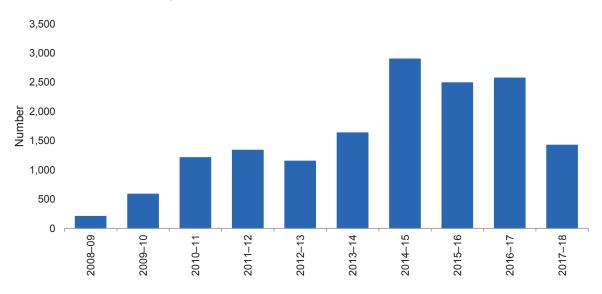
#### **AUSTRALIAN BORDER SITUATION**

The importation of prescription pharmaceuticals by individuals is primarily done for personal use and without criminal intent. Pharmaceuticals continue to be purchased over the internet for a variety of reasons, including the anonymity afforded to purchasers, the ability to purchase without a prescription and lower costs. However, the importation of prescription pharmaceuticals can result in a greater risk of purchasing counterfeit drugs, which either have no effect, or can be dangerous or contain a different active ingredient than expected.

Pharmaceutical detections reported by the Department of Home Affairs only reflect detections of benzodiazepines and opioids. The number of benzodiazepine and opioid pharmaceuticals detected at the Australian border decreased 44.6 per cent this reporting period, from 2,574 in 2016–17 to 1,425 in 2017–18 (see Figure 32).

- The number of benzodiazepine detections at the Australian border decreased
   47.6 per cent this reporting period, from 2,404 in 2016–17 to 1,260 in 2017–18.
- The number of opioid pharmaceutical detections at the Australian border decreased 2.9 per cent this reporting period, from 170 in 2016–17 to 165 in 2017–18.

FIGURE 32: Number of pharmaceutical detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)



<sup>103</sup> Benzodiazepines and opioids statistics only represent a component of the larger pharmaceutical category. As such, caution must be used when comparing data.

#### **IMPORTATION METHODS**

In 2017–18, detections of benzodiazepines at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. The international mail stream accounted for 72.9 per cent of the number of benzodiazepine detections at the Australian border this reporting period, followed by air passenger/crew (24.0 per cent), air cargo (2.5 per cent) and sea cargo (0.5 per cent).<sup>104</sup>

In 2017–18, detections of opioids at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. The international mail stream accounted for 66.7 per cent of the number of opioid detections at the Australian border this reporting period, followed by air passenger/crew (15.2 per cent), air cargo (12.7 per cent) and sea cargo (5.5 per cent).<sup>105</sup>

#### DOMESTIC MARKET INDICATORS

According to the 2016 NDSHS, the proportion of the Australian population aged 14 years or older reporting the non-medical<sup>106</sup> use of any pharmaceuticals (excluding OTC<sup>107</sup>) at least once in their lifetime increased, from 7.3 per cent in 2013 to 12.8 per cent in 2016. In the same survey, the proportion reporting recent, non-medical use of any pharmaceuticals (excluding OTC) also increased, from 3.6 per cent to 4.8 per cent (AIHW 2017a).

The National Wastewater Drug Monitoring Program (NWDMP) collects wastewater samples every two months in capital city sites and every four months in regional sites. Aimed at acquiring data on the population-scale use of substances causing potential harm, the program provides a measure of the consumption of 12 illicit and licit drugs. According to data from the NWDMP:

- When comparing data for August 2017 and August 2018, the population-weighted average consumption of oxycodone for both capital city and regional sites increased.
- When comparing data from the start of the program (August 2016) to August 2018, the population-weighted average consumption of oxycodone decreased in capital city and regional sites.
- When comparing data for August 2017 and August 2018, the population-weighted average consumption of fentanyl increased in both capital city and regional sites.
- When comparing data from the start of the program to August 2018, the populationweighted average consumption of fentany increased in capital city and regional sites (ACIC 2019).

According to a national study of injecting drug users:

 The proportion of respondents reporting the recent 'non-prescribed' use of benzodiazepines decreased, from 32.0 per cent in 2017 to 30.0 per cent in 2018.



<sup>104</sup> A figure for importation methods of benzodiazepine detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>.

<sup>105</sup> A figure for importation methods of opioid detections in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>.

<sup>106</sup> The NDSHS relates use for non-medical purposes to the use of drugs either alone or with other drugs to induce or enhance a drug experience, for performance enhancement or cosmetic purposes.

<sup>107</sup> OTC refers to paracetamol, aspirin and other non-opioid over-the-counter pain-killers/analgesics.

- The proportion of respondents reporting the recent non-prescribed use of buprenorphine decreased, from 10.0 per cent in 2017 to 7.0 per cent in 2018.
- The proportion of respondents reporting the recent non-prescribed use of methadone remained unchanged at 16.0 per cent in 2018.
- The proportion of respondents reporting the recent non-prescribed use of morphine decreased, from 24.0 per cent in 2017 to 22.0 per cent in 2018.
- The proportion of respondents reporting the recent non-prescribed use of oxycodone decreased, from 17.0 per cent in 2017 to 14.0 per cent in 2018.
- The proportion of respondents reporting the recent non-prescribed use of pharmaceutical stimulants increased, from 7.0 per cent in 2017 to 9.0 per cent in 2018 (Peacock et al. 2018a).

According to a national study of regular ecstasy users:

- The proportion of respondents reporting the recent use of illicitly obtained benzodiazepines increased, from 37.0 per cent in 2017 to 41.0 per cent in 2018.
- The proportion of respondents reporting the recent use of illicitly obtained pharmaceutical stimulants decreased, from 42.0 per cent in 2017 to 34.0 per cent in 2018 (Peacock et al. 2018b).

The Drug Use Monitoring in Australia (DUMA) program, which examines drug use and offending patterns among police detainees, comprises an interviewer-assisted self-report survey and the voluntary provision of a urine sample which is subjected to urinalysis to detect licit and illicit drug use.<sup>108</sup>

- The proportion of detainees testing positive for benzodiazepines<sup>109</sup> remained relatively stable this reporting period, decreasing from 21.3 per cent in 2016–17 to 21.1 per cent in 2017–18. The self-reported recent use<sup>110</sup> of benzodiazepines increased this reporting period, from 32.2 per cent in 2016–17 to 33.0 in 2017–18 (see Figure 33).
- The proportion of detainees testing positive for any opiates<sup>111</sup> decreased this reporting period, from 12.8 per cent in 2016–17 to 10.8 per cent in 2017–18. The self-reported recent use of any opiates increased this reporting period, from 18.2 per cent in 2016–17 to 21.5 in 2017–18 (see Figure 34).

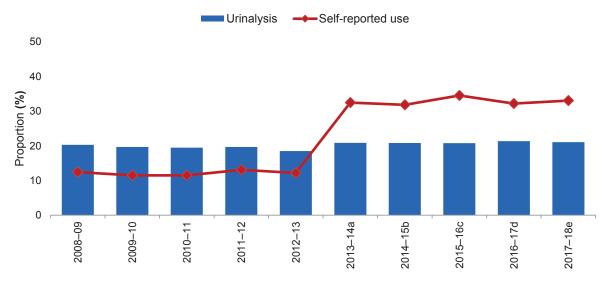
<sup>108</sup> Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

<sup>109</sup> Benzodiazepines and their metabolites can be detected in urine for 2 to 14 days after administration.

<sup>110</sup> Recent use in DUMA program refers to self-reported use in the 12 months prior to arrest.

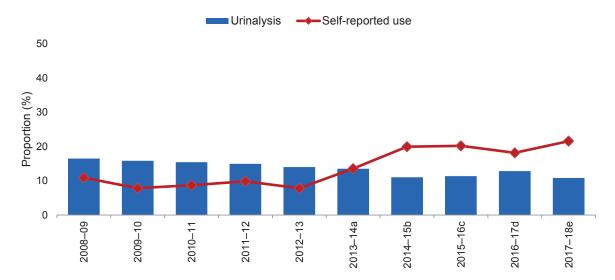
<sup>111</sup> Opiates and their metabolites cam be detected in urine on average 2 to 3 days after administration.

FIGURE 33: National proportion of detainees testing positive for benzodiazepines, 2008–09 to 2017–18 (Source: Australian Institute of Criminology)



- 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.

FIGURE 34: National proportion of detainees testing positive for any opiate compared with self-reported use of opiates other than heroin, 2008–09 to 2017–18 (Source: Australian Institute of Criminology)



- 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.

According to data from the 2017 ASSAD survey:

- The proportion of respondents reporting the non-medicinal<sup>112</sup> use of tranquilisers<sup>113</sup> at least once in their lifetime increased, from 18.0 per cent in 2014 to 20.0 per cent in 2017.
- The proportion of respondents reporting the non-medicinal use of tranquilisers in the past month increased, from 5.0 per cent in 2014 to 6.0 per cent in 2017.
- In 2017, 6.0 per cent of the respondents reported the non-medicinal use of other opiates at least once in their lifetime.<sup>114</sup>
- In 2017, 2.0 per cent of respondents reported the non-medicinal use of other opiates in the past month (White & Williams 2016; Guerin & White 2018).

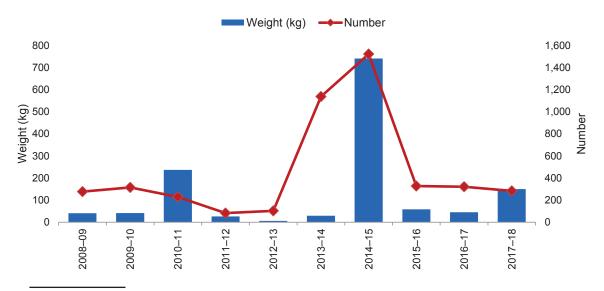
#### **PRICE**

Law enforcement price data for pharmaceuticals obtained for non-medical use is limited. Nationally, the price for a single tablet of MS Contin ranged between \$25 and \$50 in 2017–18, compared with a price of \$30 (reported in Queensland) in 2016–17. Nationally, the price for a single tablet of OxyContin ranged between \$10 and \$100 in 2017–18, compared to a price range of \$10 to \$130 in 2016–17 (reported by New South Wales and Queensland). Nationally, the price for a single 100 microgram patch of fentanyl ranged between \$75 and \$450 in 2017–18, compared to a price range of \$50 to \$400 in 2016–17 (reported in New South Wales). The price of a single benzodiazepine tablet ranged between \$5 and \$25 in 2017–18, slightly lower than the price range of \$10 to \$25 reported in Queensland and South Australia in 2016–17.

#### **SEIZURES**

The number of national other opioid seizures decreased 11.5 per cent this reporting period, from 321 in 2016–17 to 284 in 2017–18. The weight of other opioids seized nationally increased 230.7 per cent this reporting period, from 45.4 kilograms in 2016–17 to 150.1 kilograms in 2017–18 (see Figure 35).

FIGURE 35: National other opioid seizures, by number and weight, 2008-09 to 2017-18



<sup>112</sup> In the 2017 ASSAD survey, 'non-medicinal' refers to use 'without a doctor's prescription' or 'other than for medical reasons'.

<sup>113</sup> In the 2017 ASSAD survey, 'tranquillisers' includes sleeping tablets, tranquillisers, sedatives or benzodiazepines. 114 In the 2017 ASSAD survey, 'other opiates' includes methadone, morphine, oxycodone or pethidine.

Western Australia reported the greatest percentage increase in both the number and weight of other opioid seizures this reporting period. New South Wales accounted for the greatest proportion of the number (62.7 per cent) and weight (67.5 per cent) of national other opioid seizures in 2017–18 (see Table 19).

TABLE 19: Number, weight and percentage change of national other opioid seizures, 2016–17 and 2017–18

	Number			Weight		
State/Territory <sup>a</sup>	2016–17	2017–18	% change	2016–17	2017–18	% change
New South Wales	212	178	-16.0	35,270	101,283	187.2
Victoria	26	46	76.9	8,886	44,120	396.5
Queensland	11	19	72.7	116	2,393	1,962.9
South Australia	0	2	_	0	11	-
Western Australia <sup>b</sup>	9	18	100.0	83	2,285	2,653.0
Tasmania	26	5	-80.8	503	3	-99.4
Northern Territory	0	0	0.0	0	0	0.0
Australian Capital Territory	37	16	-56.8	542	27	-95.0
Total	321	284	-11.5	45,400	150,122	230.7

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

# **NEW PSYCHOACTIVE SUBSTANCES**<sup>115</sup>

#### MAIN FORMS

NPS are substances that may be structurally or functionally similar to a parent compound which is a prohibited or scheduled drug and are referred to as analogues.

- There are three categories of analogue drugs: direct, structural and functional.
- NPS are often marketed and sold under a range of terms including 'legal highs'<sup>116</sup>, 'herbal highs', 'bath salts', 'designer drugs' and 'research chemicals' (UNODC 2017a; UNODC 2017b; UNODC 2017c; Wermuth 2006).

A wide range of NPS are available to users. This section covers three groups of NPS in more detail: synthetic cannabinoids, cathinones, in particular 4-methylmethcathinone (4-MMC) and NBOMe compounds. These substances are controlled and border controlled drugs for the purposes of the serious drug offences in the Criminal Code Act 1995 (Criminal Code).

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

<sup>115</sup> The term 'new' does not necessarily refer to a new invention, as many NPS may have been synthesized years or decades ago, rather it reflects their recent emergence on the market.

<sup>116</sup> Use of the term legal high may not reflect the true legal status of these substances under Australian legislation.

#### SYNTHETIC CANNABINOIDS

Synthetic cannabinoids are a large and diverse group of substances which mimic the effect of delta-9-tetrahydrocannabinoil (THC)—the primary psychoactive component in cannabis.

 Commonly sold as smokable herbal mixtures which have been soaked in or sprayed with the synthetic compound, synthetic cannabinoids may also come in powder, crystal or tablet form (ADF 2018g; EMCDDA 2017b; UNODC 2016).

#### 4-MMC (4-METHYLMETHCATHINONE)

4-MMC, also known as mephedrone, is one of the most common cathinone-type substances available globally.

 Often sold as a white or brown powder, it is also available in crystal, capsule or tablet form and can be injected, smoked or swallowed (ADF 2018h).

#### **NBOME COMPOUNDS**

There are a number of different NBOMe compounds available, with differing effects. NBOMes are potent hallucinogenic drugs, with 25I, 25B and 25C the most commonly encountered NBOMe compounds.

 NBOMes are available in various forms including blotter paper (similar to LSD), liquid, powder or tablet and can be consumed orally (buccal or sublingual), snorted or injected (ADF 2018; UNODC 2016; EMCDDA 2014; AMCD 2013).

#### INTERNATIONAL TRENDS

Through the Early Warning Advisory on New Psychoactive Substances (NPS) system, the UNODC continues to track a large number of NPS (803 as of December 2017) since it began global monitoring in 2009. While the number of NPS reported to the UNODC increased every year between 2009 and 2015, the number declined between 2015 and 2016. The 2018 World Drug Report notes that while synthetic cannabinoids account for the largest number of global NPS seizures, when grouped by pharmacological effect, stimulants account for the greatest proportion, followed by synthetic cannabinoids and hallucinogens. In contrast to other categories of NPS, the number of substances under the broad category of 'other substances', which includes derivatives of prescription medicines such as fentanyl analogues and derivatives of benzodiazepines, has continued to increase every year since 2014, totalling 155 substances in 2017 (UNODC 2018).

According to the WCO, the number of NPS<sup>117</sup> seizures by WCO agencies increased by a third, from 2,663 in 2016 to 3,550 seizures in 2017. The subcategory 'other substances' accounted for the greatest proportion of the number of NPS seizures in 2017, as well as the greatest increase in seizure numbers from 2016. Synthetic cannabinoids accounted for the greatest proportion of the weight of NPS seized in 2017 (13,196 kilograms)—largely attributable to four seizures, each weighing over 2,900 kilograms. The US, Denmark, Hong Kong (China), Norway and Belgium reported the highest number of seizures of NPS in 2017 (WCO 2018).

<sup>117</sup> The WCO includes a variety of substances under the NPS category, including synthetic cathinones, synthetic cannabinoids, phenethylamines, plant-based substances, ketamine and phencyclidine-type substances, tryptamines and other substances.

### **DOMESTIC TRENDS**

#### AUSTRALIAN BORDER SITUATION

The number of NPS detections at the Australian border decreased 29.0 per cent this reporting period, from 968 detections in 2016–17 to 687 detections in 2017–18. Detections occurred in the air cargo, air passenger/crew and international mail streams. The international mail stream accounted for the greatest proportion of the number of NPS detections at the Australian border this reporting period (82.5 per cent), followed by air cargo (17.3 per cent) and air passenger/crew (0.1 per cent). 118

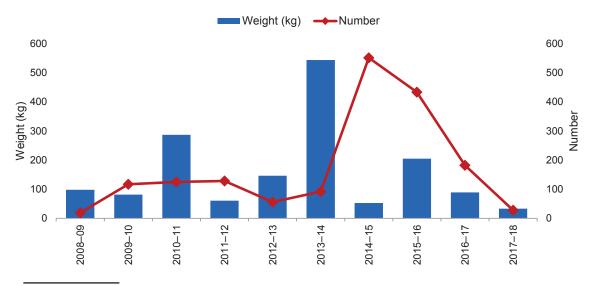
#### DRUG PROFILING

Although the range of NPS appearing on the illicit drug market is large, and some only appear sporadically, the Australian Federal Police (AFP) Forensic Drug Intelligence team, in consultation with the National Measurement Institute (NMI), has identified the following categories of NPS:

- amphetamine-type substances
- cathinone-type substances
- synthetic cannabinoids
- tryptamine-type substances
- other<sup>119</sup>

For the third consecutive reporting period, the number of NPS seizures at the Australian border selected for further analysis decreased, from 182 in 2016–17 to 28 in 2017–18. The weight of analysed seizures also decreased this reporting period, from 89.0 kilograms in 2016–17 to 33.1 kilograms in 2017–18<sup>120</sup> (see Figure 36).

FIGURE 36: Number and weight of seizures selected for further analysis and found to contain novel substances and drug analogues, 2008–09 to 2017–18 (Source: Australian Federal Police, Forensic Drug Intelligence)



<sup>118</sup> A figure for importation methods of NPS detections will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

<sup>119</sup> Other NPS include 2C-group substances, synthetic opiates and ketamine analogues.

<sup>120</sup> The data above refer only to seizures made by the AFP, examined by AFP crime scene teams, sampled and subsequently confirmed to contain a NPS by the NMI. Seizure data do not represent all AFP seizures of NPS during these periods.

Among the many different compounds detected and reported since 2007–08, some were more common than others in terms of the overall number of seizures and/or the weight of material seized. While cathinone-type substances have traditionally accounted for the greatest proportion of the number of seizures within this subset, amphetamine-type substances were more common this reporting period.

- In 2017–18, amphetamine-type substances accounted for 32.1 per cent of the total number of analysed seizures, followed by other substances (28.6 per cent), cathinone-type substances (21.4 per cent) and tryptamine-type substances (17.9 per cent).
- There were no seizures of synthetic cannabinoids analysed in 2017–18.

Consistent with previous reporting periods, amphetamine-type substances continue to account for the greatest proportion of the weight of analysed seizures.

- In 2017–18, amphetamine-type substances accounted for 46.5 per cent of the weight of analysed seizures.
- Cathinone-type substances accounted for 38.1 per cent of the weight of analysed seizures in 2017–18, followed by tryptamine-type substances (9.3 per cent) and other substances (6.1 per cent).
- There were two cathinones detected this reporting period: N-ethyl pentylone and 4-fluoro-alpha-pyrrolidionohexiophenone. N,N-dimethyltryptamine was the only tryptamine-type substance analysed in 2017–18.

#### DOMESTIC MARKET INDICATORS

NPS use was included in the NDSHS for the second time in 2016 and included questions on new and emerging psychoactive substances and synthetic cannabinoids.

- For new and emerging psychoactive substances:
  - The proportion of the Australian population aged 14 years or older reporting having used a new and emerging psychoactive substance increased from 0.4 per cent in 2013 to 1.0 per cent in 2016.
  - In the same survey, the reported recent use of new and emerging psychoactive substances decreased, from 0.4 per cent in 2013 to 0.3 per cent in 2016.
- For synthetic cannabinoids:
  - The proportion of the Australian population aged 14 years or older reporting having used synthetic cannabinoids at least once in their lifetime increased, from 1.3 per cent in 2013 to 2.8 per cent in 2016.
  - The proportion reporting the recent use of synthetic cannabinoids decreased, from
     1.2 per cent in 2013 to 0.3 per cent in 2016 (AIHW 2017a).

In a 2018 national study of regular ecstasy users:

- The proportion of respondents reporting recent NPS use decreased, from 33.0 per cent in 2017 to 31.0 per cent in 2018.
- The proportion of respondents reporting the recent use of synthetic cannabinoids increased, from 2.0 per cent in 2017 to 3.0 per cent in 2018 (Peacock et al. 2018b).

The NWDMP tests for the presence of two NPS, the synthetic stimulants mephedrone and methylone.

- NPS are the least consumed substances of all substances monitored by the NWDMP.
- Nationally, the number of mephedrone detections increased, from 11 detections in August 2017 to 30 detections in August 2018.
- Nationally, the number of methylone detections decreased, from 90 in August 2017 to 21 in August 2018.
- In all instances the quantity of mephedrone and methylone detected was below the level at which it could be reliably quantified (ACIC 2019).

According to the 2017 ASSAD survey, the proportion of respondents reporting the use of synthetic cannabis at least once in their lifetime decreased, from 2.3 per cent in 2014 to 2.0 per cent in 2017 (White & Williams 2016; Guerin & White 2018).

#### **PRICE**

Law enforcement price data for NPS is limited. Queensland and South Australia reported a price range of between \$50 and \$95 for 3 grams of synthetic cannabinoids in 2017–18, compared with a price range of \$35 to \$95 in 2016–17.

# OTHER AND UNKNOWN NOT ELSEWHERE CLASSIFIED DRUGS

Data for national other and unknown not elsewhere classified (NEC) drug seizures and arrests capture those drugs and substances outside the specific drug categories contained in the *Illicit Drug Data Report*. This category contains a range of substances including precursors, anaesthetics, NPS, pharmaceuticals and drugs not elsewhere classified. Substances in this category are likely to change between reporting periods. Data limitations are further discussed in the *Statistics* chapter of this report.

#### SEIZURES AND ARRESTS

The number of national other and unknown NEC drug seizures remained relatively stable this reporting period, decreasing from a record 8,243 in 2016–17 to 8,206 in 2017–18, the second highest number on record. The weight of other and unknown NEC drugs seized nationally increased 13.3 per cent this reporting period, from 7,305.7 kilograms in 2016–17 to 8,281.0 kilograms in 2017–18 (see Figure 37).



FIGURE 37: National other and unknown not elsewhere classified drug seizures, by number and weight, 2008–09 to 2017–18



The Australian Capital Territory reported the greatest percentage increase in both the number and weight of other and unknown NEC drug seizures this reporting period. New South Wales accounted for the greatest proportion of the number (50.1 per cent) and weight (65.7 per cent) of national other and unknown NEC drug seizures in 2017–18 (see Table 20).

TABLE 20: Number, weight and percentage change of national other and unknown not elsewhere classified drug seizures, 2016–17 and 2017–18

	Number			Weight (grams)		
State/Territory <sup>a</sup>	2016–17	2017–18	% change	2016–17	2017–18	% change
New South Wales	4,150	4,115	-0.8	4,844,328	5,443,178	12.4
Victoria	739	519	-29.8	1,718,536	901,134	-47.6
Queensland	922	960	4.1	313,326	1,552,100	395.4
South Australia	45	34	-24.4	24,655	61,659	150.1
Western Australia <sup>b</sup>	1,935	2,009	3.8	100,794	232,139	130.3
Tasmania	154	187	21.4	6,248	2,544	-59.3
Northern Territory	186	211	13.4	297,473	86,240	-71.0
Australian Capital Territory	112	171	52.7	380	2,006	427.9
Total	8,243	8,206	-0.4	7,305,740	8,281,000	13.3

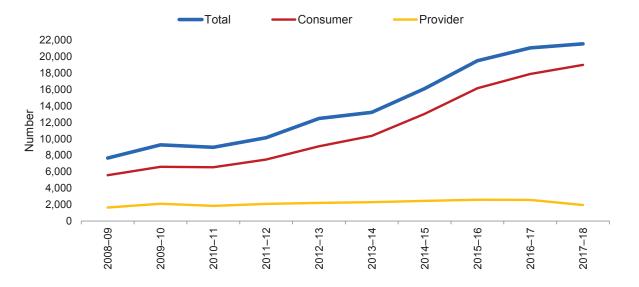
a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.

The number of national other and unknown NEC drug arrests increased 2.4 per cent this reporting period, from 21,045 in 2016–17 to a record 21,545 in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, accounting for 90.7 per cent of national other and unknown NEC drug arrests in 2017–18 (see Figure 38).



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

FIGURE 38: Number of national other and unknown not elsewhere classified drug arrests, by number and weight, 2008–09 to 2017–18



The Australian Capital Territory reported the greatest percentage increase in the number of other and unknown NEC drug arrests in 2017–18. Victoria accounted for the greatest proportion of national other and unknown NEC drug arrests this reporting period (28.2 per cent), followed by Queensland (27.7 per cent) and Western Australia (25.5 per cent). Combined, these three states account for 81.4 per cent of national other and unknown NEC drug arrests in 2017–18 (see Table 21).

TABLE 21: Number and percentage change of national other and unknown not elsewhere classified drug arrests, 2016–17 and 2017–18

	Arrests				
State/Territory <sup>a</sup>	2016–17	2017–18	% change		
New South Wales	2,533	2,806	10.8		
Victoria	5,906	6,085	3.0		
Queensland	5,800	5,962	2.8		
South Australia	517	620	19.9		
Western Australia <sup>b</sup>	5,794	5,489	-5.3		
Tasmania	392	472	20.4		
Northern Territory	92	87	-5.4		
Australian Capital Territory	11	24	118.2		
Total	21,045	21,545	2.4		

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

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

# NATIONAL IMPACT

Indicators of demand for other drugs—including surveys of drug users, police detainees and wastewater analysis—provide a mixed picture for these drug markets within Australia.

- Indicators for AAS suggest demand has increased this reporting period.
  - According to the 2016 NDSHS, the proportion of respondents reporting the use of steroids for non-medical purposes at least once in their lifetime increased, while recent use remained stable.
  - According to the ANSPS, the prevalence of respondents reporting PIEDs as the drug last injected increased in 2017.
  - According to a national study of secondary students, the proportion of respondents reporting the non-prescribed use of PIEDs at least once in their lifetime increased from 2014 to 2017, while recent use remained stable.
- Based on available indicators, the demand for tryptamines remains relatively stable.
  - According to the 2016 NDSHS, the proportion of respondents reporting the use of hallucinogens at least once in their lifetime remained stable, while recent use decreased.
  - According to a national study of regular ecstasy users, the proportion of respondents reporting the recent use of LSD and magic mushrooms increased from 2017 to 2018.
  - According to a national study of secondary school students, the proportion of respondents reporting the use of any hallucinogen at least once in their lifetime increased from 2014 to 2017, while recent use remained stable.
- Indicators of demand for anaesthetics—including GHB/GBL and ketamine—suggest a potential expansion of the GHB/GHL market.
  - According to the 2016 NDSHS, the reported lifetime and recent use of both GHB and ketamine increased.
  - According to a national study of regular ecstasy users, the proportion of respondents reporting the recent use of both GHB and ketamine decreased from 2017 to 2018.
- Indicators for the demand of pharmaceuticals in Australia provide a mixed picture.
   In Australia, benzodiazepines and opioids are the most commonly misused pharmaceutical drugs.
  - According to the 2016 NDSHS, the proportion of respondents reporting both recent and lifetime non-medical use of any pharmaceutical (excluding OTC) at least once in their lifetime increased.

#### For benzodiazepines:

- According to a national study of police detainees, the proportion of detainees testing positive to benzodiazepines decreased in 2017–18, while the self-reported recent use of benzodiazepines increased.
- According to a national study of regular injecting drug users, the proportion of respondents reporting the recent non-prescribed use of benzodiazepines decreased from 2017 to 2018.
- According to a national study of regular ecstasy users, the proportion of respondents reporting the recent non-prescribed use of benzodiazepines increased from 2017 to 2018.
- According to a national study of secondary school students, the proportion of respondents reporting recent and lifetime non-medicinal use of tranquilisers increased.

#### - For opiates:

- According to a national study of police detainees, the proportion of detainees testing positive to opiates decreased in 2017–18, while the self-reported recent use of any opiates increased.
- According to a national study of regular injecting drug users, the proportion of respondents reporting the recent non-prescribed use of methadone remained unchanged from 2017 to 2018, while the recent non-prescribed use of buprenorphine, morphine and oxycodone decreased.
- The NWDMP reported an overall increase in the average consumption of both fentanyl and oxycodone between August 2017 and August 2018.
- Indicators of demand for NPS provide a mixed picture for drugs within this group.
  - According to the 2016 NDSHS, the proportion of respondents reporting NPS and synthetic cannabinoid use at least once in their lifetime increased, while recent use decreased.
  - According to a national study of regular ecstasy users, the proportion of respondents reporting recent NPS use decreased from 2017 to 2018, while the proportion of respondents reporting recent synthetic cannabinoid use increased.
  - According to the NWDMP, while the synthetic stimulants mephedrone and methylone were detected, they were at levels below those that could be quantified.
  - According to a national study of secondary school students, the proportion of respondents reporting synthetic cannabis use at least once in their lifetime decreased from 2014 to 2017.



Indicators of supply for other drugs include border detection, seizure, arrest and profiling data.

- In 2017–18, the number of PIEDs detected at the Australian border increased, with steroids continuing to account for the greatest proportion of detections.
- Both the number of national steroid seizures and arrests decreased this reporting period, while the weight of steroids seized nationally increased in 2017–18.
- The number tryptamine detections at the Australian border decreased this reporting period, with LSD accounting for the greatest proportion of detections in 2017–18.
- Both the number and weight of national hallucinogen seizures decreased this reporting period, while the number of national hallucinogen arrests increased in 2017–18.
- In 2017–18, the number of anaesthetic detections at the Australian border decreased, with ketamine accounting for the greatest proportion of detections.
- The number of clandestine laboratories manufacturing GHB/GBL detected nationally doubled this reporting period, from 11 in 2016–17 to a record 22 in 2017–18.
- The number of benzodiazepine and opioid pharmaceutical detections at the Australian border decreased this reporting period.
- The number of national other opioid seizures decreased this reporting period, while the weight of other opioids seized nationally increased in 2017–18.
- The number of NPS detections at the Australian border decreased this reporting period.
- Forensic profiling of NPS seized at the Australian border and selected for further analysis indicates amphetamine-type substances accounted for the greatest proportion of the number and weight of analysed samples in 2017–18.
- The number of national other and unknown NEC drug seizures remained relatively stable and high this reporting period, while the weight of other and unknown NEC drugs seized nationally increased. The number of national other and unknown NEC drug arrests increased to record levels in 2017–18.



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