

OTHER DRUGS

KEY POINTS

- There was a record 586 GHB, GBL and ketamine detections at the Australian border in 2015–16.
- There was a record 1 297 national steroid arrests in 2015–16.
- The weight of hallucinogens seized nationally and the number of national hallucinogen arrests increased to record highs in 2015–16.
- There were record numbers of national other and unknown not elsewhere classified drug seizures and arrests in 2015–16.



OTHER DRUGS

Other drugs and substances—collectively referred to in this report as ‘other drugs’—are increasingly being 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
- tryptamines
- anaesthetics
- pharmaceuticals
- new psychoactive substances (NPS)¹
- other drugs not elsewhere classified (NEC).

ANABOLIC AGENTS AND OTHER SELECTED HORMONES

MAIN FORMS

Anabolic agents and selected hormones are also referred to as performance and image enhancing drugs (PIEDs).

The *Australian Standard Classification of Drugs of Concern* distinguishes four classes of substances as anabolic agents and selected hormones. These are:

- anabolic-androgenic steroids (AAS)
- beta-2 agonists
- peptide hormones, mimetics and analogues
- other anabolic agents and selected hormones (ABS 2011).

ANABOLIC-ANDROGENIC STEROIDS, BETA-2-AGONIST AND OTHER ANABOLIC AGENTS

Anabolic-androgenic steroids (AAS) are derivatives of the male sex hormone testosterone and assist in the growth and repair of muscle and bone. In clinical settings these drugs are used in the treatment of a variety of conditions resulting from hormone deficiency, such as delayed puberty, as well as for diseases that result in the loss of lean muscle mass, such as cancer and acquired immunodeficiency syndrome (AIDS). Some athletes, body-builders and non-athletes use these drugs for non-medical purposes to increase muscle definition and mass, enhance sporting performance and/or improve their physical appearance (ADF 2016; ADF 2016a; NIDA 2016).

¹ NPS have been referred to as drug analogues and new psychoactive substances (DANPS) in previous Illicit Drug Data Reports.



AAS may be administered orally, injected intramuscularly or absorbed via cream, gel or skin patches, suppositories or nasal sprays. Side effects of AAS use may include severe acne, liver damage, enlarged heart, high blood pressure, mood swings, depression, paranoia and aggression. Male-specific effects include infertility and gynaecomastia—the development of breast tissue. In females it can lead to menstrual problems, baldness and growth of facial hair (ADF 2016; ADF 2016a; NIDA 2016; NSW Health 2013).

There is also an illicit market for beta-2-agonists, which induce both anabolic (muscle building) and catabolic (body fat reducing) effects. A common beta-2-agonist misused in Australia is clenbuterol, which is used in the treatment of asthma. Clenbuterol is promoted as a weight loss product, sometimes referred to as the ‘size zero pill’ and is used to burn fat and define muscle. Side effects of beta-2-agonist use may include increases in body temperature, nausea, headaches, insomnia and anxiety. Effects of excessive use may include muscle tremors, palpitations, muscle cramps and the dilation of blood vessels, with a risk of overdose and stroke when used at high doses. Clenbuterol misuse can also exacerbate pre-existing heart conditions or hypertension (NDS 2006).

AAS and other anabolic agents commonly used in Australia are outlined in Table 27.

TABLE 27: AAS and other anabolic agents commonly used in Australia

Drug name	Potential effects	Brand name	Forms
AAS—Anabolic	Used to increase muscle mass through increased retention of protein	Deca-durabolin, Anadrol-50, Oxandrin	Ampoule, vial, pre-packed syringe, tablet
AAS—Androgenic	Used to increase muscle mass by increasing male sex hormone levels	Depo-testosterone, Sustanon, Androil Testocaps	Vial, ampoule, pre-packed syringe, capsule
Beta-2-agonists (including clenbuterol)	Commonly used to treat asthma, however when taken into the blood-stream increases muscle mass by mimicking the effects of adrenaline and non-adrenaline	Bricanyl, Ventolin, Spiropent (clenbuterol) and Ventipulmin (clenbuterol)	Ampoule, rotacap, inhaler, nebuliser, tablet

PEPTIDE HORMONES, MIMETICS AND ANALOGUES

While anabolic steroids remain widely used, the PIEDs market has evolved to include an ever-expanding range of substances which manipulate the body’s hormonal system. Hormones are vital for the effective functioning of the human body. Synthetic mimetics and analogues of naturally occurring hormones have been developed to assist in the treatment of a number of medical conditions, with some diverted for non-medical use as a consequence of their performance enhancing effects. While peptides can be used on their own to promote muscle growth, these substances are also used in combination with anabolic steroids to maintain muscle gains. These include erythropoietin (EPO), human growth hormone (hGH) and human chorionic gonadotrophin (hCG).



EPO is a naturally occurring hormone produced in the kidneys that regulates the production of red blood cells in bone marrow. Increased EPO levels in the body increases oxygen absorption, reduces fatigue, improves endurance and increases metabolic and healing rates. Side effects of EPO use include an increased risk of blood clots and high blood pressure (Harty 2010; NDS 2006).

hGH is a naturally occurring hormone produced by the pituitary gland responsible for muscle development and bone growth, as well as psychological wellbeing. Side effects of hGH use may include gigantism and acromegaly, resulting in abnormal growth of hands and feet, and bone changes in facial features, such as increases in jaw size. Major organs, such as the heart, may also increase in size (NIDDK 2012).

hCG is important in triggering hormonal changes in women during pregnancy and can increase the production of natural male and female sex hormones. As high doses of AAS over prolonged periods may reduce the body's natural production of testosterone, hCH may be used to stimulate natural testosterone production following a long cycle of steroid use. Side effects of hCG use may include acne, tiredness, mood changes and excessive fluid retention (NDS 2006a).

Hormones, mimetics and analogues commonly use din Australia are listed in Table 28.

TABLE 28: Peptide hormones, mimetics and analogues commonly used in Australia

Drug name	Potential effects	Brand name	Forms
Erythropoietin (EPO)	Increases endurance and recovery from anaerobic exercise	Eprex, Aranesp	Ampoule, prepacked syringe
Human chorionic gonadotrophin (hCG)	Used to manage the side effects of AAS use such as gynaecomastia and shrinking testicles	APL, Pregnyl, Profasi, Novarel, Repronex	Vial, ampoule
Human growth hormone (hGH)	Used to increase muscle size and strength	Norditropin, Norditropin-SimpleXx, Genotropin, Humatrope, Saizen, Scitropi	Penset, vial, auto injector cartridge
Insulin	Used because of the perception that it contributes to increased muscle bulk	NovoRapid, Apidra, Humalog, Hypurin Neutral, Actrapid, Humulin R, Protaphane, NovoMix 30	Vial, penset, prepacked syringe
Pituitary and synthetic gonadotrophins	Used to overcome the side effects of AAS use or as a masking agent	Clomid, Bravelle	Ampoule, tablet
Insulin-like Growth Factor	Used to increase muscle bulk and reduce body fat	Increlex	Vial
Corticotrophins	Used because of its anti-inflammatory properties and for mood elevating effects	Synacthen Depot	Ampoule
Anti-oosterones	Used to manage the side effects of AAS use such as gynaecomastia	Nolvadex	Tablet





INTERNATIONAL TRENDS

The worldwide trafficking and use of PIEDs is a complex, large and highly profitable market. PIEDs may be diverted from the licit market to the illicit market or manufactured illicitly in clandestine laboratories. China is a primary source country for PIEDs globally, which are either diverted from legitimate sources, or manufactured illicitly in clandestine laboratories. Illicit PIEDs are primarily marketed to professional and amateur athlete and body building markets and are also used by individuals seeking to improve their appearance. PIEDs may be distributed online or through direct sales to users, including through gyms or sporting clubs (ADF 2016a; DEA 2015).

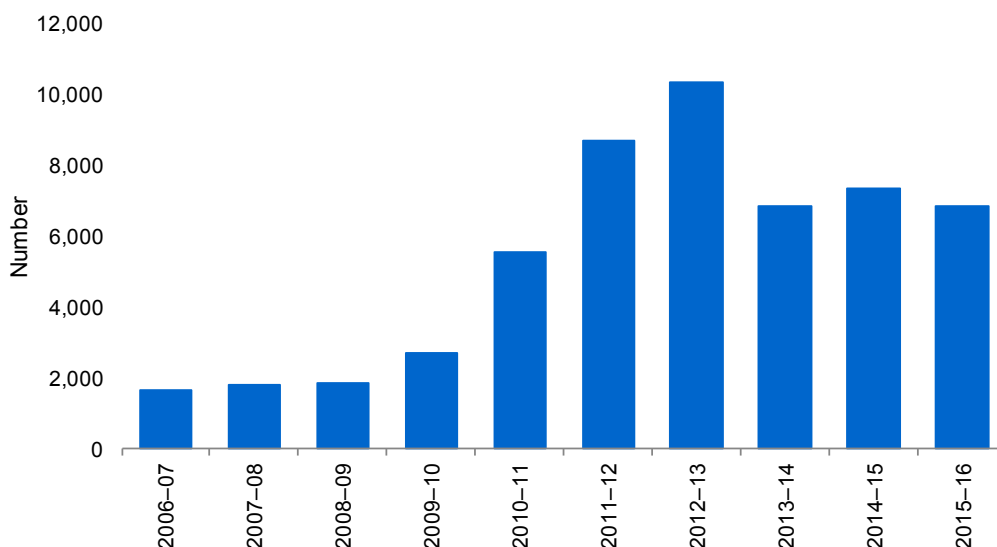
A collaborative, multi-agency approach is necessary to address the illicit use of PIEDs. Operation Cyber Juice, announced in 2015, was a Drug Enforcement Administration (DEA) led multi-agency operation involving domestic law enforcement partners, the United States Anti-Doping Agency (USADA) and the World Anti-Doping Agency (WADA) and targeted every level of the illicit trade of steroids and other PIEDs. The nationwide series of enforcement undertaken as part of Operation Cyber Juice resulted in the detection of 16 illicit steroid laboratories, 636.0 kilograms of raw steroid powder, 8 200.0 litres of raw steroid injectable liquid, 134 000 steroid dosage units and over 90 arrests, as well as assisting in international steroid investigations being coordinated by Europol. Project Energia, an INTERPOL initiative, supported by WADA and the School of Criminal Science at the University of Lausanne, focuses on substances used with the exclusive aim of improving athletic performance and physical fitness. Focusing on such substances as anabolic steroids, peptides, growth hormones and EPO, Project Energia aims to assist member countries understand and combat the trafficking of PIEDs through intelligence sharing and targeted criminal analysis (INTERPOL 2016; DEA 2015).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of PIED detections at the Australian border decreased 6.8 per cent this reporting period, from 7 381 in 2014–15 to 6 877 in 2015–16 (see Figure 58).²

FIGURE 58: Number of performance and image enhancing drug detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)

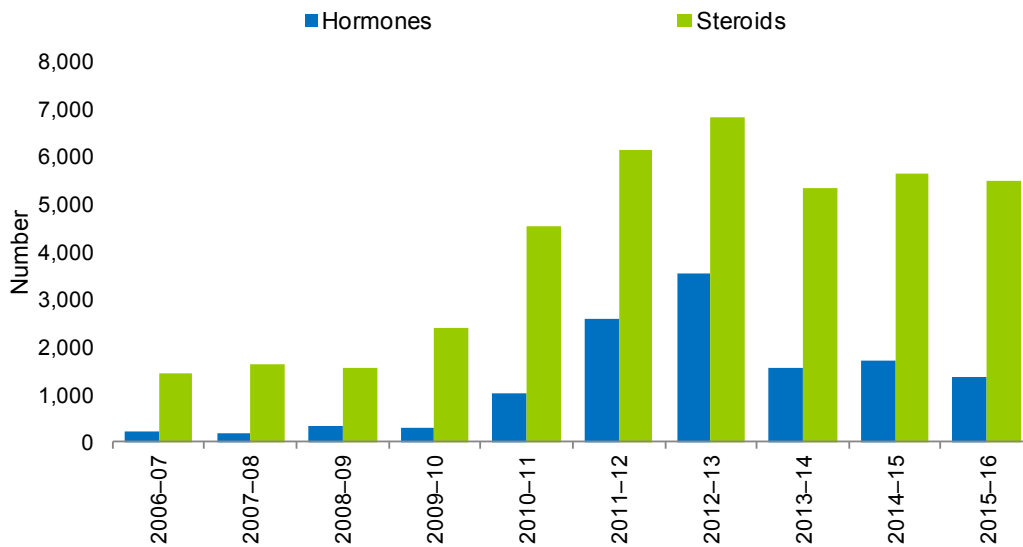


² The Department of Immigration and Border Protection is unable to provide statistical data on the weight of drugs in this category due to differences in drug form, which includes liquid, vials and tablets.

Of the 6 877 PIED detections in 2015–16, 80.0 per cent were steroids and 20.0 per cent were hormones. The number of steroid detections decreased 2.7 per cent this reporting period, from 5 657 in 2014–15 to 5 502 in 2015–16. The number of hormones detected decreased 20.2 per cent this reporting period, from 1 724 in 2014–15 to 1 375 in 2015–16 (see Figure 59).

The number of clenbuterol detections at the Australian border decreased 11.1 per cent this reporting period, from 669 in 2014–15 to 595 in 2015–16. Of the 595 detections, 95.0 per cent were identified in the international mail stream, followed by air cargo (2.7 per cent) and air passenger/ crew stream (2.3 per cent).

FIGURE 59: Number of performance and image enhancing drug detections, by category, at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)

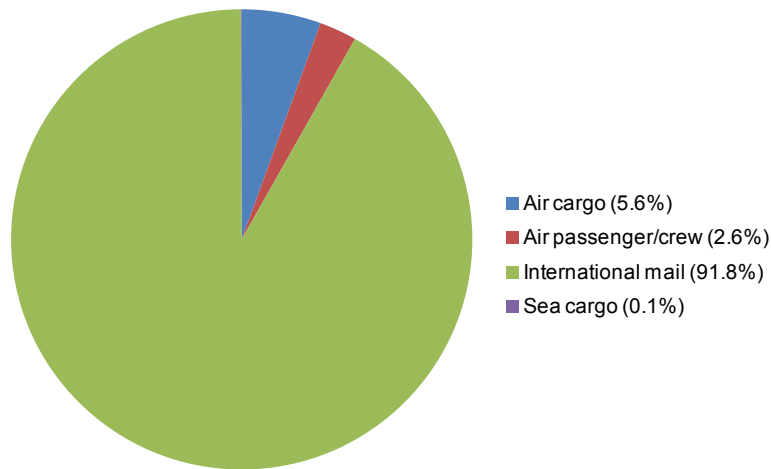


IMPORTATION METHODS

PIED detections were identified in the air cargo, air passenger/crew, sea cargo and international mail streams this reporting period. The international mail stream accounted for 91.8 per cent of the number of PIED detections at the Australian border in 2015–16 (see Figure 60).



FIGURE 60: Number of performance and image enhancing drug detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16
 (Source: Department of Immigration and Border Protection)



EMBARKATION POINTS

In 2015–16, 64 countries were identified as embarkation points for PIED detections at the Australian border. By number, the United Kingdom (UK) was the primary embarkation point for PIED detections in 2015–16, with 2 134 detections. Other key embarkation points this reporting period include China (including Hong Kong; 1 118 detections), the United States (US; 1 091 detections), Thailand (753 detections), India (387 detections), Moldova (234 detections) and Turkey (151 detections). Combined, these 7 embarkation points account for 85.3 per cent of the number of PIED detections at the Australian border in 2015–16.

In 2015–16, 61 countries were identified as embarkation points for steroid detections at the Australian border, compared with 58 countries in 2014–15. Key embarkation points for steroid detections this reporting period include the UK (1 880 detections), China (including Hong Kong; 887 detections), Thailand (700 detections) and the US (573 detections). Combined, these 4 embarkation points account for 73.4 per cent of the number of steroid detections at the Australian border in 2015–16.

In 2015–16, 42 countries were identified as embarkation points for hormone detections at the Australian border, compared with 37 countries in 2014–15. Key embarkation points for hormone detections this reporting period include the US (518 detections), the UK (254 detections), China (including Hong Kong; 231 detections) and India (113 detections). Combined, these 4 embarkation points account for 81.2 per cent of the number of hormone detections at the Australian border in 2015–16.

In 2015–16, 28 countries were identified as embarkation points for clenbuterol detections at the Australian border. Key embarkations points for clenbuterol detections this reporting period include the US (133 detections), the UK (124 detections), India (81 detections) and Thailand (71 detections). Combined, these 4 embarkations points account for 68.7 per cent of the number of clenbuterol detections at the Australian border in 2015–16.



DOMESTIC MARKET INDICATORS

According to the 2013 National Drug Strategy Household Survey (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 0.4 per cent in 2010 to 0.5 per cent in 2013. In the same survey, the proportion reporting recent³ steroids use for non medical purposes remained stable at 0.1 per cent (AIHW 2014).

In a 2015 national study of regular injecting drug users, the proportion of the respondents reporting steroid use at some stage in their lifetime remained stable at 6.0 per cent. In the same study, 9 respondents reported recent⁴ steroid use, a decrease from 10 respondents in 2014. In a 2015 national study of regular ecstasy users, the proportion of respondents reporting steroid use at some stage in their lifetime remained stable at 4.0 per cent. In the same study, the proportion of respondents reporting recent steroid use decreased, from 2.0 per cent in 2014 to 1.0 per cent in 2015. Early findings from the 2016 study indicate this has remained stable at 1.0 per cent (Stafford & Breen 2016; Stafford et al 2016, Sindicich et al 2016; Stafford et al 2016).

According to the Australian Needle and Syringe Program Survey (ANSPS), the prevalence of respondents reporting PIEDs as the drug last injected nationally decreased, from 7.0 per cent in 2014 to 6.0 per cent in 2015. Reported figures of specific use vary between the states and territories. In Queensland and New South Wales, the reported prevalence of PIEDs as the drug last injected was 12.0 per cent in 2015. The reported prevalence of injecting PIEDs remained at 3.0 per cent or less in all other states and territories. In 2015, of the respondents who recently initiated⁵ injecting drug use, 38.0 per cent reported PIEDs as the drug last injected (Memedovic et al 2016).

PRICE

National law enforcement data on the price of PIEDs is limited. Nationally, the price range for a single 10 millilitre vial of testosterone enanthate ranged between \$130 and \$250 in 2015–16, the price for a single 10 millilitre vial of Sustanon 250 (a blend of four testosterone compounds) ranged between \$90 and \$250 and the price for a single 10 millilitre vial of testosterone propionate ranged between \$90 and \$250. Nationally, the price of a single 10 millilitre vial of Deca-durabolin (an anabolic steroid) ranged between \$150 and \$250 this reporting period.

SEIZURES AND ARRESTS

The number of national steroid seizures decreased 3.8 per cent this reporting period, from 529 in 2014–15 to 509 in 2015–16, the second highest number on record. The weight of steroids seized nationally decreased 78.5 per cent this reporting period, from 320.4 kilograms in 2014–15 to 68.8 kilograms in 2015–16, the second highest weight on record (see Figure 61).

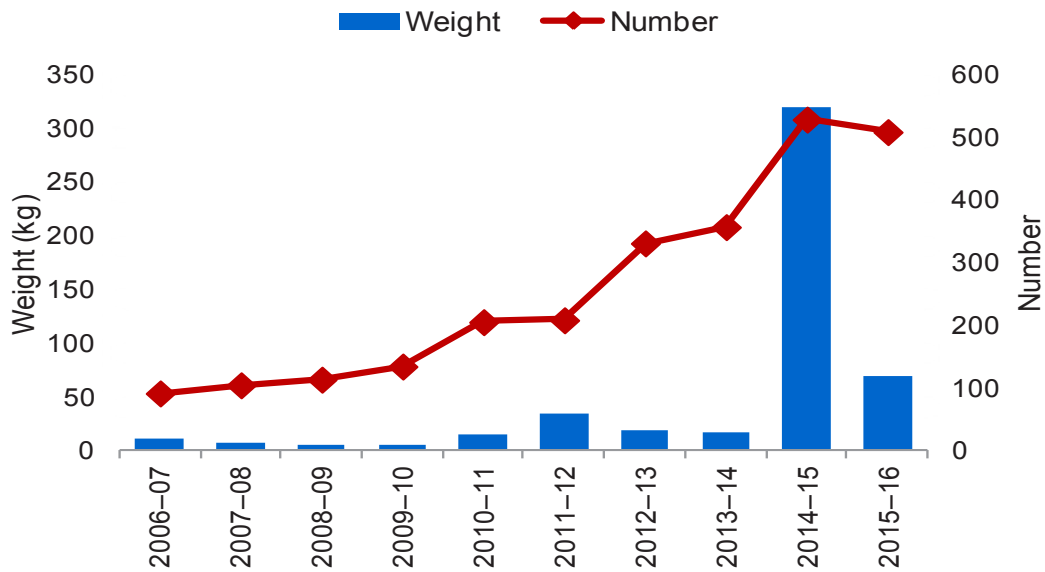
3 In the NDSHS, recent use refers to reported use in the 12 months preceding interview.

4 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.

5 Less than three years since first injection.



FIGURE 61: National steroid seizures, by number and weight, 2006–07 to 2015–16



Tasmania reported the greatest percentage increase (300.0 per cent) in the number of steroid seizures in 2015–16, while the Australian Capital Territory reported the greatest percentage increase in the weight of steroids seized (146.3 per cent). New South Wales continues to account for the greatest proportion of national steroid seizures, accounting for 56.2 per cent of the number and 92.2 per cent of the weight seized in 2015–16 (see Table 29).

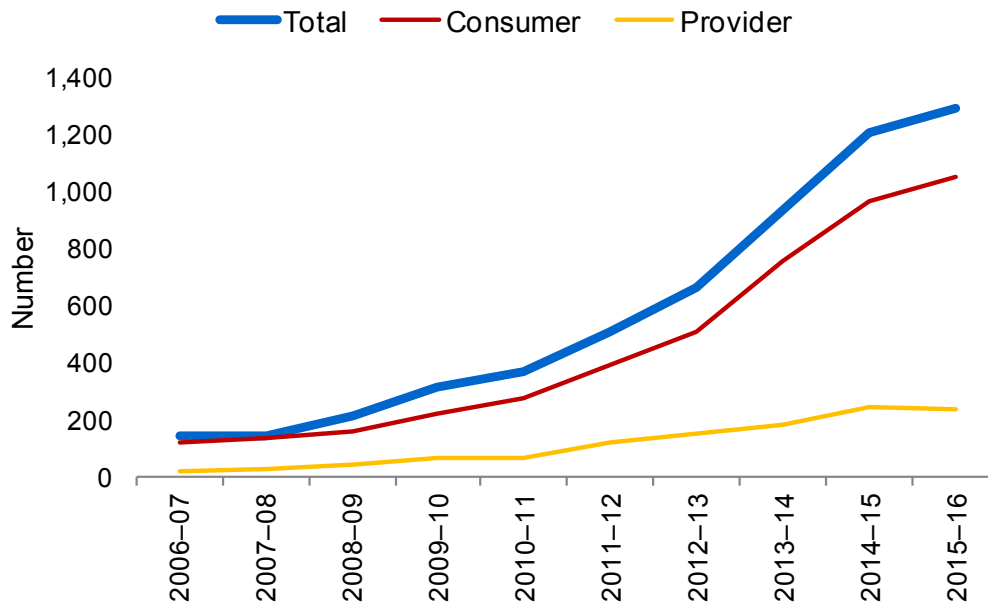
TABLE 29: Number, weight and percentage change of national steroid seizures, 2014–15 and 2015–16

State/Territory ^a	Number			Weight (grams)		
	2014–15	2015–16	% change	2014–15	2015–16	% change
New South Wales	238	286	20.2	277 412	63 492	-77.1
Victoria	31	20	-35.5	23 966	624	-97.4
Queensland	136	57	-58.1	16 301	1 072	-93.4
South Australia	7	0	-100.0	111	0	-100.0
Western Australia	35	49	40.0	1 605	1 576	-1.8
Tasmania	1	4	300.0	0	1	–
Northern Territory	17	20	17.6	481	575	19.5
Australian Capital Territory	64	73	14.1	607	1 495	146.3
Total	529	509	-3.8	320 483	68 835	-78.5

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

The number of national steroid arrests increased 7.2 per cent this reporting period, from 1 210 in 2014–15 to a record 1 297 in 2015–16. Consumer arrests continue to account for the greatest proportion of arrests, comprising 81.0 per cent of national steroid arrests in 2015–16 (see Figure 62).

FIGURE 62: Number of national steroid arrests, 2006–07 to 2015–16



The Northern Territory reported the greatest percentage increase in steroid arrests this reporting period (614.3 per cent). Queensland continues to account for the greatest proportion of national steroid arrests, accounting for 54.4 per cent in 2015–16 (see Table 30).

TABLE 30: Number and percentage change of national steroid arrests, 2014–15 and 2015–16

State/Territory ^a	Arrests		
	2014–15	2015–16	% change
New South Wales	147	158	7.5
Victoria	115	96	-16.5
Queensland	702	705	0.4
South Australia	5	8	60.0
Western Australia	204	255	25.0
Tasmania	9	22	144.4
Northern Territory	7	50	614.3
Australian Capital Territory	21	3	-85.7
Total	1 210	1 297	7.2

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

TRYPTAMINES

MAIN FORMS

Tryptamines are hallucinogenic substances that affect the central nervous system, distorting mood, thought and perception. Some are found naturally in a variety of flowering plants, leaves, seed and spore-forming plants, such as psilocybin-containing mushrooms, while other hallucinogenic substances such as lysergic acid diethylamide (LSD) are synthetically manufactured. Short-term effects of tryptamine use may include vivid perceptual distortions, a distorted sense of time and place, poor coordination, increased body temperature, rapid heart beat, high blood pressure, agitation, anxiety and paranoia.

The most frequently reported long-term effect of hallucinogen use is flashback.⁶ Other long-term effects may include memory and brain function impairment, prolonged depression and anxiety (ADF 2016b; NIDA 2016a, NDARC 2010).

The following section covers the two most common tryptamines used in Australia—LSD and psilocybin-containing mushrooms.

LYSERGIC ACID DIETHYLAMIDE (LSD)

Synthesised from lysergic acid⁷, LSD, commonly referred to as ‘acid’, is one of the most potent mood and perception altering drugs. Due to its potency, only a small amount of LSD is needed to cause visual hallucinations and distortions. In its pure form, LSD is a white, odourless powder that is soluble in water. LSD is most commonly ingested orally and sold in blotters (tabs).⁸ In its liquid form, LSD can be administered by intravenous or intramuscular injection, or impregnated in sugar cubes. Other available forms include tablets (microdots), gelatine squares (window panes) and capsules (ADF 2016b; NIDA 2016a; NDARC 2010).

LSD produces unpredictable psychological effects, often referred to as ‘trips’. In addition to sensory-perceptual changes and a distorted sense of time and space, users may experience extreme emotional mood swings, or experience several different emotions simultaneously. Users may also experience flashbacks which may persist over the long term and seriously impact social or occupational functioning. Short-term effects of LSD use may include increased body temperature, heart rate and blood pressure, loss of coordination and appetite, confusion, and slurred speech. Chronic LSD use may also result in other psychological conditions, including depression, anxiety and prolonged psychosis (ADF 2016b; NIDA 2016a; EMCDDA 2015; NDARC 2010).

PSILOCYBIN-CONTAINING MUSHROOMS

Psilocybin is a chemical with hallucinogenic properties found in certain species of mushrooms, commonly referred to as ‘magic mushrooms’. There are approximately 20 species of psilocybin-containing mushrooms in Australia, with ‘gold tops’, ‘blue meanines’ and ‘liberty caps’ the most common varieties. The potency of hallucinogenic mushrooms varies and is influenced by the species, origin, growing conditions, harvest period and form. Hallucinogenic mushrooms are available fresh, treated or preserved, or in powder or capsule form. Usually sold as dried mushrooms, they can be eaten raw, brewed as a tea, combined with other foods, or smoked (ADF 2016c; NIDA 2016a, EMCDDA 2015a; NDARC 2010).

Psilocybin-containing mushrooms have similar hallucinogenic effects to LSD. Short-term effects of use may include vomiting and diarrhoea, changes in consciousness, distortions to mood, thought and perception, paranoia and panic attacks. Long-term effects of use may include flashbacks, impaired memory, anxiety and prolonged depression. Due to the difficulty in visually distinguishing between psilocybin-containing mushrooms and poisonous mushrooms, users also risk permanent liver damage, respiratory failure or death (ADF 2016c; NIDA 2016a, EMCDDA 2015a; NDARC 2010).

6 A spontaneous recurrence of a specific experience which occurred while taking the drug. Flashbacks can persist and lead to a condition known as hallucinogen persisting perceptual disorder.

7 A naturally occurring ergot alkaloid, found in a fungus that grows on certain grains.

8 Small squares of absorbent paper generally decorated with artwork or designs impregnated with LSD.



INTERNATIONAL TRENDS

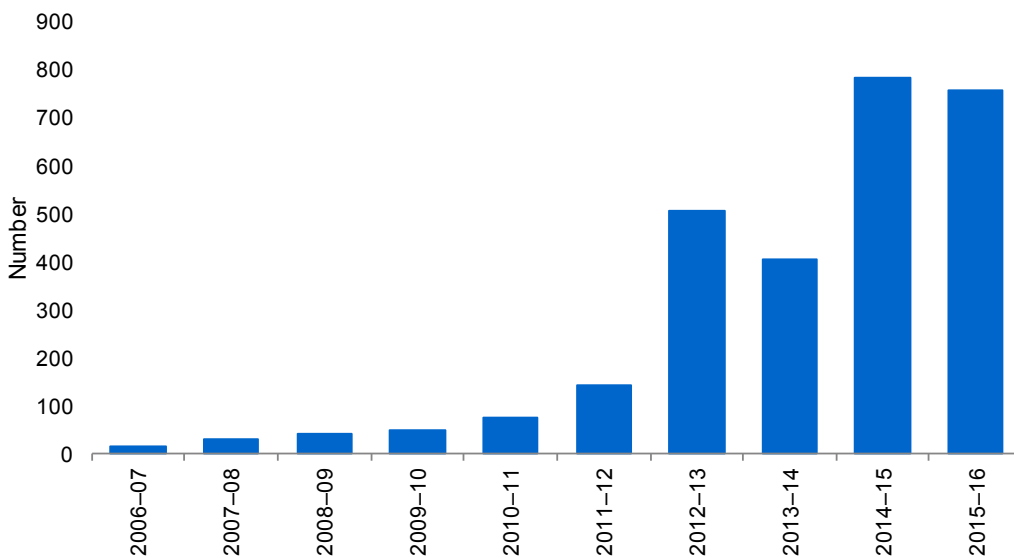
Globally, the use of hallucinogens remains low, with higher use confined to niche groups. In the US, seizures of hallucinogens decreased 59.0 per cent, from 119 507 dosage units in 2013 to 48 970 dosage units in 2014. Seizures of LSD in Europe have remained fairly stable since the early 2000s at below 1 000 seizures per annum. Moderate increases have been observed since 2012, with just under 1 900 seizures reported in the European Union (EU) in 2014. There is limited international reporting on psilocybin-containing mushrooms (DEA 2016; EMCDDA and Europol 2016d).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of tryptamines detected at the Australian border decreased 3.2 per cent this reporting period, from 785 in 2014–15 to 760 in 2015–16 (see Figure 63). Of the 760 detections in 2015–16, 418 were LSD, a 21.9 per cent decrease from the 535 detections reported in 2014–15. There were 190 detections of psilocybin this reporting period, a 3.3 per cent increase from the 184 detections reported in 2014–15. The remaining 152 tryptamine detections this reporting period were reported as ‘other’. All tryptamine detections in 2015–16 weighed 5.0 kilograms or less. The largest single LSD detection this reporting period weighed 48 grams and was from Poland.

FIGURE 63: Number of tryptamine detections at the Australian border, 2006–07 to 2015–16
(Source: Department of Immigration and Border Protection)

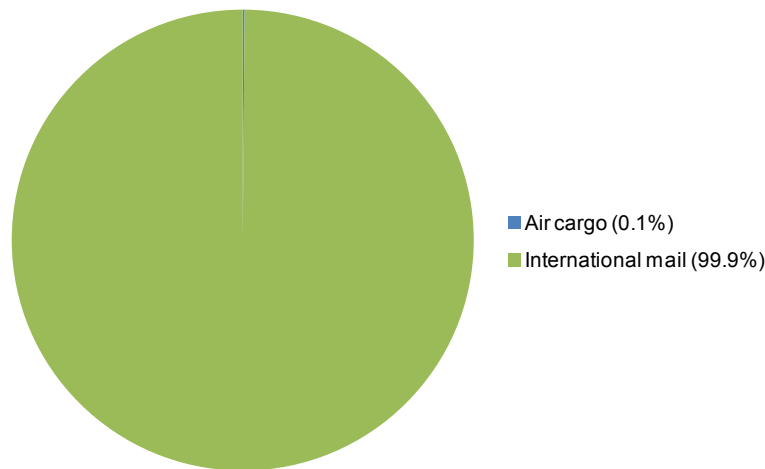


IMPORTATION METHODS

All but one of the 760 tryptamine detections at the Australian border in 2015–16 were detected in the international mail stream, with the air cargo stream accounting for a single detection of LSD this reporting period (see Figure 64).



FIGURE 64: Number of tryptamine detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



EMBARKATION POINTS

Canada was identified as the primary embarkation point for tryptamine detections at the Australian border in 2015–16, followed by the Netherlands and the UK.

Canada was the primary embarkation point for LSD detections at the Australian border in 2015–16, accounting for 31.6 per cent of the number of detections this reporting period, followed by the Netherlands (25.6 per cent) and the UK (20.6 per cent). Combined, these 3 embarkation points account for 77.8 per cent of the number of LSD detections at the Australian border in 2015–16.

Primary embarkation points for psilocybin detections at the Australian border this reporting period include Canada, the Netherlands, the US and the UK.

DOMESTIC MARKET INDICATORS

According to the 2013 NDSHS, 9.4 per cent of the Australian population aged 14 years of older reported using hallucinogens at least once in their lifetime, an increase from the 8.8 per cent reported in 2010. In the same survey, 1.3 per cent reported the recent use of hallucinogens, a decrease from the 1.4 per cent reported in 2010 (AIHW 2014).

In a 2015 national study of regular injecting drug users, 64.0 per cent of respondents reported having used hallucinogens at some stage in their lifetime, an increase from the 61.0 per cent reported in 2014. The reported recent use of hallucinogens within this user group remained stable at 6.0 per cent. LSD was the main type of hallucinogen reportedly used within this user group, followed by magic mushrooms⁹ (Stafford & Breen 2016; Stafford et al 2016).

⁹ Magic mushrooms refer to psilocybin-containing mushrooms.

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting the use of LSD at some stage in their lifetime remained stable at 66.0 per cent, with the reported use of magic mushrooms remaining stable at 59.0 per cent. In the same study, the proportion of respondents reporting recent LSD use decreased, from 41.0 per cent in 2014 to 40.0 per cent, with the reported recent use of magic mushrooms increasing from 21.0 per cent in 2014 to 24.0 per cent in 2015. Early findings from the 2016 study indicate the proportion of respondents reporting recent LSD use has increased to 45.0 per cent, with reported magic mushroom use decreasing to 22.0 per cent (Sindicich et al 2016; Stafford et al 2016).

PRICE

Nationally, the price per tab of LSD ranged between \$5 and \$35 in 2015–16, compared with a price range between \$10 and \$40 in 2014–15. Queensland was the only state to report a price for a single 20 millilitre vial of LSD this reporting period, which remained stable at \$800. No law enforcement price data for psilocybin was available in 2015–16.

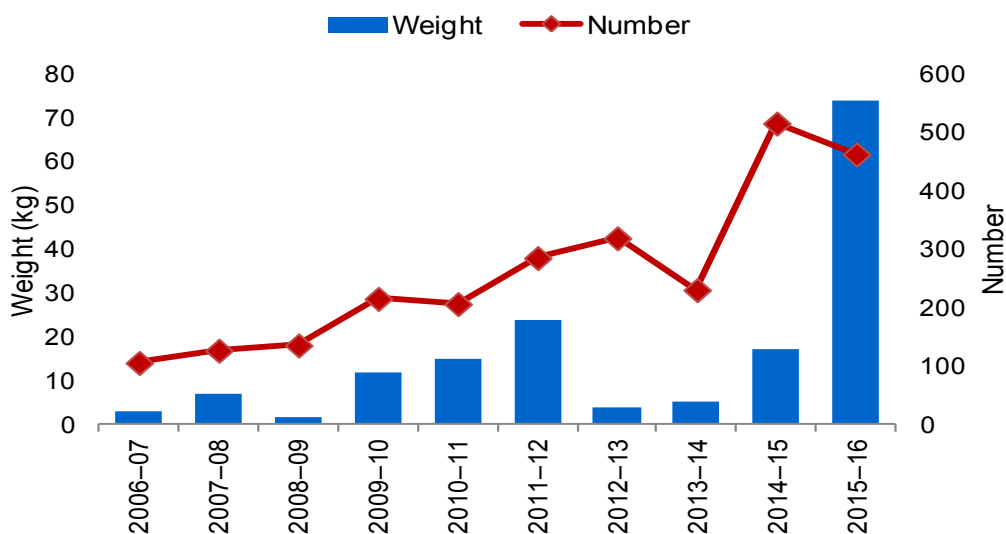
AVAILABILITY

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting LSD as easy or very easy to obtain decreased, from 66.0 per cent in 2014 to 57.0 per cent in 2015. Early findings from the 2016 study indicate that this has increased to 69.0 per cent (Sindicich et al, 2016; Stafford et al 2016).

SEIZURES AND ARRESTS

The number of national hallucinogen seizures decreased 10.3 per cent this reporting period, from 516 in 2014–15 to 463 in 2015–16, the second highest number reported in the last decade. The weight of hallucinogens seized nationally increased 334.0 per cent this reporting period, from 17.0 kilograms in 2014–15 to a record 73.7 kilograms in 2015–16 (see Figure 65).

FIGURE 65: National hallucinogen seizures, by number and weight, 2006–07 to 2015–16



Western Australia reported the greatest percentage increase (42.3 per cent) in the number of hallucinogen seizures in 2015–16, while Queensland reported the greatest percentage increase in the weight of hallucinogens seized (2 415.6 per cent). New South Wales continues to account for the greatest proportion of the number of national hallucinogen seizures (52.7 per cent this reporting period), while Queensland accounted for the greatest proportion of the weight of hallucinogens seized nationally in 2015–16 (45.9 per cent; see Table 31).

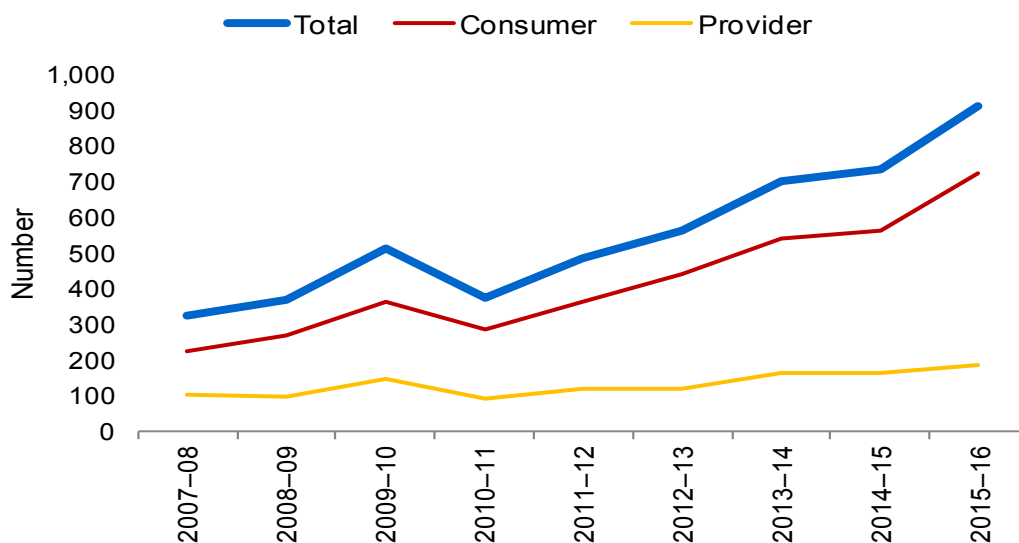
TABLE 31: Number, weight and percentage change of national hallucinogen seizures, 2014–15 and 2015–16

State/Territory ^a	Number			Weight (grams)		
	2014–15	2015–16	% change	2014–15	2015–16	% change
New South Wales	299	244	-18.4	7 801	16 286	108.8
Victoria	71	83	16.9	4 875	19 916	308.5
Queensland	60	44	-26.7	1 346	33 860	2 415.6
South Australia	8	0	-100.0	34	0	-100.0
Western Australia	52	74	42.3	2 882	3 649	26.6
Tasmania	9	3	-66.7	51	56	9.8
Northern Territory	10	10	0.0	10	25	150.0
Australian Capital Territory	7	5	-28.6	3	<1	-100.0
Total	516	463	-10.3	17 002	73 792	334.0

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 24.7 per cent this reporting period, from 734 in 2014–15 to a record 915 in 2015–16. Consumer arrests continue to account for the greatest proportion of arrests, comprising 79.2 per cent of national hallucinogen arrests in 2015–16 (see Figure 66). However, the Northern Territory reported the same number of hallucinogen consumer and provider arrests in 2015–16.

FIGURE 66: Number of national hallucinogen arrests, 2006–07 to 2015–16



OTHER DRUGS

The Northern Territory reported the greatest percentage increase in hallucinogen arrests this reporting period (700.0 per cent). Queensland continues to account for the greatest proportion of national hallucinogen arrests, accounting for 42.1 per cent in 2015–16 (see Table 32).

TABLE 32: Number and percentage change of national hallucinogen arrests, 2014–15 and 2015–16

State/Territory ^a	Arrests		
	2014–15	2015–16	% change
New South Wales	174	148	-14.9
Victoria	125	128	2.4
Queensland	265	385	45.3
South Australia ^b	19	44	131.6
Western Australia	137	192	40.1
Tasmania	10	9	-10.0
Northern Territory	1	8	700.0
Australian Capital Territory	3	1	-66.7
Total	734	915	24.7

- a. The arrest data for each state and territory include Australian Federal Police data.
 b. For the first time, offender data provided by South Australia Police in 2015–16 included data for offenders participating in its Drug Diversion Program (excluding diversion records not related to a drug seizure).

ANAESTHETICS

MAIN FORMS

While anaesthetics and their precursor chemicals have many legitimate uses in the medical, veterinary, plastics and chemical industries, they are also diverted for illicit use. This section covers ketamine and gamma-hydroxybutyrate (GHB), the two most prevalent anaesthetics used illicitly in Australia.

KETAMINE

Ketamine is a general anaesthetic used clinically in medical and veterinary settings. Described as a dissociative anaesthetic, it induces feelings of detachment from an individual's emotions, body and environment. It is used illicitly for its sedative and hallucinogenic effects. Ketamine is commonly sold in three forms—powder, tablet and liquid. Ketamine can be swallowed, snorted or injected. It can also be combined with other substances, such as cannabis or tobacco and smoked. When used in combination with other depressant drugs, such as alcohol, diazepam or heroin, it can cause vital organ failure (ADF 2016d; Health Direct 2015, NIDA 2016a).



Short-term effects of ketamine use may include hallucinations and distorted sensory processing, drowsiness, temporary paralysis, nausea, cardiac arrhythmia, increased body temperature, amnesia and convulsions. Long-term effects of use may include impaired memory and cognitive functions, reduced ability to concentrate, personality and mood changes, depression and severe bladder conditions.¹⁰ Regular users of ketamine may also experience flashbacks (ADF 2016d; Health Direct 2015).

GAMMA-HYDROXYBUTYRATE (GHB) AND RELATED SUBSTANCES

Developed as an anaesthetic, GHB is a central nervous system depressant with hypnotic, amnesic and sedative effects. Found naturally in the brain in small quantities, GHB may also be synthetically produced. GHB is available in powder, liquid, capsule and tablet form. It can be administered orally, snorted or injected. GHB is most commonly consumed as a water soluble salt, usually sold in small bottles or vials. Gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-BD) are analogues and precursors of GHB. Both GBL and 1,4-BD metabolise into GHB in the body, producing identical effects (ADF 2016e; DoH 2014; NSW Health 2013a).

The effects of GHB appear to vary greatly according to the amount used. Effects of GHB use may include a sense of relaxation and well-being, increased confidence and decreased inhibitions, drowsiness, dizziness, headaches and nausea. Side effects of higher doses of GHB may include tachycardia, hypotension, hallucinations and tremors. Risks associated with GHB use are also exacerbated by the small difference in dosage size from desired effect to overdose. The use of GHB in combination with drugs such as amphetamines or MDMA may place enormous strain on the body and increase the risk of seizures. As a consequence of its depressant effects on the central nervous system, the use of GHB in combination with alcohol or other depressants increases the risk of overdose and can be lethal (ADF 2016e; NSW Health, 2014; NSW Health 2013a).

INTERNATIONAL TRENDS

In the period 2009–14, annual global seizures of ketamine averaged 10 tonnes, an increase from an average of 3 tonnes per annum in the period 1998–2008. East and South-East Asia are predominantly responsible for the considerable increase in the weight of ketamine seized globally since 2012, accounting for more than 12 tonnes in 2014. In the EU, around 2 000 ketamine seizures per annum have been reported since 2009, with this figure decreasing to less than 1 000 in 2014. Combined, Spain and the UK accounted for more than 90 per cent of the total quantity of ketamine seized in 2014 (EMCDDA and Europol 2016d; UNODC 2016).

The total number of GBL seizures by World Customs Organization (WCO) agencies increased 64.2 per cent, from 330 in 2014 to 542 in 2015. The weight of GBL seized decreased 16.4 per cent, from 5 690 kilograms in 2014 to 4 758 kilograms in 2015. The US accounted for the greatest proportion of both the number and weight of GBL seizures in 2015, accounting for 86.0 per cent of the number and 71.7 per cent of the weight (WCO 2016).¹¹

¹⁰ Ketamine use in large, repeated doses may result in the painful condition 'ketamine bladder syndrome'. Requiring ongoing treatment, symptoms include difficulty holding urine and incontinence, which may result in ulceration of the bladder.

¹¹ Usually seized in bulk in industrial consignments, the quantity of GBL seized can fluctuate considerably, both within reporting agencies and between reporting periods.

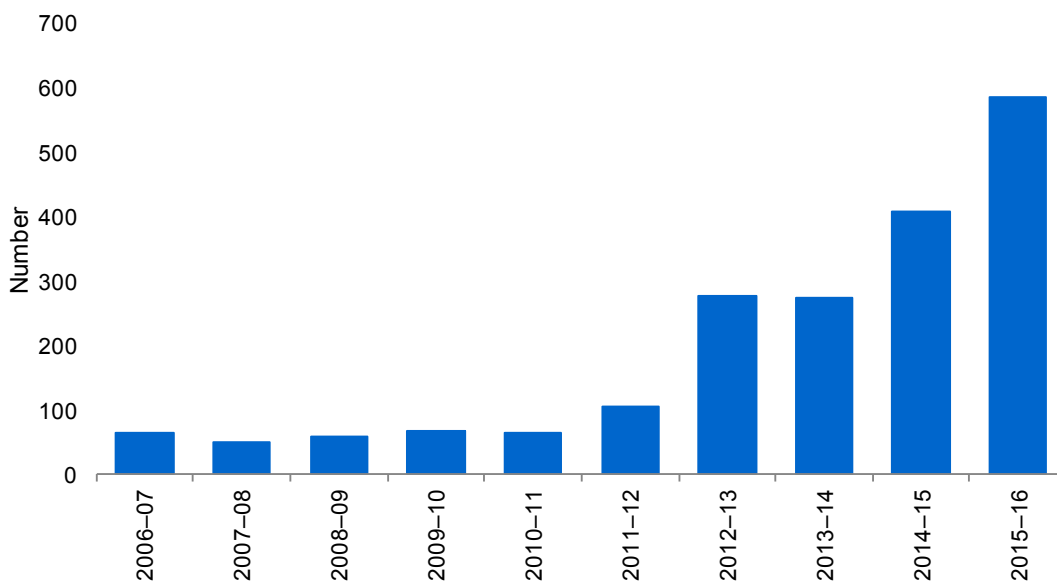


DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

Detections of anaesthetics by the Department of Immigration and Border Protection include GHB, GBL and ketamine. The number of anaesthetic detections at the Australian border increased 43.6 per cent this reporting period, from 408 in 2014–15 to a record 586 in 2015–16 (see Figure 67). This reporting period the number of ketamine detections increased 123.4 per cent, from 218 in 2014–15 to 487 in 2015–16 and account for 83.1 per cent of the number of anaesthetic detections at the Australian border this reporting period. The number of GHB detections decreased 66.7 per cent this reporting period, from 33 in 2014–15 to 11 in 2015–16 and account for 1.9 per cent of the number of anaesthetic detections at the Australian border this reporting period. The number of GBL detections decreased 44.0 per cent this reporting period, from 157 in 2014–15 to 88 in 2015–16 and account for 15.0 per cent of the number of anaesthetic detections at the Australian border this reporting period.

FIGURE 67: Number of anaesthetic detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)

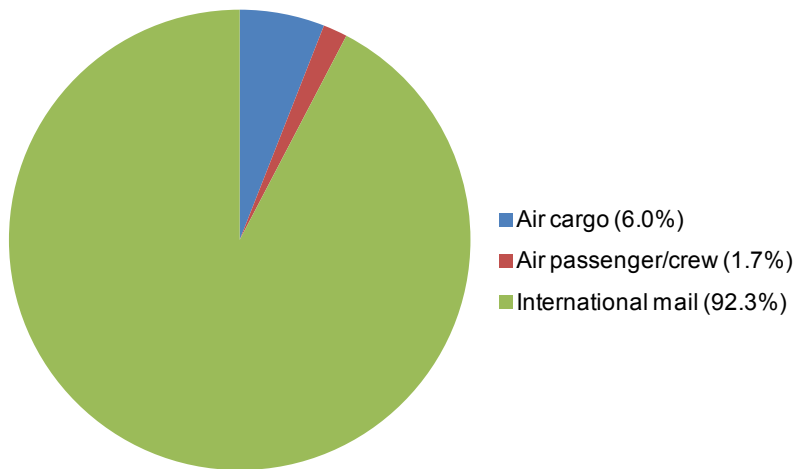


IMPORTATION METHODS

Detections of anaesthetics occurred in the air cargo, air passenger/crew and international mail streams this reporting period. The international mail stream accounted for 92.3 per cent of the number of anaesthetic detections at the Australian border in 2015–16 (see Figure 68).

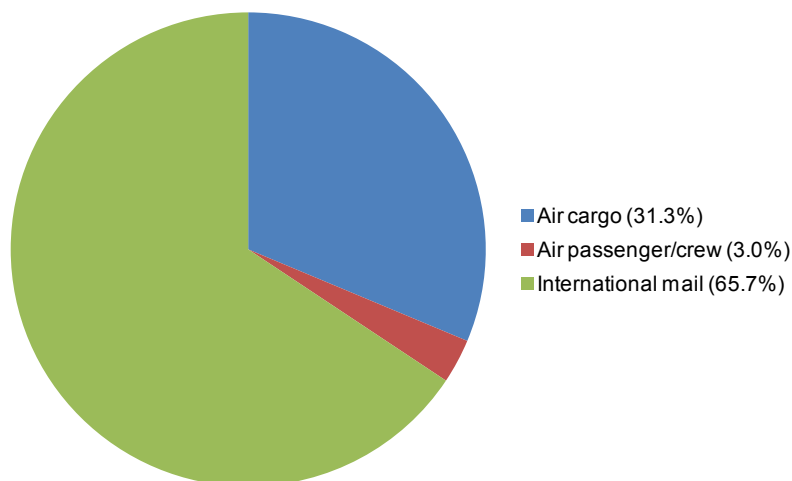


FIGURE 68: Number of anaesthetic detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



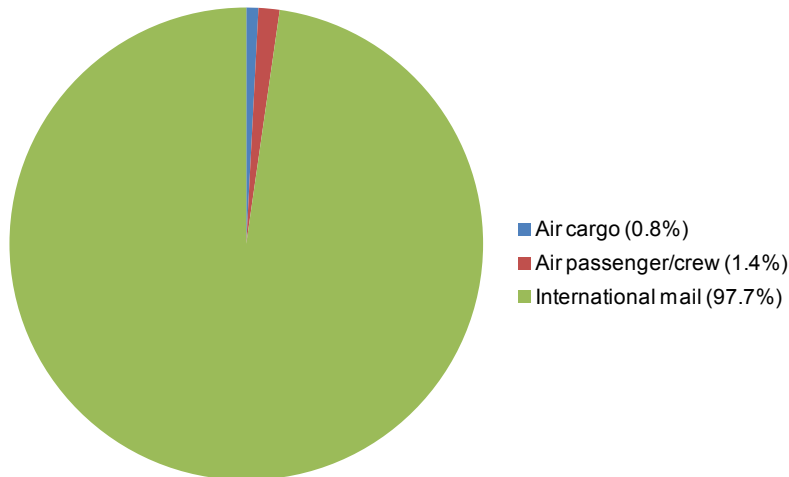
Detections of GBL and GHB occurred in the air cargo, air passenger/crew and international mail streams this reporting period. The international mail stream accounted for 65.7 per cent of the combined number of GHB and GBL detections at the Australian border in 2015–16 (see Figure 69). GHB was detected in the air passenger/crew and international mail streams this reporting period, while GBL was detected in the air cargo, air passenger/crew and international mail streams.

FIGURE 69: Number of GBL and GHB detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



Detections of ketamine occurred in the air cargo, air passenger/crew and international mail streams this reporting period. The international mail stream accounted for 97.7 per cent of ketamine detections at the Australian border in 2015–16 (see Figure 70).

FIGURE 70: Number of ketamine detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



EMBARKATION POINTS

The predominant embarkation points for GHB and GBL detections at the Australian border this reporting period were China (including Hong Kong; 50 detections) and the Netherlands (10 detections). Combined, these 2 embarkation points account for 60.6 per cent of the number of GHB and GBL detections at the Australian border in 2015–16.

In 2015–16, 28 countries were identified as embarkation points for ketamine detections at the Australian border, compared with 15 countries in 2014–15. The predominant embarkation point this reporting period was the UK (277 detections), which accounts for 56.9 per cent of the number of ketamine detections at the Australian border in 2015–16.

DOMESTIC MARKET INDICATORS

According to the 2013 NDSHS, the proportion of the Australian population aged 14 years or older who reported using GHB at least once in their lifetime increased, from 0.8 per cent in 2010 to 0.9 per cent in 2013. In the same survey, the proportion reporting ketamine use at least once in their lifetime increased, from 1.4 per cent in 2010 to 1.7 per cent in 2013. While the proportion reporting recent GHB use decreased from 0.1 per cent in 2010 to <0.1 per cent in 2013, the proportion reporting recent ketamine use increased, from 0.2 per cent in 2010 to 0.3 per cent in 2013 (AIHW 2014).





In a 2015 national study of regular ecstasy users, the proportion of respondents reporting GHB¹² use at least once in their lifetime decreased, from 14.0 per cent in 2014 to 12.0 per cent in 2015. In the same study, the proportion reporting ketamine use at least once in their lifetime also decreased, from 36.0 per cent in 2014 to 34.0 per cent in 2015. The reported recent use of GHB within this user group remained stable at 5.0 per cent, with recent ketamine use decreasing, from 18.0 per cent in 2014 to 15.0 per cent in 2015. According to early findings of the 2016 study, the proportion reporting recent GHB use increased to 8.0 per cent, with the proportion reporting recent ketamine use increasing to 26.0 per cent (Sindicich et al 2016; Stafford et al 2016).

PRICE

Nationally, the price for 1 gram of ketamine powder ranged between \$50 and \$360 in 2015–16, compared with a price range between \$100 and \$200 in 2014–15. Nationally, the price for 1–1.5 millilitres of GHB/GBL ranged between \$2 and \$12 this reporting period, compared with a price range between \$4 and \$20 in 2014–15. The price of a litre of GHB/GBL ranging between \$1 000 and \$5 000 this reporting period, compared with a price range between \$2 000 and \$11 000 in 2014–15.

AVAILABILITY

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting ketamine as easy or very easy to obtain decreased, from 48.0 per cent in 2014 to 47.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 64.0 per cent. In the same survey, the proportion of respondents reporting GHB as easy or very easy to obtain increased, from 45.0 per cent in 2014 to 60.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 83.0 per cent (Sindicich et al, 2016; Stafford et al 2016).

PHARMACEUTICALS

MAIN FORMS

Australian legislation and regulations strictly control the manufacture, importation and supply of pharmaceuticals. Under the National Medicines Policy, the Australian Government funded Pharmaceuticals Benefits Scheme (PBS)¹³ subsidises a wide range of medicines to meet medication and related service needs (DoH 2015). However, pharmaceuticals may be accessed or diverted for non-medical use.

Some of the reasons pharmaceuticals are used for non-medical purposes include self-medication, treatment for an underlying drug dependency problem, improved performance, withdrawal from illicit drugs and to counter or enhance the effects of illicit drugs. The availability of other drugs, especially heroin, may also influence the demand for certain pharmaceuticals. Opioid analgesics and benzodiazepines are the most commonly misused pharmaceuticals in Australia. The misuse of these pharmaceuticals can lead to dependence and/or overdose (AIC 2015; Vrecko 2015).

¹² GHB category also includes 1,4B-D and GBL.

¹³ The PBS is a federally funded government program which subsidises the cost of a broad range of medicines and was established to ensure Australians have affordable access to pharmaceutical medicines.

Pharmaceutical drugs are obtained for non-medical purposes through a range of means, including:

- family and friends with legitimate prescriptions
- stolen, altered or forged prescriptions
- feigning symptoms
- theft from surgeries or pharmacies
- doctor shopping¹⁴
- threatening general practitioners
- purchases over the internet
- poor prescription practices, such as prescribing larger than required quantities
- health practitioners self-prescribing or otherwise misappropriating through their work (UNODC 2011; Vrecko 2015).

This section focuses on the pharmaceutical drugs most commonly misused in Australia: benzodiazepines and opioids (ADF 2016f; AIC 2015).

BENZODIAZEPINES

Benzodiazepines are among the most prescribed drugs in Australia. Commonly prescribed for insomnia, stress and anxiety, they are depressant drugs that slow down the activity of the brain and central nervous system, making users feel calm and lethargic. Benzodiazepines generally come in tablet or capsule form and are generally stamped with their propriety name and the related dose in milligrams. Benzodiazepines may be misused to 'come down' from the effects of stimulant drugs, to enhance the effects of other depressant drugs, or as a substitute for drugs of choice (ADF 2016f; ADF 2016g).

Effects of benzodiazepine use may include drowsiness, confusion, impaired motor coordination, nausea and loss of appetite. Long-term use may result in depression, memory loss, lethargy, lack of motivation, aggression and anxiousness. The use of benzodiazepines in combination with other depressant drugs, such as alcohol or heroin, increases the risk of breathing difficulties and/or overdose. If taken in combination with stimulants, such as amphetamines or MDMA, the body may become stressed as it tries to deal with the competing effects (ADF 2016f; ADF 2016g).

¹⁴ Doctor shopping refers to presenting to numerous doctors for the purpose of obtaining multiple prescriptions to deal with non-existent or exaggerated symptoms.



The main forms of benzodiazepine pharmaceuticals are listed in Table 33.

TABLE 33: Main forms of commonly used benzodiazepine pharmaceuticals

Pharmaceutical type	Trade name	User names
Alprazolam	Zanax, Alprazolam, Tafil, Farmapram, Asolan, Traxil, Niravam	Zanies, Zans, Blues, Quad Bars, Totem Poles, Z Bars
Bromazepam	Lexotan	
Clonazepam	Rivotril	
Diazepam	Valium, Ducene, Antenex, Propam	
Flunitrazepam	Hypnodorm	Rohies, Roofies
Nitrazepam	Mogadon, Alodorm, Dormican, Nitepam	Moggies
Oxazepam	Serepax, Murelax, Alepam, Benzotran	Sarahs
Temazepam	Normison, Temaze, Euhypnos	Footballs, Normies

OPIOIDS

Opioids include drugs derived from the opium poppy and synthetic substances with similar pain relieving properties. Opioid pharmaceuticals are commonly prescribed for pain management and the treatment of heroin and other opioid addictions and are known to be used illicitly. The most common opioids used to treat pain include codeine, morphine and oxycodone. The misuse of opioids may result in tolerance and dependence, leading users to seek increasingly larger doses of the drug to achieve the same affect (ADF 2016f).

There is a range of harms related to the non-medical use of prescription opioids including nausea, respiratory depression, drowsiness, confusion and circulatory failure. While adverse side effects can occur when used in accordance with medical directions, when pharmaceutical opioids are used outside the parameters of medical supervision and guidelines for safe and effective use, or in combination with other pharmaceutical or illicit drugs, adverse effects are more likely, particularly overdose. Administration via injection may also expose users to further health risks, including blood-borne viruses such as human immunodeficiency virus (HIV), hepatitis B and C, as well as bacterial and fungal infections, collapsed veins and abscesses (ADF 2016f; Degenhardt et al 2007).

Common opioid pharmaceuticals are listed in Table 34.



TABLE 34: Main forms of commonly used opioid pharmaceuticals

Pharmaceutical type	Trade name	User names	Comments
Morphine	MS Contin, Anamorph, Kapanol, Morphalgin	M, Monkey, Morph, Miss Emma, Dreamer, Hard Stuff, Greys	Main component of opium; powerful narcotic analgesic
Codeine	Panadine Forte, Codral Forte, Dymadon Forte, Codalgin Forte, Mersyndol Forte		An extract of opium which is not as strong as morphine
Oxycodone	OxyContin, Endone, Wxynorm, Percocet, Roxidcodone, Tylox, Percodan	Oxy, Oxies, O.Cs, Oxycottons, Oxy 80s, Hillbilly Heroin, Roxies, Percs	A semi-synthetic opioid analgesic similar to morphine
Fentanyl	Durogesic, Actiq (lozenge), Fenpatch, Denpax		An opioid analgesic more potent than morphine, with a rapid onset and short duration
Pethidine		Peth	Synthetic narcotic analgesic, similar to morphine but shorter lasting
Methadone (or physeptone when in tablet form)		Meth, Done, Metho	Synthetic narcotic analgesic used in the treatment of opioid dependence; predominantly provided in syrup form to patients
Buprenorphine	Subutex, Temgesic	Beup, mud	Used to treat withdrawal from heroin and employed in maintenance treatment to block the effects of other opioids



INTERNATIONAL TRENDS

Pharmaceutical drugs continue to be increasingly misused globally. Data from routine monitoring and individual studies indicate that the main types of pharmaceuticals misused in Europe are opioid analgesics, benzodiazepines and hypnotic drugs. Opioids comprise the greatest proportion of misused controlled prescription drugs in the US. In the US, drug overdose deaths are the leading cause of injury death. Drug poisoning deaths involving prescription drugs in the US increased 13.1 per cent, from 22 767 in 2013 to 25 760 in 2014. Since 2002, the number of deaths in the US involving controlled prescription drugs has exceeded that reported for heroin and cocaine combined, with 10 574 heroin and 5 415 cocaine drug poisoning deaths reported in 2014. While recent data indicates the use of controlled prescription drugs in the US has decreased in some areas, the reported current use of these drugs exceeds that of cocaine, heroin, methylamphetamine, MDMA and phencyclidine (PCP) combined. The DEA's 11th National Prescription Drug Take-Back Day was held in April 2016 and aims at providing a safe, convenient and responsible means of disposing of prescription drugs, while educating the general public about medications and potential abuse. Conducted in over 5 000 communities across the US, it collected more than 447 tonnes of unused, expired or unwanted prescription drugs. These events have collected more than 3 210 tonnes of prescription drugs since September 2010 (DEA 2016; EMCDDA and Europol 2016d).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

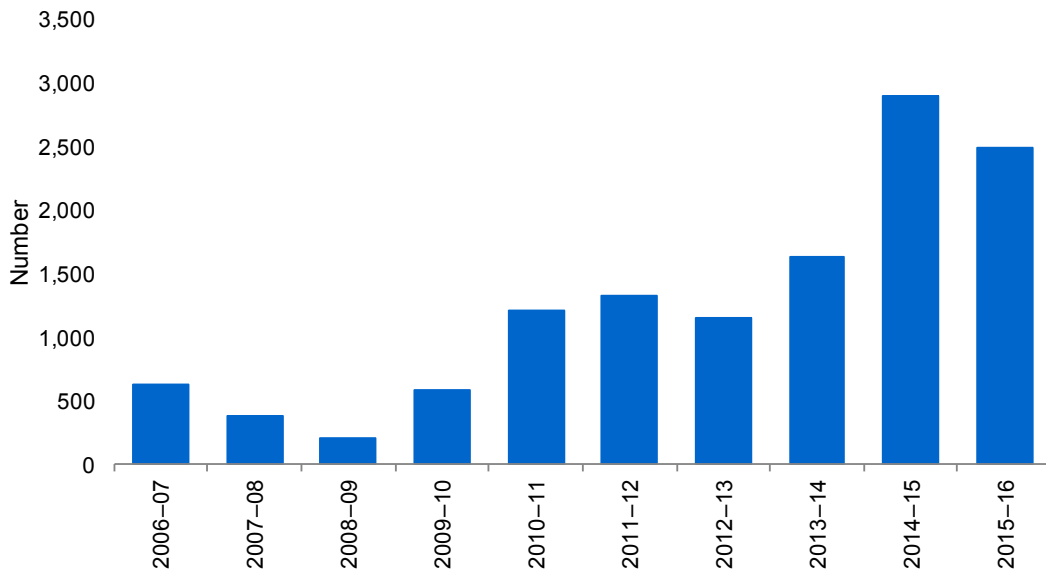
The importation of prescription pharmaceuticals when imported by individuals is primarily done for personal use and without serious criminal intent. Pharmaceuticals continue to be purchased over the internet for a variety of reasons, including the anonymity afforded to purchasers, the ability to purchase without a prescription and the lower cost.

Pharmaceutical detections reported by the Department of Immigration and Border Protection only reflect detections of benzodiazepines and opioids.¹⁵ This reporting period detections of benzodiazepines at the Australian border decreased 13.5 per cent, from 2 772 in 2014–15 to 2 399 in 2015–16. Detections of opioids at the Australian border decreased 27.3 per cent this reporting period, from 128 in 2014–15 to 93 in 2015–16. Oxycodone (30 detections) and codeine (27 detections) were the most common opioid pharmaceuticals detected this reporting period. Combined, they account for 61.3 per cent of the number of opioid detections at the Australian border in 2015–16. Other opioid pharmaceuticals detected this reporting period include morphine, buprenorphine, dihydrocodeine, methadone and fentanyl. The total number of benzodiazepine and opioid pharmaceutical detections at the Australian border decreased 14.1 per cent this reporting period, from 2 900 in 2014–15 to 2 492 in 2015–16 (see Figure 71).

¹⁵ Benzodiazepine and opioid statistics only represent a component of the larger pharmaceutical category. As such, caution must be used when comparing data.



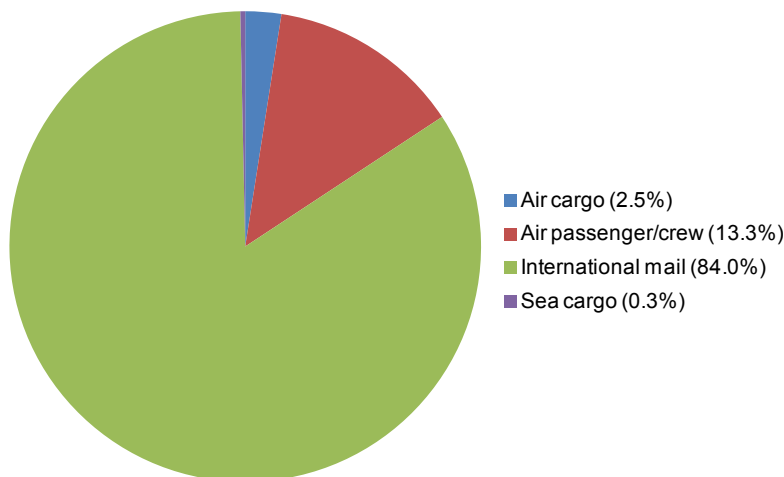
FIGURE 71: Number of pharmaceutical detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)



IMPORTATION METHODS

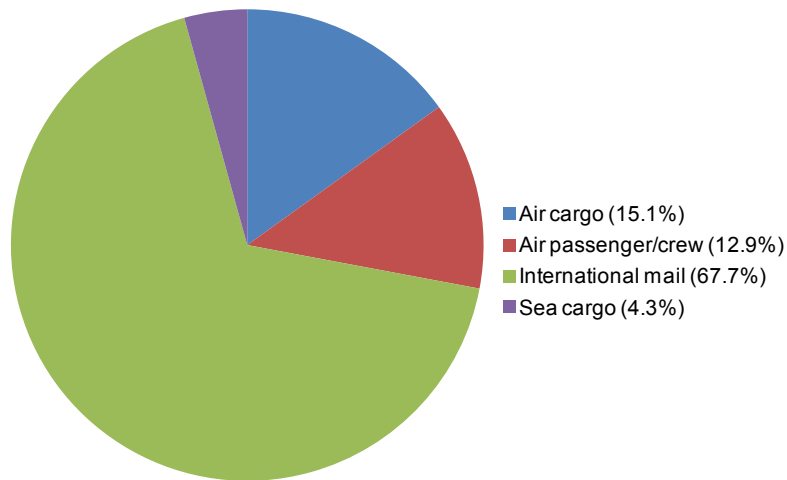
Detections of benzodiazepines occurred in the air cargo, air passenger/crew, international mail and sea cargo streams this reporting period. The international mail stream accounted for 84.0 per cent of the number of benzodiazepine detections at the Australian border in 2015–16 (see Figure 72).

FIGURE 72: Number of benzodiazepine detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



Detections of opioids occurred in the air cargo, air passenger/crew, international mail and sea cargo streams this reporting period. The international mail stream accounted for 67.7 per cent of the number of opiate detections at the Australian border in 2015–16 (see Figure 73).

FIGURE 73: Number of opioid detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



DOMESTIC MARKET INDICATORS

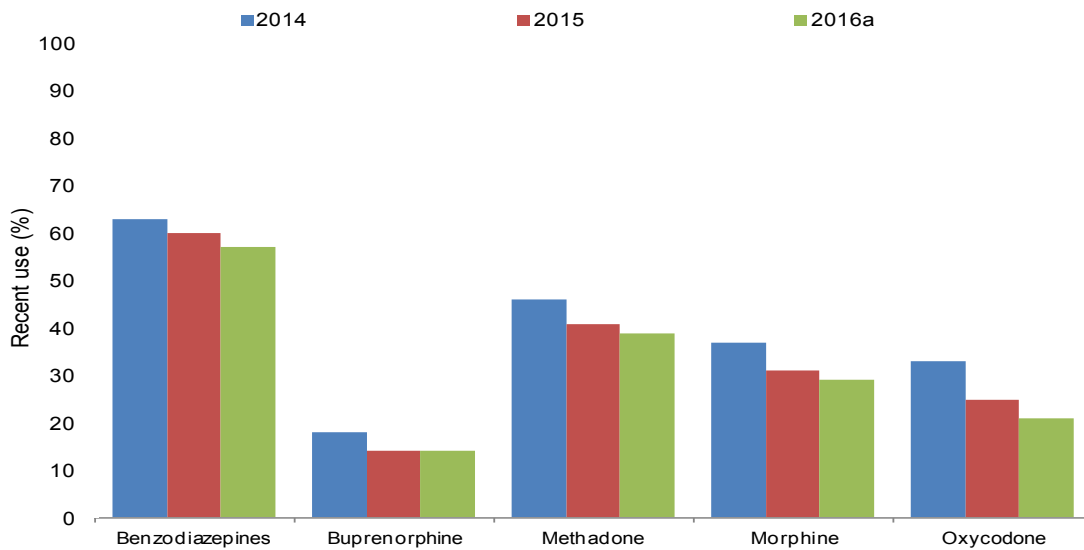
According to the 2013 NDSHS, the proportion of the Australian population aged 14 years or older reporting the non-medical¹⁶ use of any pharmaceutical at least once in their lifetime decreased, from 7.4 per cent in 2010 to 4.7 per cent in 2013. In the same survey, the proportion reporting recent use increased, from 4.2 per cent in 2010 to 4.7 per cent in 2013 (AIHW 2014).

In a 2015 national study of regular injecting drug users, the proportion of respondents reporting the recent use of any form (licit or illicit) of benzodiazepine decreased, from 63.0 per cent in 2014 to 60.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 57.0 per cent. The reported recent use of buprenorphine (any form) in this user group decreased, from 18.0 per cent in 2014 to 14.0 per cent in 2015. Early findings from the 2016 study indicate this remains unchanged at 14.0 per cent. The reported recent use of methadone (any form) in this user group decreased, from 46.0 per cent in 2014 to 41.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 39.0 per cent. The reported recent use of morphine (any form) in this user group decreased, from 37.0 per cent in 2014 to 31.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 29.0 per cent. The reported recent use of oxycodone (any form) in this user group decreased, from 33.0 per cent in 2014 to 25.0 in 2015. Early findings from the 2016 study indicate this has decreased to 21.0 per cent (Stafford & Breen 2016; Stafford et al 2016; see Figure 74).

¹⁶ 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 for cosmetic purposes.



FIGURE 74: Proportion of a regular injecting drug user population reporting recent use of illicit and licit pharmaceuticals, by pharmaceutical type, 2014 to 2016¹⁷ (Source: National Drug and Alcohol Research Centre)



a. Reported figures for 2016 are preliminary.

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting the recent use of any form (licit or illicit) of benzodiazepines decreased, from 34.0 per cent in 2014 to 32.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 38.0 per cent (Sindicich et al 2016; Stafford et al 2016).

The Drug Use Monitoring in Australia (DUMA) program, which examines drug use and offending patterns among police detainees in Australia, 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.¹⁸ The proportion of detainees testing positive via urinalysis for benzodiazepines¹⁹ increased, from 23.5 per cent in 2014–15 to 24.4 per cent in 2015–16. Self-reported recent use²⁰ of benzodiazepines increased, from 31.8 per cent in 2014–15 to 34.5 per cent in 2015–16 (see Figure 75).

¹⁷ Preliminary reported figures. Figures for pharmaceutical stimulants were not available.

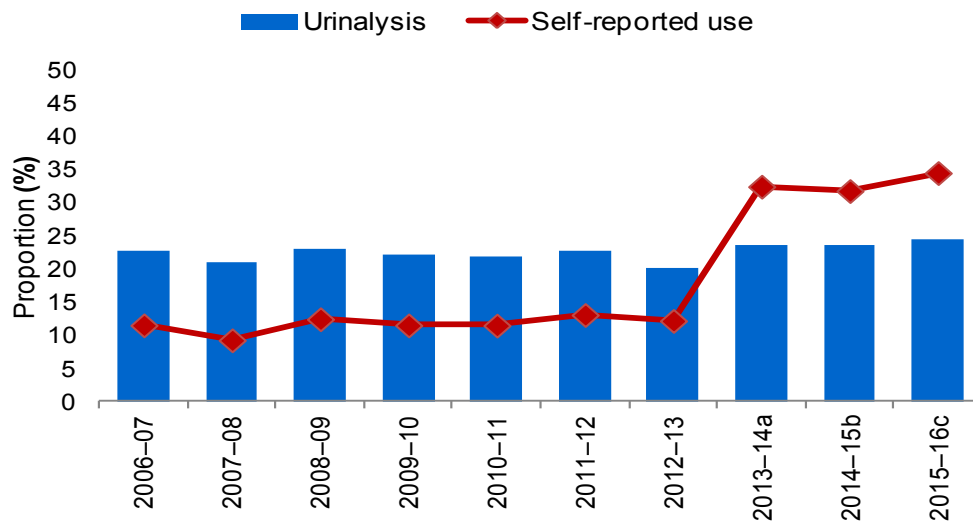
¹⁸ Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

¹⁹ Benzodiazepines and their metabolites can be detected in urine for 2 to 14 days after administration.

²⁰ Recent use in the DUMA program refers to self-reported use in the 12 months prior to arrest.



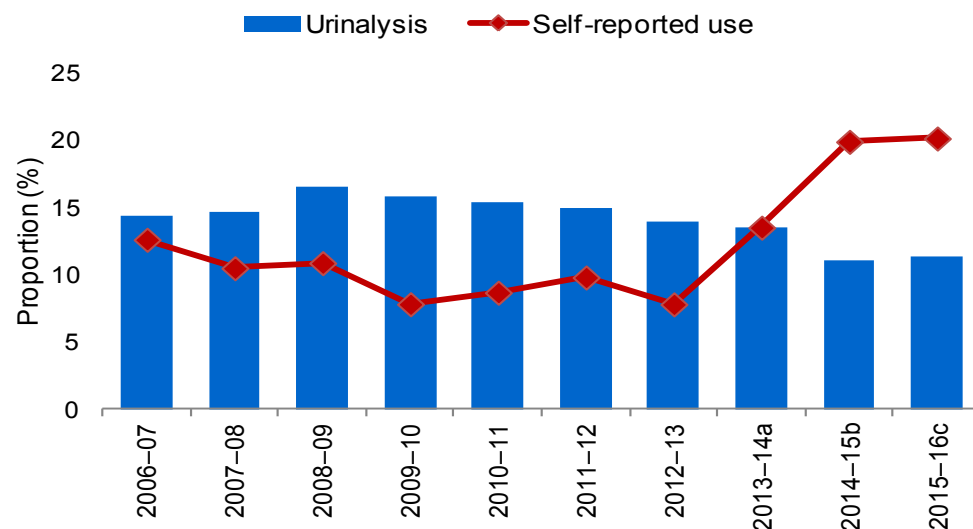
FIGURE 75: National proportion of detainees testing positive for benzodiazepines, 2006–07 to 2015–16 (Source: Australian Institute of Criminology)



- 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.

This reporting period the proportion of detainees testing positive via urinalysis for any opiate²¹ increased, from 11.0 per cent in 2014–15 to 11.3 per cent in 2015–16. The self-reported recent use of opiates other than heroin increased, from 19.9 per cent in 2014–15 to 20.2 per cent in 2015–16 (see Figure 76).

FIGURE 76: National proportion of detainees testing positive for any opiate compared with self-reported use of opiates other than heroin, 2006–07 to 2015–16 (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.

²¹ Opiates and their metabolites can be detected in urine on average 2 to 3 days after administration.

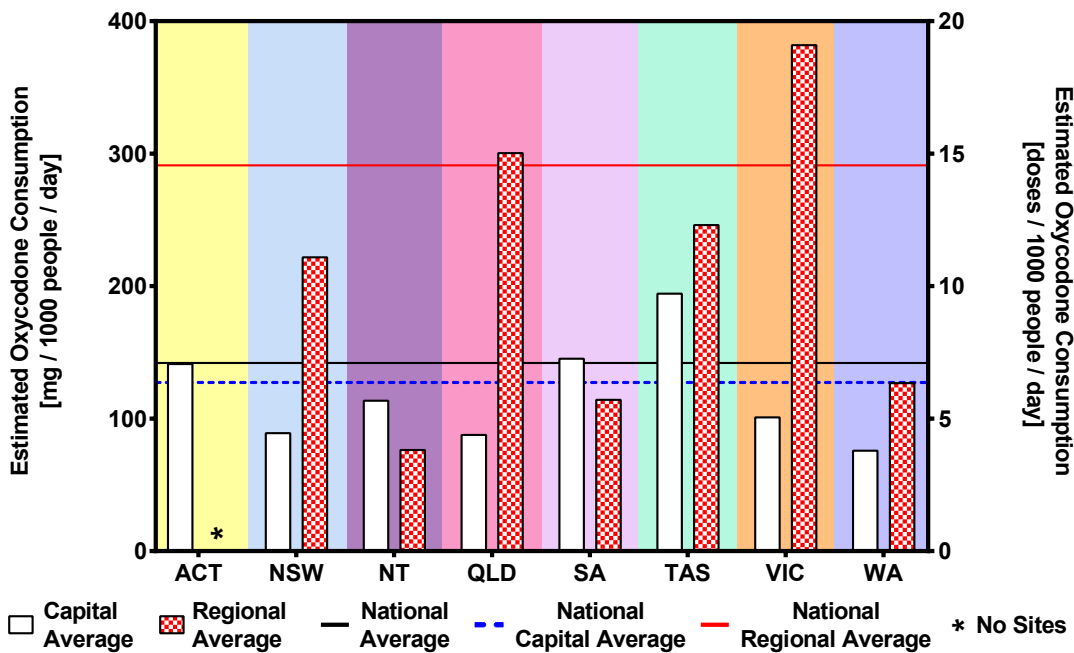


OTHER DRUGS

Wastewater analysis has become the standard for measuring population-scale consumption of a range of different chemical compounds. The underlying concepts involved in wastewater analysis are well established in Australia and have been applied to a wide range of licit and illicit drugs. Estimates of drug consumption in a population can be back-calculated from measured concentrations of drug metabolites (excreted into the sewer system after consumption) in wastewater samples. Following on from recommendations from the National Ice Taskforce and National Ice Action Strategy, the Commonwealth Minister for Justice approved \$3.6 million over three years from the Commonwealth Confiscated Assets Account for the Australian Criminal Intelligence Commission (ACIC) to develop a national program to monitor drug consumption through wastewater analysis. This program of sampling and analysis is known as the National Wastewater Drug Monitoring Program (NWDMP).²²

Wastewater analysis conducted in the latter half of 2016 shows oxycodone²³ consumption in numerous regional sites was well above capital city levels, with the national regional average almost double the national capital and national averages. Regional sites in Victoria and Queensland had higher than average oxycodone consumption levels (see Figure 77).

FIGURE 77: Estimated average consumption of oxycodone for capital city sites and regional sites by state/territory (Source: National Wastewater Drug Monitoring Program)



PRICE

Law enforcement price data for pharmaceuticals obtained for non-medical use is limited. Nationally, the price for a single 100 milligram tablet of MS Contin in 2015–16 ranged between \$30 and \$150.

22 The public NWDMP reports are available on the ACIC website. See <https://www.acic.gov.au/sites/g/files/net1491/f/national_wastewater_drug_monitoring_program_report_1_0.pdf?v=1490333695>.

23 Oxycodone is a pharmaceutical substance which has therapeutic application, but is also diverted to the illicit market. Consumption figures reflect both licit and illicit use.

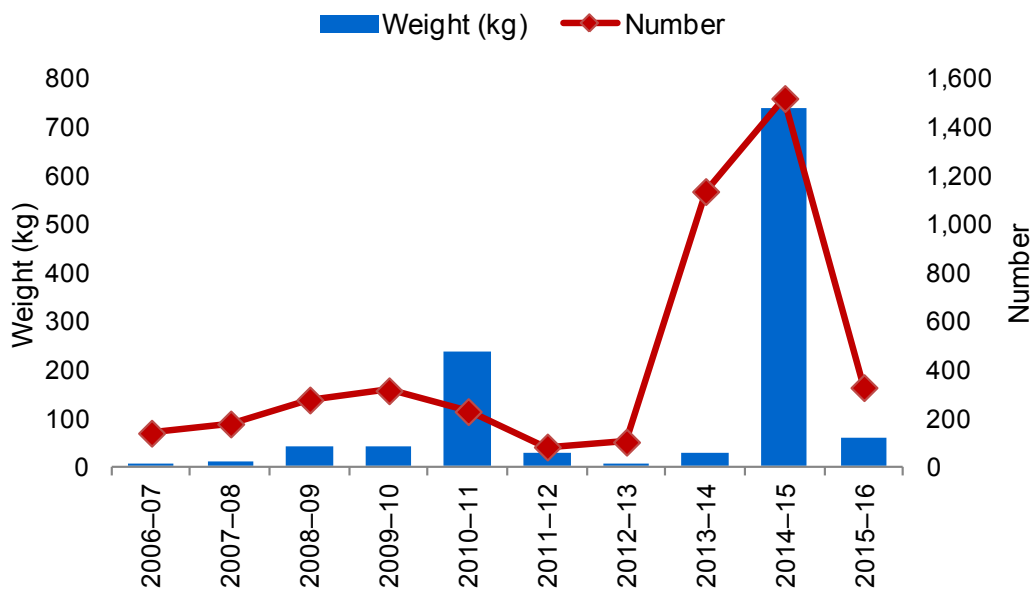
AVAILABILITY

In a 2015 national study of regular injecting drug users, the proportion of respondents reporting illicit oxycodone as easy or very easy to obtain increased, from 43.0 per cent in 2014 to 64.0 per cent in 2015. In the same study, the proportion of respondents reporting illicit morphine as easy or very easy to obtain increased, from 70.0 per cent in 2014 to 77.0 per cent in 2015 (Stafford & Breen 2016).

SEIZURES

The number of national other opioid seizures decreased 78.4 per cent this reporting period, from 1 521 in 2014–15 to 328 in 2015–16. The weight of other opioids seized nationally decreased 92.1 per cent this reporting period, from a record 740.6 kilograms²⁴ in 2014–15 to 58.6 kilograms in 2015–16 (see Figure 78).

FIGURE 78: National other opioid seizures, by number and weight, 2006–07 to 2015–16



The Australian Capital Territory reported the greatest percentage increase (243.5 per cent) in the number of other opioid seizures in 2015–16, while Western Australia reported the greatest percentage increase in the weight of other opioids seized (1 580.0 per cent). New South Wales continues to account for the greatest proportion of the number of national other opioid seizures (45.1 per cent this reporting period) and also accounted for the greatest proportion of the weight of other opioids seized nationally in 2015–16 (44.3 per cent; see Table 35).

²⁴ A large proportion of the weight detected in 2014–15 (490 kilograms) relates to a single seizure of poppy seeds in September 2014 in Victoria.



TABLE 35: Number, weight and percentage change of national other opioid seizures, 2014–15 and 2015–16

State/Territory ^a	Number			Weight (grams)		
	2014–15	2015–16	% change	2014–15	2015–16	% change
New South Wales ^b	1 361	148	-89.1	144 428	25 965	-82.0
Victoria	53	18	-66.0	589 846	17 780	-97.0
Queensland	12	21	75.0	5 152	2 000	-61.2
South Australia	3	0	-100.0	135	0	-100.0
Western Australia	17	9	-47.1	310	5 208	1 580.0
Tasmania	52	53	1.9	371	1 275	243.7
Northern Territory	0	0	0.0	0	0	0.0
Australian Capital Territory	23	79	243.5	381	6 391	1 577.4
Total	1 521	328	-78.4	740 623	58 619	-92.1

- a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.
- b. In 2015–16, the New South Wales Police Force changed the way in which pharmaceutical drugs are coded. This reporting period only seizures identified as opioids appear in other opioid seizure data, with seizures of pharmaceutical drugs (not further described) reflected in other and unknown not elsewhere classified drug seizure data. This change has had a significant impact on the number of other opioid seizures reported in New South Wales and resulted in a considerable decrease in the number of other opioid seizures this reporting period.

NEW PSYCHOACTIVE SUBSTANCES

MAIN FORMS

New²⁵ psychoactive substances (NPS) have been identified in Australia and overseas since at least the mid-2000s. Often marketed using terms such as legal highs, herbal highs, bath salts, designer drugs and research chemicals, 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. Three categories of analogue drugs have been identified—direct, structural and functional. Direct analogues possess chemical and pharmacological similarities. Structural analogues possess structural similarities only and functional analogues are chemically different compounds which display similar pharmacological properties. In September 2015, the Commonwealth Government introduced new offences in the Criminal Code Act 1995 (Criminal Code) to ban the importation of NPS on the basis of their psychoactive effect or appearance. These laws operate alongside existing serious drug offences to reduce the availability of potentially harmful new substances, giving authorities time to place appropriate controls around them (UNODC 2016a; Wermuth 2006).

²⁵ 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 in the market.



The role of the internet in facilitating the sale of NPS, as well as providing a platform for users to discuss these substances is well known. NPS are often marketed as legal alternatives to controlled substances, including cannabis, methylamphetamine and MDMA. Prospective users of these 'legal highs'²⁶ may interpret this to mean that they are safe to consume and less harmful than illicit drugs. As many of these substances are novel, there is limited knowledge or research on the short or long-term health consequences of use, risk of dependence, possible effects of use in combination with other drugs, or potential fatal dose levels. Some short-term effects associated with NPS use include dilated pupils, hypertension, hyperventilation, acute psychosis, paranoia, agitation, hyperthermia, tremors and seizures (Arnold 2013; EMCDDA and Europol 2016c; EMCDDA and Europol 2016d; UNODC 2016; UNODC 2016a).

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.

SYNTHETIC CANNABINOIDS

Synthetic cannabinoids mimic the effects of tetrahydrocannabinol (THC – the principal psychoactive component in cannabis). Synthetic cannabinoids are usually sold as smoking mixtures, which typically contain vegetable matter to which one or more cannabinoids have been added, or sold in liquid form to be vaporised and inhaled. Synthetic cannabinoids may also be brewed and drunk as a tea. Reported short-term effects of synthetic cannabinoid use include memory and cognitive impairment, breathing difficulties, acute kidney injury, decreased coordination, fatigue, headaches, disorientation, nausea, hallucinogens, high blood pressure, tachycardia, paranoia, agitation, restlessness, panic attacks, anxiety and depression. Long-term effects may include tolerance, dependence and death—particularly when taken in combination with alcohol and/or illicit drugs, or used by an individual with an existing heat condition (ADF 2015h; EMCDDA 2015c; NIDA 2015b).

4-MMC (4-METHYLMETHCATHINONE)

4-MMC, also marketed as mephedrone, is a synthetic stimulant. Methcathinone analogue drugs have similar effects to MDMA. Available in powder, crystal, capsule and tablet form, 4-MMC can be snorted, swallowed, smoked or dissolved for ingestion or injection. Reported short-term effects of 4-MMC use include anxiety, paranoia, hallucinations, muscle tension, blurred vision, dizziness, distorted sense of time, memory loss, sweating, stomach pains, skin rashes, fast or irregular heartbeat, high blood pressure, chest pain and convulsions. Long-term effects may include insomnia, muscle spasms, hallucinations and dependence (ADF 2016i; NIDA 2016c).

²⁶ Use of the term 'legal high' may not reflect the true legal status of these substances under Australian legislation.



NBOME COMPOUNDS

There are a number of different NBOME compounds available, with differing effects. Generally designed to mimic or produce similar hallucinogenic effects of more traditional illicit drugs such as LSD, commonly encountered NBOME compounds include 25I, 25B and 25C. NBOMes are available in various forms, including blotting paper (similar to LSD) with images and logos from popular culture, liquid, powder and tablet form. The most common method of administration is under the tongue or held in the cheek to allow absorption into the bloodstream. NBOMes carry a high risk of overdose as a consequence of the small difference in the quantity required to produce a high and that which results in overdose. Reported side effects of the use of NBOME compounds include confusion, difficulty communicating, memory lapses, hallucinations, paranoia, nausea, rapid heart rate, overheating and seizures. NBOMes have also been implicated in fatalities in Australia (ADF 2014j).

INTERNATIONAL TRENDS

The legal status of NPS varies from country to country, with producers of NPS rapidly developing and introducing new substances in response to changes to regulatory and legislative controls. NPS may be transient in nature and may only be reported by a small number of countries. NPS may be used as a temporary replacement for illicit drugs, or may displace illicit drugs—either temporarily or more permanently. A primary concern in relation to NPS is the diversity and large number of substances involved. Over 100 countries and territories from all regions of the world have reported one or more NPS. As at December 2015, governments, laboratories and partner agencies reported more than 600 substances to the UNODC Early Warning Advisory on NPS, the majority of which were synthetic cannabinoids receptor agonists (35.0 per cent), stimulants (35.0 per cent) and classic hallucinogens (18.0 per cent). One hundred new substances were reported for the first time in 2015, with no indication of a slowdown in the availability, type or number of substances (EMCDDA 2015b; EMCDDA and Europol 2016c; EMCDDA and Europol 2016d; UNODC 2016a).

The International Narcotics Control Board (INCB) Project ION (International Operations on NPS) promotes international cooperation among law enforcement agencies to prevent and combat the illicit trafficking of NPS. As part of its mandate to support governments in preventing the diversion of drug precursors and other substances used for the illicit manufacture of drugs, Project ION's Incident Communication System (IONICS) provides support to operational responses on NPS and facilitates intelligence sharing—including information on suspicious shipments, trafficking and the manufacture or production of NPS—among law enforcement agencies (UNODC 2016b).

While domestic manufacture is reported in some countries, NPS primarily originate in East and South Asia in countries recognised for their pharmaceutical and chemical industries. In 2014, 34.0 tonnes of synthetic NPS was seized globally, with North America, in particular the US, accounting for the greatest proportion of global seizures. Synthetic cannabinoids dominate the global NPS market, with 32.0 tonnes seized in 2014, of which 26.5 tonnes was seized in the US and 5.4 tonnes in Europe (mainly in Cyprus and Turkey). Seizures of synthetic cathinones have been steadily increasing, with 1.3 tonnes seized globally in 2014, triple the weight seized in 2013. Of the 1.3 tonnes seized in 2014, 692 kilograms was seized in the Russian Federation (UNODC 2016).



The total number of NPS seizures by World Customs Organization (WCO) agencies increased 2.9 per cent, from 2 468 in 2014 to 2 540 in 2015. The weight of NPS seized increased 15.6 per cent, from 3 574 kilograms in 2014 to 4 132 kilograms in 2015. North America accounted for the greatest proportion of both the number and weight of NPS seizures in 2015, accounting for 65.7 per cent of the number and 55.0 per cent of the weight (WCO 2016).

DOMESTIC TRENDS

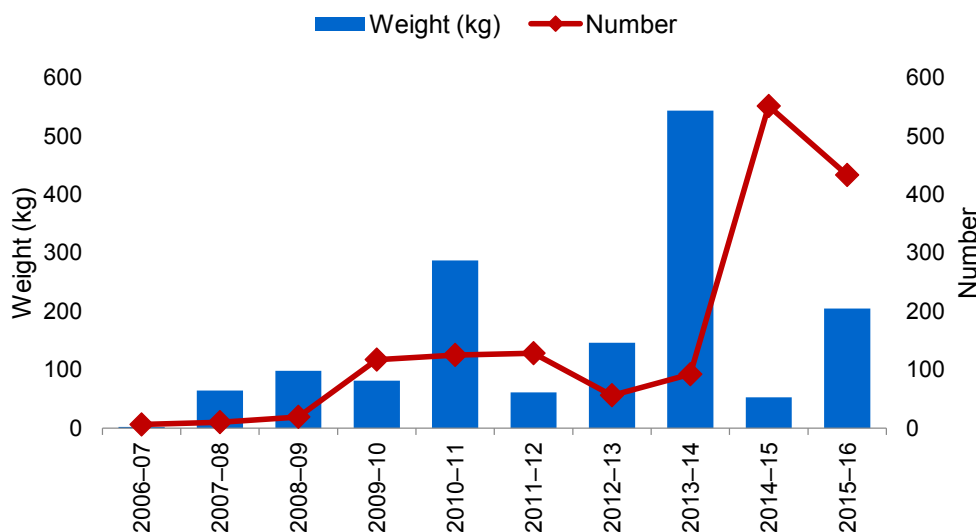
DRUG PROFILING

Although the breadth of new substances appearing on the 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.²⁷

The number of NPS seizures at the Australian border selected for further analysis decreased 21.4 per cent this reporting period, from 551 in 2014–15 to 433 in 2015–16, while the weight of analysed seizures increased 288.38 per cent, from 52.7 kilograms in 2014–15 to 204.7 kilograms in 2015–16 (see Figure 79).

FIGURE 79: Number and weight of seizures selected for further analysis and found to contain novel substances and drug analogues, 2006–07 to 2015–16²⁸ (Source: Australian Federal Police, Forensic Drug Intelligence)



²⁷ Other drug analogues and NPS include 2C-group substances and ketamine analogues.

²⁸ The data in Figure 79 refers only to seizures made by the AFP, examined by AFP crime scene teams, sampled and subsequently confirmed to contain a novel substance by the NMI. Seizure data does not represent all AFP seizures of NPS during these periods.



Among the many different compounds detected and reported since 2006–07, some have been more common than others in terms of the overall number of seizures and/or the weight of material seized. Since 2008–09, cathinone-type substances have accounted for the highest proportion of the number of seizures within this subset. In 2015–16, cathinone-type substances accounted for 33.3 per cent of the number of analysed seizures, followed by other (24.9 per cent), amphetamine-type substances (22.2 per cent), tryptamine-type substances (14.8 per cent) and synthetic cannabinoids (4.8 per cent). By weight, amphetamine-type substances accounted for 51.8 per cent of the weight of analysed seizures in 2015–16, followed by cathinone-type substances (24.6 per cent), tryptamine-type substances (17.4 per cent), synthetic cannabinoids (5.8 per cent) and other (0.4 per cent).

DOMESTIC MARKET INDICATORS

NPS use was included in the NDSHS for the first time in 2013. According to the survey, 1.2 per cent of the Australian population aged 14 years or older reported recent use of synthetic cannabinoids, with 0.4 per cent reporting use of other NPS (AIHW 2014).

According to a 2015 national study of regular ecstasy users, 39.0 per cent of respondents reported recent NPS use, a decrease from 40.0 per cent in 2014. Early findings from the 2016 study indicate this has decreased to 36.0 per cent. In the same study, the proportion of respondents reporting recent synthetic cannabinoid use decreased, from 7.0 per cent in 2014 to 6.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 4.0 per cent. The proportion of respondents reporting recent NPS use (excluding synthetic cannabinoids) decreased, from 36.0 per cent in 2014 to 35.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 34.0 per cent (Sindicich et al 2016; Stafford et al 2016).

PRICE

Law enforcement price data for NPS is limited. Nationally, the price range for 3 grams of synthetic cannabinoids ranged between \$30 and \$95 in 2015–16, compared with a price range between \$50 and \$95 in 2014–15.

OTHER & UNKNOWN NOT ELSEWHERE CLASSIFIED DRUGS

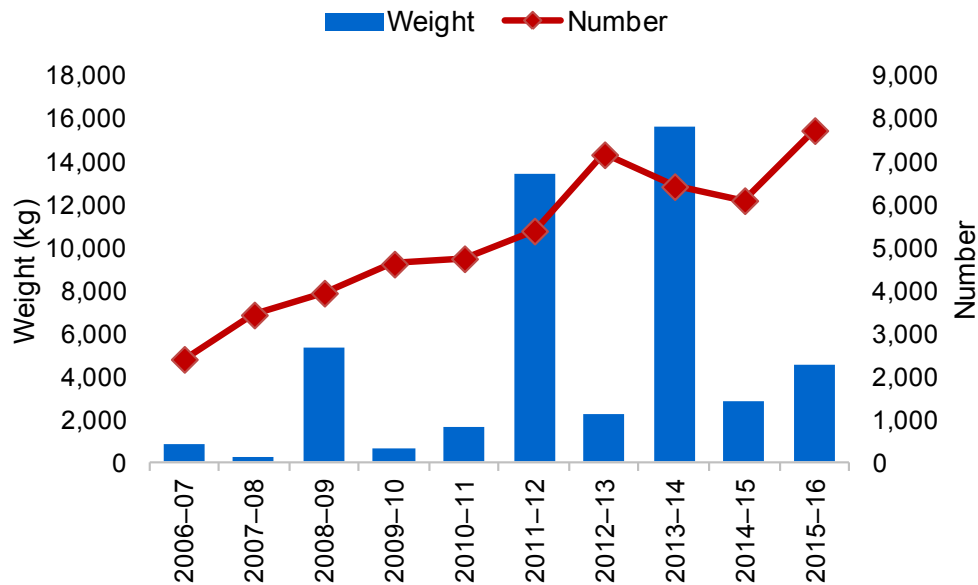
Data for national other and unknown not elsewhere classified (NEC) drug seizures and arrests capture those drugs and substances outside the specific drug categories contained in *the Illicit Drug Data Report*. This category covers a range of substances including precursors, anaesthetics, NPS, pharmaceuticals 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 increased 26.8 per cent this reporting period, from 6 107 in 2014–15 to a record 7 741 in 2015–16. The weight of other and unknown NEC drugs seized nationally increased 59.9 per cent this reporting period, from 2 861.9 kilograms in 2014–15 to 4 576.5 kilograms in 2015–16 (see Figure 80).



FIGURE 80: National other and unknown not elsewhere classified drug seizures, by number and weight, 2006–07 to 2015–16



Tasmania reported the greatest percentage increase (189.8 per cent) in the number of other and unknown NEC drug seizures in 2015–16, while South Australia reported the greatest percentage increase in the weight of other and unknown NEC drugs seized (663.5 per cent). New South Wales accounts for the greatest proportion of the number of national other and unknown NEC drug seizures in 2015–16 (43.4 per cent), while Victoria accounts for the greatest proportion of the weight of other and unknown NEC drugs seized nationally (44.4 per cent; see Table 36).

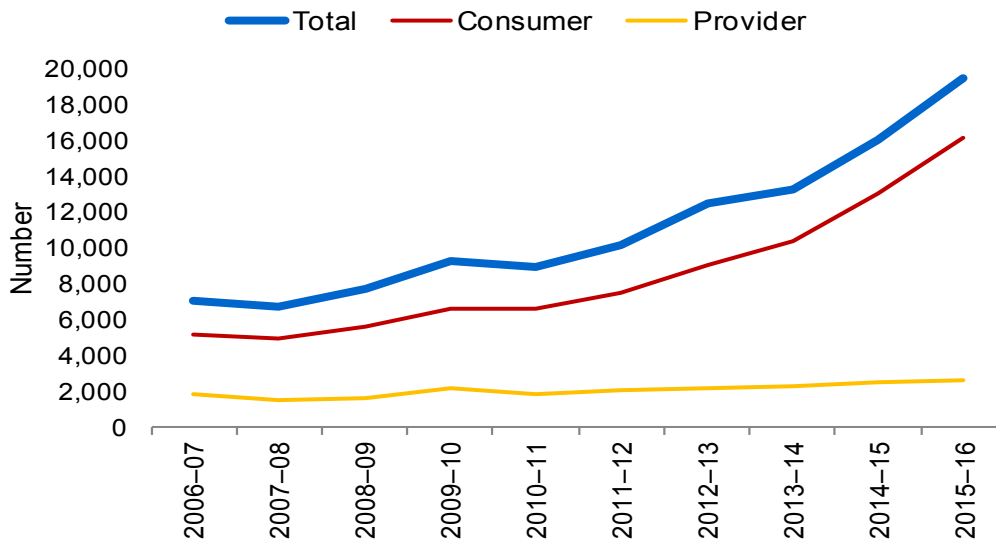
TABLE 36: Number, weight and percentage change of national other and unknown not elsewhere classified drug seizures, 2014–15 and 2015–16

State/Territory ^a	Number			Weight (grams)		
	2014–15	2015–16	% change	2014–15	2015–16	% change
New South Wales ^b	1 755	3 364	91.7	1 397 496	1 591 373	13.9
Victoria	882	1 206	36.7	748 548	2 029 974	171.2
Queensland	1 139	941	-17.4	358 547	89 685	-75.0
South Australia	56	40	-28.6	20 978	160 168	663.5
Western Australia	1 967	1 810	-8.0	154 487	539 426	249.2
Tasmania	59	171	189.8	998	3 578	258.5
Northern Territory	186	144	-22.6	149 428	161 570	8.1
Australian Capital Territory	63	65	3.2	31 471	800	-97.5
Total	6 107	7 741	26.8	2 861 953	4 576 574	59.9

- a. Includes seizures by state and territory police and Australian Federal Police for which a valid seizure weight was recorded.
- b. In 2015–16, the New South Wales Police Force changed the way in which pharmaceutical drugs are coded. This reporting period only seizures identified as opioids appear in other opioid seizure data, with seizures of pharmaceutical drugs (not further described) reflected in other and unknown not elsewhere classified drug seizure data. This change has had a significant impact on the number of other and unknown not elsewhere classified drug seizures reported in New South Wales and resulted in a considerable increase in the number of other and unknown not elsewhere classified drug seizures this reporting period.

The number of national other and unknown NEC drug arrests increased 21.1 per cent this reporting period, from 16 090 in 2014–15 to a record 19 491 in 2015–16. Consumer arrests continue to account for the greatest proportion of arrests, comprising 82.8 per cent of national other and unknown NEC drug arrests in 2015–16 (see Figure 81). However, the Northern Territory reported more other and unknown NEC drug provider arrests than consumer arrests in 2015–16.

FIGURE 81: Number of national other and unknown not elsewhere classified drug arrests, by number and weight, 2006–07 to 2015–16



With the exception of the Australian Capital Territory, all states and territories reported increases in the number of other and unknown NEC drug arrests in 2015–16. The Northern Territory reported the greatest percentage increase in the number of other and unknown NEC drug arrests this reporting period (490.0 per cent). Queensland continues to account for the greatest proportion of national other and unknown NEC arrests (30.7 per cent this reporting period), followed by Western Australia (27.9 per cent) and Victoria (24.5 per cent). Combined, these three states account for 83.1 per cent of national other and unknown NEC drug arrests in 2015–16 (see Table 37).

TABLE 37: Number and percentage change of national other and unknown not elsewhere classified drug arrests, 2014–15 and 2015–16

State/Territory ^a	Arrests		
	2014–15	2015–16	% change
New South Wales	1 460	2 385	63.4
Victoria	4 207	4 783	13.7
Queensland	5 348	5 988	12.0
South Australia ^b	269	381	41.6
Western Australia	4 465	5 435	21.7
Tasmania	307	395	28.7
Northern Territory	20	118	490.0
Australian Capital Territory	14	6	-57.1
Total	16 090	19 491	21.1

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

b. For the first time, offender data provided by South Australia Police in 2015–16 included data for offenders participating in its Drug Diversion Program (excluding diversion records not related to a drug seizure).



NATIONAL IMPACT

Surveys of regular injecting drug user and regular ecstasy user populations indicate the proportion of respondents reporting steroid use at least once in their lifetime remains stable, with reported recent steroid use within the regular ecstasy user population also stable.

The number of PIED detections at the Australian border decreased in 2015–16 to 6 877, of which 80.0 per cent were steroids and 20.0 per cent hormones. The international mail stream was the primary importation method by number for detections of PIEDs at the Australian border this reporting period. In 2015–16, 64 countries were identified as embarkation points for PIED detections at the Australian border. The UK was the prominent embarkation point by number for PIED detections at the Australian border this reporting period.

While the number and weight of national steroid seizures decreased in 2015–16, the 509 seizures weighing 68.8 kilograms are the second highest figures on record. The number of national steroid arrests continued to increase this reporting period to a record 1 297. Consumer arrests continue to account for the greatest proportion of national steroid arrests, accounting for 81.0 per cent of arrests in 2015–16.

Surveys of regular injecting drug user and regular ecstasy user populations indicate the proportion of respondents reporting hallucinogen use at least once in their lifetime and reported recent use remains stable. LSD is the main type of tryptamine used within these user populations.

The number of detections of tryptamines at the Australian border decreased in 2015–16. Of the 760 detections this reporting period, the majority were LSD (55.0 per cent), followed by psilocybin (25.0 per cent). All but one of the 760 tryptamine detections at the Australian border this reporting period were in the international mail stream. Canada was the primary embarkation point for tryptamine detections at the Australian border in 2015–16.

While the number of national hallucinogen seizures decreased in 2015–16, the 463 seizures this reporting period is the second highest reported in the last decade. The weight of hallucinogens seized nationally increased to a record 73.7 kilograms in 2015–16. The number of national hallucinogen arrests increased to a record 915 in 2015–16. Consumer arrests continue to account for the greatest proportion of national hallucinogen arrests, comprising 79.2 per cent of arrests in 2015–16.

Surveys of a regular ecstasy user population indicate the proportion of respondents reporting the use of GHB and ketamine at least once in their lifetime remains relatively stable. Within this user population there were increases in reported recent use, most notably of ketamine, which increased from 15.0 per cent in 2015 to 26.0 per cent in 2016. Ketamine is the main type of anaesthetic used within this user population.

The number of detections of anaesthetics at the Australian border increased in 2015–16. Of the record 586 detections this reporting period, the majority were ketamine (83.1 per cent), followed by GBL (15.0 per cent) and GHB (1.9 per cent). The international mail stream was the primary importation method by number for detections of anaesthetics at the Australian border this reporting period. The UK was the primary embarkation point for ketamine detections at the Australian border in 2015 in 2015–16, while China was the prominent embarkation point for GHB and GBL detections this reporting period.



Surveys of a regular injecting drug user population indicate decreases in the proportion of respondents reporting the recent use of licit and illicit pharmaceuticals. The reported recent use of buprenorphine remained stable, while the reported recent use of benzodiazepines, methadone, morphine and oxycodone continued to decrease. According to a national study of police detainees, the self-reported use of benzodiazepines increased in 2015–16 and is the highest figure reported in the last decade, while the proportion testing positive for benzodiazepines remains relatively stable. Within this user population, the self-reported recent use of any opiate and the proportion of detainees testing positive for any opiate remained stable.

Wastewater analysis conducted in the latter half of 2016 as part of the NWDMP measured the presence of 13 substances across 51 sites nationally. Oxycodone consumption in numerous regional sites was well above capital city site levels, with the national regional average almost double the national capital and national average.

The number of benzodiazepine and opioid detections at the Australian border decreased in 2015–16, with oxycodone and codeine the most common opioid pharmaceuticals detected this reporting period. The international mail stream was the primary importation stream by number for benzodiazepine and opioid detections at the Australian border this reporting period. Both the number and weight of national other opioid seizures decreased in 2015–16.

Surveys of a regular ecstasy drug user population indicate a continued decrease in recent NPS use, with decreases also reported in the recent use of an NPS (excluding synthetic cannabinoids) and recent synthetic cannabinoid use.

Common NPS available in the Australian illicit drug market in 2015–16 included amphetamine-type substances, cathinone-type substances, synthetic cannabinoids and tryptamine-type substances. While the number of analysed NPS border seizures decreased in 2015–16, the weight increased. Since 2008–09, cathinone-type substances have continued to account for the greatest proportion of the number of seizures within this subset. In 2015–16, amphetamine-type substances accounted for the greatest proportion of the weight of analysed NPS border seizures.

The number of national other and unknown NEC drug seizures increased to a record 7 741 in 2015–16. While the weight of related drugs seized increased, it is the fourth highest weight reported in the last decade. The number of national other and unknown NEC drug arrests increased to a record 19 491 in 2015–16. Consumer arrests continue to account for the greatest proportion of related national other and unknown NEC drug arrests, accounting for 82.8 per cent of arrests in 2015–16.



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