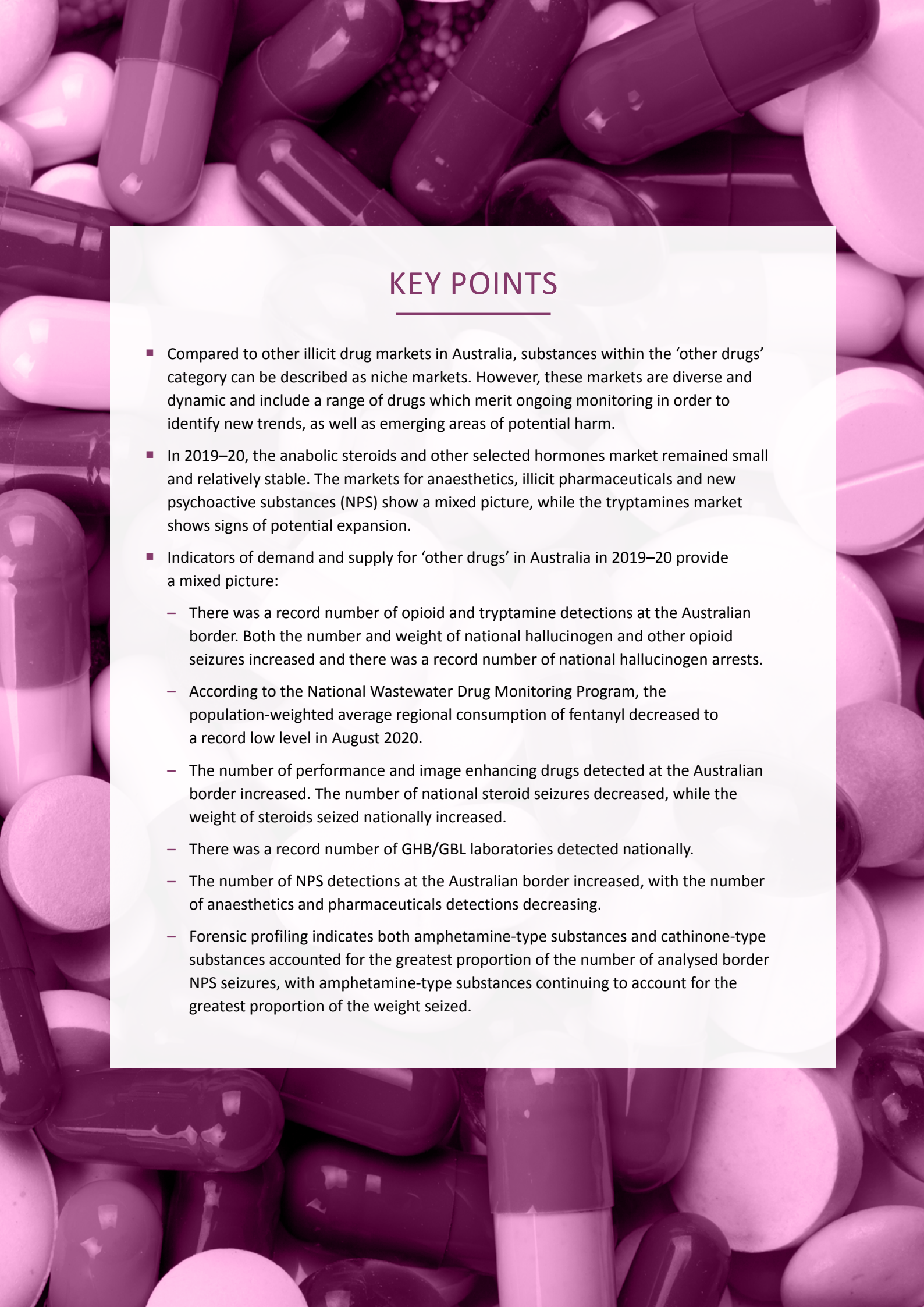
OTHER DRUGS



KEY POINTS

- Compared to other illicit drug markets in Australia, substances within the 'other drugs' category can be described as niche markets. However, these markets are diverse and dynamic and include a range of drugs which merit ongoing monitoring in order to identify new trends, as well as emerging areas of potential harm.
- In 2019–20, the anabolic steroids and other selected hormones market remained small and relatively stable. The markets for anaesthetics, illicit pharmaceuticals and new psychoactive substances (NPS) show a mixed picture, while the tryptamines market shows signs of potential expansion.
- Indicators of demand and supply for 'other drugs' in Australia in 2019–20 provide a mixed picture:
  - There was a record number of opioid and tryptamine detections at the Australian border. Both the number and weight of national hallucinogen and other opioid seizures increased and there was a record number of national hallucinogen arrests.
  - According to the National Wastewater Drug Monitoring Program, the population-weighted average regional consumption of fentanyl decreased to a record low level in August 2020.
  - The number of performance and image enhancing drugs detected at the Australian border increased. The number of national steroid seizures decreased, while the weight of steroids seized nationally increased.
  - There was a record number of GHB/GBL laboratories detected nationally.
  - The number of NPS detections at the Australian border increased, with the number of anaesthetics and pharmaceuticals detections decreasing.
  - Forensic profiling indicates both amphetamine-type substances and cathinone-type substances accounted for the greatest proportion of the number of analysed border NPS seizures, with amphetamine-type substances continuing to account for the greatest proportion of the weight seized.

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)[62]
- 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 (ADF 2020a).

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 (DEA 2020; Larance et al. 2005).

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 2020b; Larance et al. 2005).

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

INTERNATIONAL TRENDS

Established in 2008, Operation Pangea is an international collaboration coordinated by the International Criminal Police Organisation (INTERPOL) in a global effort to target the trafficking of counterfeit medicines (including anabolic steroids). Operation Pangea XIII was conducted in March 2020 and involved 91 countries worldwide. A primary goal of this operation was to respond to increased levels of criminal involvement in these markets following the high demand for medical products and equipment driven by the COVID-19 outbreak. Operation Pangea XIII resulted in 121 arrests, USD 14 million in potentially dangerous pharmaceuticals seized, 4.4 million units of illicit pharmaceuticals seized (including anabolic steroids), and 37 organized crime groups dismantled (INTERPOL 2020).

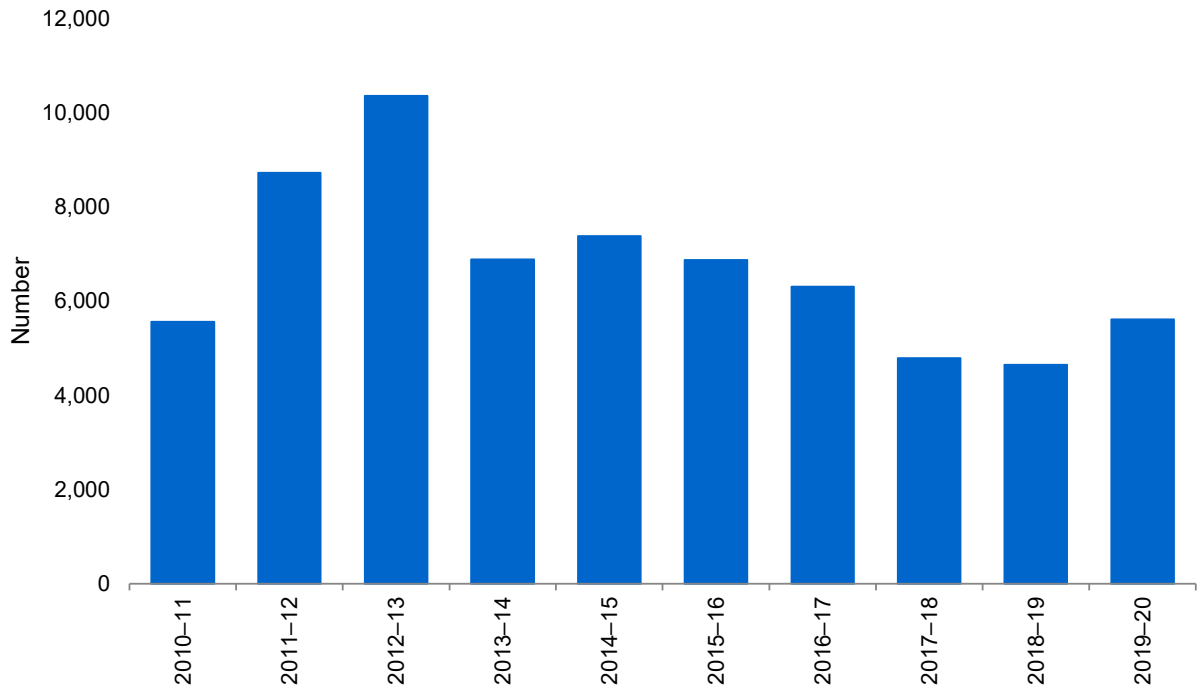
According to the World Customs Organization (WCO), the number of 'metabolic agents'[63] seizures increased 82 per cent to 2,630 in 2019—making it the most common medical product seized globally that year. Metabolic agents were most commonly seized in the United States (US) in 2019 (2,148 seizures). The 150,201.5 kilograms of metabolic agents seized globally in 2019 was the second highest weight seized on record and accounted for 28 per cent of the total weight of medical products seized (WCO 2020).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of PIEDs detected at the Australian border displays a relatively stable trend over the last decade, increasing 1 per cent from 5,561 in 2010–11 to 5,614 in 2019–20. The number of detections increased 21 per cent this reporting period from 4,643 in 2018–19 (see Figure 24).[64]

FIGURE 24: Number of performance and image enhancing drug detections at the Australian border 2010–11 to 2019–20 (Source: Department of Home Affairs)



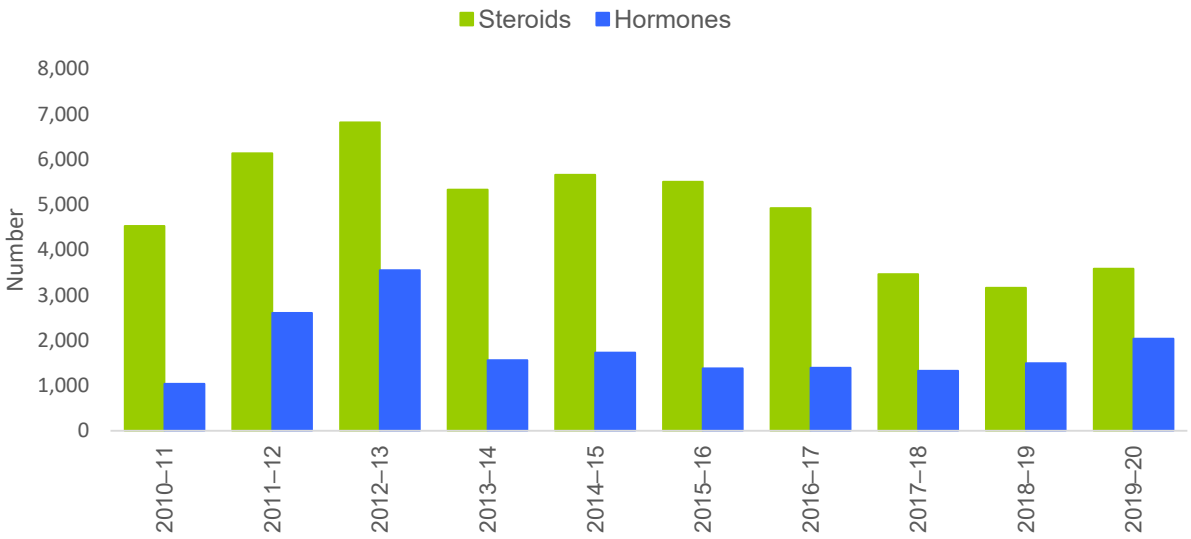
63 Metabolic agents include medical products such as steroids and antidiabetic.

64 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.

While steroid detections continue to account for the greatest proportion of the number of PIED detections, the proportion decreased over the last decade, from 81 per cent in 2010–11 to 64 per cent in 2019–20 (see Figure 25).

- The number of steroid detections increased 14 per cent this reporting period, from 3,155 in 2018–19 to 3,584 in 2019–20.
- The number of hormone detections increased 36 per cent this reporting period, from 1,488 in 2018–19 to 2,030 in 2019–20.
- The number of clenbuterol detections decreased 25 per cent this reporting period, from 203 in 2018–19 to 152 in 2019–20.

FIGURE 25: Number of performance and image enhancing drug detections, by category, at the Australian border 2010–11 to 2019–20 (Source: Department of Home Affairs)



IMPORTATION METHODS

In 2019–20, detections of PIEDs at the Australian border occurred in the air cargo, air passenger/crew and international mail streams. International mail accounted for 80 per cent of the number of PIED detections in 2019–20, followed by air cargo (18 per cent), and air passenger/crew (2 per cent).

In 2019–20, detections of clenbuterol at the Australian border occurred in the air cargo, air passenger/crew and international mail streams. International mail accounted for 89 per cent of the number of clenbuterol detections in 2019–20, followed by air cargo (7 per cent) and air passenger/crew (4 per cent).

EMBARKATION POINTS

In 2019–20, 50 countries were identified as embarkation points for PIEDs detected at the Australian border, compared with 56 countries in 2018–19. By number, China (including Hong Kong) was the primary embarkation point for PIED detections in 2019–20. Other key embarkation points by number this reporting period include the US, India, the United Kingdom (UK), the Netherlands, Singapore, Switzerland, Germany, Thailand and the Philippines.

In 2019–20, 26 countries were identified as embarkation points for clenbuterol detected at the Australian border, compared with 22 countries in 2018–19.

DOMESTIC MARKET INDICATORS

No single dataset provides a comprehensive picture of illicit drugs, or the Australian illicit drug market. Each has benefits and limitations, and it is only through the layering of multiple data that we are able to enhance our understanding of the extent of the supply and demand trends in Australia's illicit drug markets.

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 NDSHS data:

- 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 over the last decade, from <1 per cent in 2010 to 1 per cent in 2016 and 2019.
- The proportion of the Australian population aged 14 years or older who reported having recently[65] used steroids for non-medical purposes remained stable over the last decade at <1 per cent (AIHW 2020).

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 this national study, the reported recent use[66] of non-prescribed steroids has remained consistently low since monitoring commenced in 2010, ranging between 1 per cent and 3 per cent (Peacock et al. 2021).

The Australian Needle and Syringe Program Survey (ANSPS) collects self-report information and capillary blood samples[67] annually to monitor blood borne viral infections and associated risk behaviour among individuals who inject drugs. According to ANSPS data, the proportion of respondents reporting PIEDs as the drug last injected increased over the last decade, from 2 per cent in 2010 to 4 per cent in 2018 and 2019 (Heard et al. 2020).

PRICE

National law enforcement data on the price of PIEDs is limited. Queensland was the only jurisdiction to provide price data for PIEDs in 2019–20. The price for a single 10 millilitre vial of testosterone enanthate decreased over the last decade, from $230 in 2010–11 (reported in Queensland) to $80 in 2019–20. The price ranged between $100 and $230 in 2018–19 (reported in Victoria and Queensland).

The price for a single 10 millilitre vial of trenbolone acetate in Queensland was $80 in 2019–20, a decrease compared to a price range from $150 to $240 in 2018–19 (reported in Queensland and Western Australia). The price for ten 10 millilitre vials of trenbolone acetate in Queensland in 2019–20 was $650, compared to a price range of between $340 and $1,400 in 2018–19 (reported in Queensland and Western Australia). Data for trenbolone acetate is not available for 2010–11.

Queensland provided price data for several other types and quantities of PIEDs this reporting period—see the *Statistics* chapter.

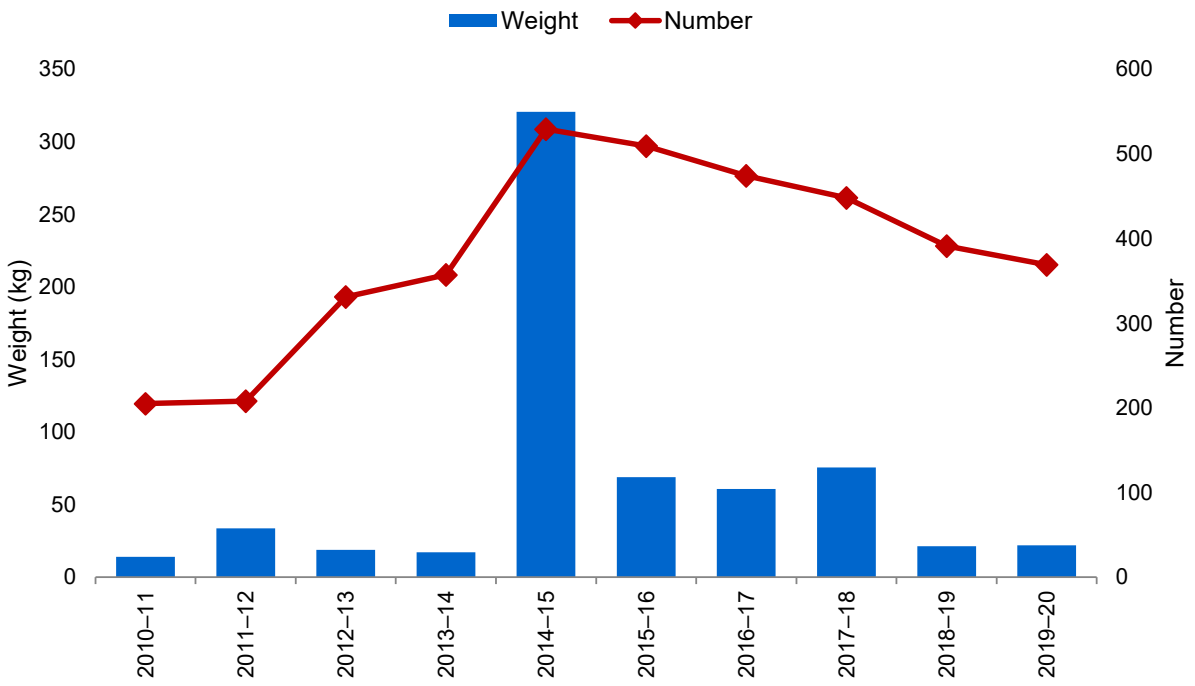
65 In the NDSHS, recent use refers to reported use in the 12 months preceding the survey.
66 In both the IDRS and EDRS studies, recent use refers to reported use in the six months preceding interview.
67 Individuals participating in the survey are invited to provide a blood sample for HIV and HCV antibody testing.

SEIZURES

The number of national steroid seizures increased 80 per cent over the last decade, from 205 in 2010–11 to 369 in 2019–20. The number of steroid seizures increased to a record number in 2014–15 before decreasing in subsequent reporting periods. This reporting period the number of seizures decreased 6 per cent, from 391 in 2018–19.

The weight of steroids seized nationally increased 58 per cent over the last decade, from 13.9 kilograms in 2010–11 to 21.9 kilograms in 2019–20 (with a record 320.4 kilograms seized in 2014–15). The weight of steroids seized nationally increased 3 per cent this reporting period, from 21.2 kilograms in 2018–19 (see Figure 26).

FIGURE 26: National steroid seizures, by number and weight, 2010–11 to 2019–20



The Australian Capital Territory reported the greatest percentage increase in the number and weight of steroid seizures in 2019–20. This reporting period New South Wales accounted for the greatest proportion of both the number (51 per cent) and weight (64 per cent) of steroids seized nationally (see Table 15).

TABLE 15: Number, weight and percentage change of national steroid seizures, 2018–19 and 2019–20

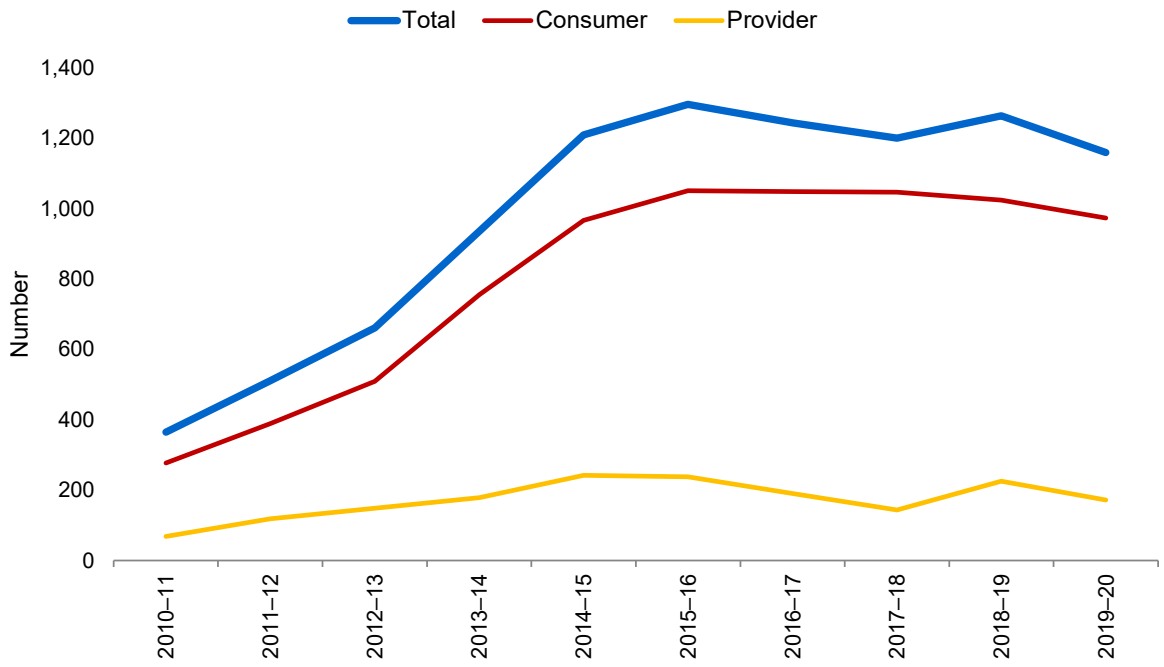
	Number			Weight (grams)		
State/Territory[a]	2018–19	2019–20	% change	2018–19	2019–20	% change
New South Wales	227	188	-17.2	9,876	14,024	42.0
Victoria	5	2	-60.0	5,206	101	-98.1
Queensland	68	52	-23.5	3,505	4,899	39.8
South Australia	0	1	–	0	2	–
Western Australia	29	52	79.3	582	1,646	182.8
Tasmania	0	0	–	0	0	–
Northern Territory	32	12	-62.5	1,756	191	-89.1
Australian Capital Territory	30	62	106.7	367	1,114	203.5
Total	**391**	**369**	**-5.6**	**21,292**	**21,977**	**3.2**

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

ARRESTS

The number of national steroid arrests increased 218 per cent over the last decade, from 365 in 2010–11 to 1,160 in 2019–20. The number of steroid arrests decreased 8 per cent this reporting period, from 1,264 in 2018–19. Consumer arrests continue to account for the greatest proportion of arrests, accounting for 84 per cent of national steroid arrests in 2019–20 (see Figure 27).

FIGURE 27: Number of national steroid arrests, 2010–11 to 2019–20



South Australia reported the greatest percentage increase in the number of arrests in 2019–20. Queensland continued to account for the greatest proportion of national steroid arrests this reporting period (51 per cent; see Table 16).

TABLE 16: Number and percentage change of national steroid arrests, 2018–19 and 2019–20

	Arrests		
State/Territory[a]	2018–19	2019–20	% change
New South Wales	181	187	3.3
Victoria	153	164	7.2
Queensland	641	596	-7.0
South Australia	3	11	266.7
Western Australia	247	184	-25.5
Tasmania	15	7	-53.3
Northern Territory	20	5	-75.0
Australian Capital Territory	4	6	50.0
Total	**1,264**	**1,160**	**-8.2**

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

TRYPTAMINES

MAIN FORMS

Tryptamines are hallucinogenic substances which act upon the central nervous system, producing altered states of perception, sensation, cognition and consciousness, and are 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 2020c; EMCDDA 2018; 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[68]), 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 2020c; 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 2018; UNODC 2016).

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

INTERNATIONAL TRENDS

The US accounted for the greatest proportion of global hallucinogenic seizures in 2018, seizing 52 kilograms of LSD, 390.4 kilograms of dimethyltryptamine (DMT), and 493.1 kilograms of non-specified hallucinogens (UNODC 2020c).

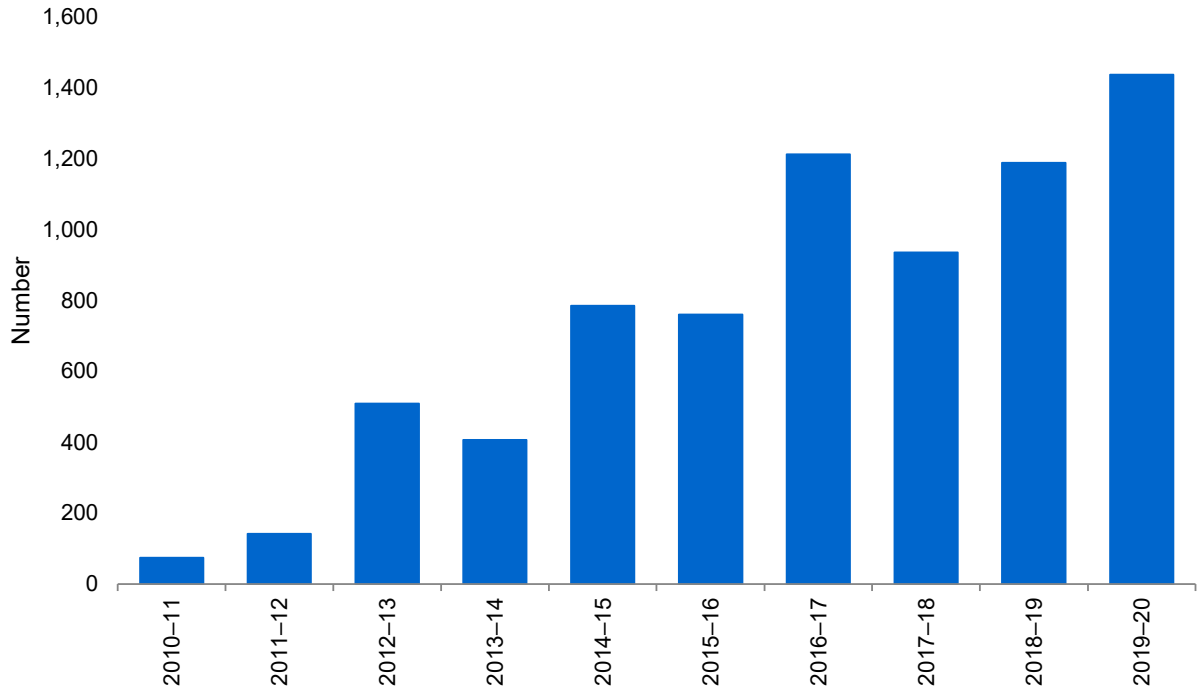
While WCO data for the specific number and weight of LSD seizures were not reported, the WCO noted a 51 per cent decrease in the number of LSD seizures in 2019. The Airport Communication Programme (AIRCOP)—a multi-agency program implemented by the United Nations Office on Drugs and Crime (UNODC) in partnership with INTERPOL and the WCO—aims to destabilise criminal networks by strengthening interception and detection capabilities. The AIRCOP seized 75.0 kilograms of LSD in 2019 (WCO 2020).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of tryptamine detections at the Australian border displays an increasing trend over the last decade, increasing 1,815 per cent from 75 in 2010–11 to a record 1,436 in 2019–20. The number of detections increased 21 per cent this reporting period from 1,188 in 2018–19 (see Figure 28).

FIGURE 28: Number of tryptamine detections at the Australian border 2010–11 to 2019–20 (Source: Department of Home Affairs)



Similar to 2018–19, the majority of tryptamine detections in 2019–20 were LSD.

- LSD accounted for 3 per cent of the number of tryptamine detections in 2010–11, increasing to 69 per cent in 2019–20; while psilocybin accounted for 97 per cent of the number of tryptamine detections in 2010–11, decreasing to 26 per cent in 2019–20. Other tryptamines increased from zero detections in 2010–11 to accounting for 4 per cent of tryptamine detections in 2019–20.
- Of the 1,436 detections in 2019–20, 996 were LSD, a 2 per cent increase from the 974 detections in 2018–19. Over the last decade the number of LSD detections increased 49,700 per cent, from 2 in 2010–11.

- Of the 1,436 detections in 2019–20, 380 were psilocybin, a 233 per cent increase from the 114 detections in 2018–19. Over the last decade the number of psilocybin detections increased 421 per cent, from 73 detections in 2010–11.
- The remaining 60 detections in 2019–20 were reported as other, a 40 per cent decrease from the 100 detections in 2018–19. Over the last decade the number of other tryptamine detections increased from zero in 2010–11.

IMPORTATION METHODS

In 2019–20, detections of tryptamines occurred in the air cargo, air passenger/crew and international mail streams. By number, international mail accounted for the greatest proportion of tryptamine detections (99 per cent), followed by air cargo (<1 per cent) and air passenger/crew (<1 per cent).

In 2019–20, detections of LSD occurred in the air cargo, air passenger/crew and international mail streams. By number, international mail accounted for the greatest proportion of LSD detections (99 per cent), followed by air passenger/crew (<1 per cent) and air cargo (<1 per cent).

In 2019–20, detections of psilocybin occurred in the international mail and air cargo streams. By number, international mail accounted for the greatest proportion of psilocybin detections (99 per cent), followed by air cargo (1 per cent).

EMBARKATION POINTS

By number, the Netherlands was the primary embarkation point for tryptamine detections at the Australian border in 2019–20. Other key embarkation points by number this reporting period include Switzerland, Taiwan, France, the UK, Canada, the US, Germany, China (including Hong Kong) and Spain.

By number, the Netherlands was the primary embarkation point for psilocybin detections at the Australian border in 2019–20. Other key embarkation points by number this reporting period include Switzerland, France, the UK, Canada, the US, Germany, Spain, Luxembourg and Latvia.

DOMESTIC MARKET INDICATORS

According to NDSHS data:

- The proportion of the Australian population aged 14 years or older who reported having used hallucinogens at least once in their lifetime increased over the last decade, from 9 per cent in 2010 to 10 per cent in 2019. In 2016 this proportion was 9 per cent.
- The proportion of the Australian population aged 14 years or older who reported having recently used hallucinogens increased over the last decade, from 1 per cent in 2010 to 2 per cent in 2019. In 2016 this proportion was 1 per cent (AIHW 2020).

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

- The proportion of respondents reporting recent LSD use increased over the last decade, from 46 per cent in 2011 to 49 per cent in 2020. In 2019 this proportion was 47 per cent.
- The reported median number of days of LSD use in the six months preceding interview remained stable at 3 days over the last decade, with the exception of 2014 and 2015 where the median number of days of use was 2.

- The proportion of respondents reporting the recent use of hallucinogenic mushrooms remained relatively stable over the last decade, increasing from 29 per cent in 2011 to 30 per cent in 2020. In 2019 this proportion was 27 per cent.
- The proportion of respondents reporting the recent use of DMT remained stable at 13 per cent in 2011 and 2020, peaking at 18 per cent in 2017 and 2018. In 2019 this proportion was 16 per cent.
- The reported median number of days of DMT use in the six months preceding interview remained stable at 2 days in 2019 and 2020 (Peacock et al. 2019a; Peacock et al. 2020; Sindicich and Burns 2012).

PRICE

Nationally, the price range per tab of LSD decreased over the last decade, from between $25 and $50 in 2010–11 to between $15 and $35 in 2019–20. The price reported in 2018–19 ranged from $15 to $50. The national median price per tab of LSD decreased this reporting period, from $30 in 2018–19 to $27.50 in 2019–20.

AVAILABILITY

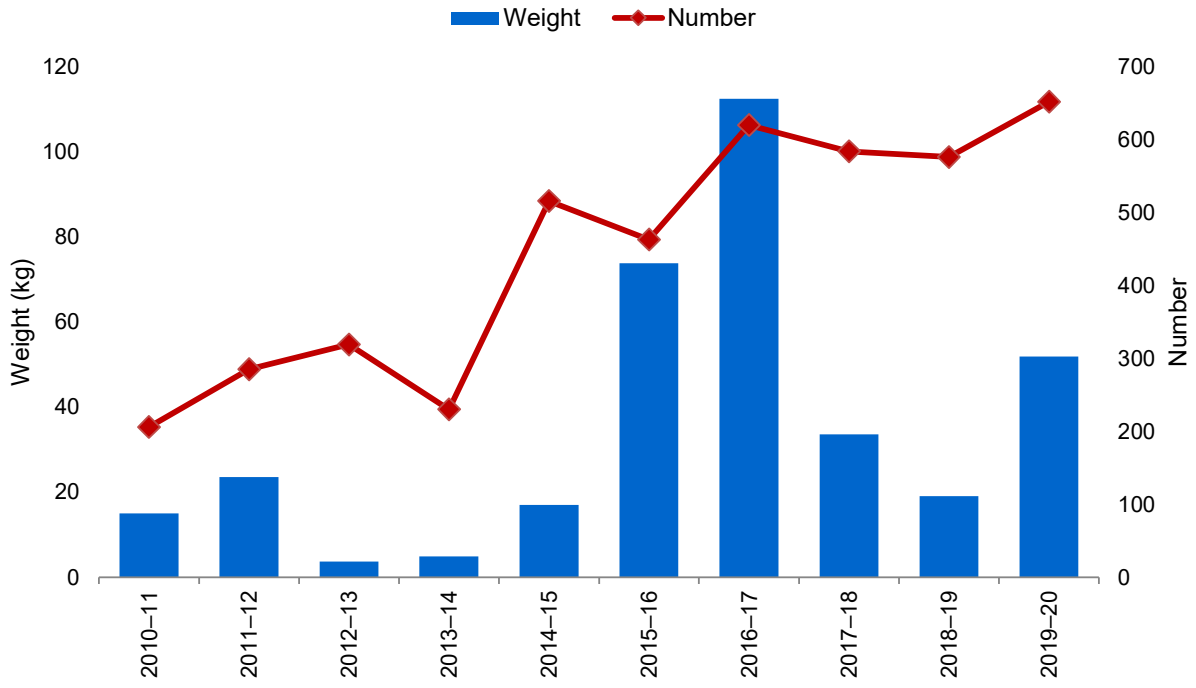
A national study of people who regularly use ecstasy and other stimulants reported that over the last decade the proportion of respondents reporting LSD as 'easy' or 'very easy' to obtain decreased, from 73 per cent in 2011 to 61 per cent in 2020. This proportion was 57 per cent in 2019 (Peacock et al. 2020).

SEIZURES

The number of national hallucinogen seizures fluctuated over the last decade, increasing 217 per cent from 206 in 2010–11 to a record 652 in 2019–20. This reporting period the number of national hallucinogen seizures increased 13 per cent from 576 in 2018–19.

Over the last decade, the weight of hallucinogens seized nationally increased 245 per cent, from 15.0 kilograms in 2010–11 to 51.8 kilograms in 2019–20. This reporting period the weight of hallucinogens seized nationally increased 171 per cent from 19.1 kilograms in 2018–19 (see Figure 29).

FIGURE 29: National hallucinogen seizures, by number and weight, 2010–11 to 2019–20



Although starting from a small base, South Australia reported the greatest percentage increase in the number of hallucinogen seizures in 2019–20, while Tasmania reported the greatest percentage increase in the weight of hallucinogens seized. This reporting period New South Wales accounted for the greatest proportion of the number of national hallucinogen seizures (53 per cent), while Victoria accounted for the greatest proportion of the weight of hallucinogens seized nationally (56 per cent; see Table 17).

TABLE 17: Number, weight and percentage change of national hallucinogen seizures 2018–19 and 2019–20

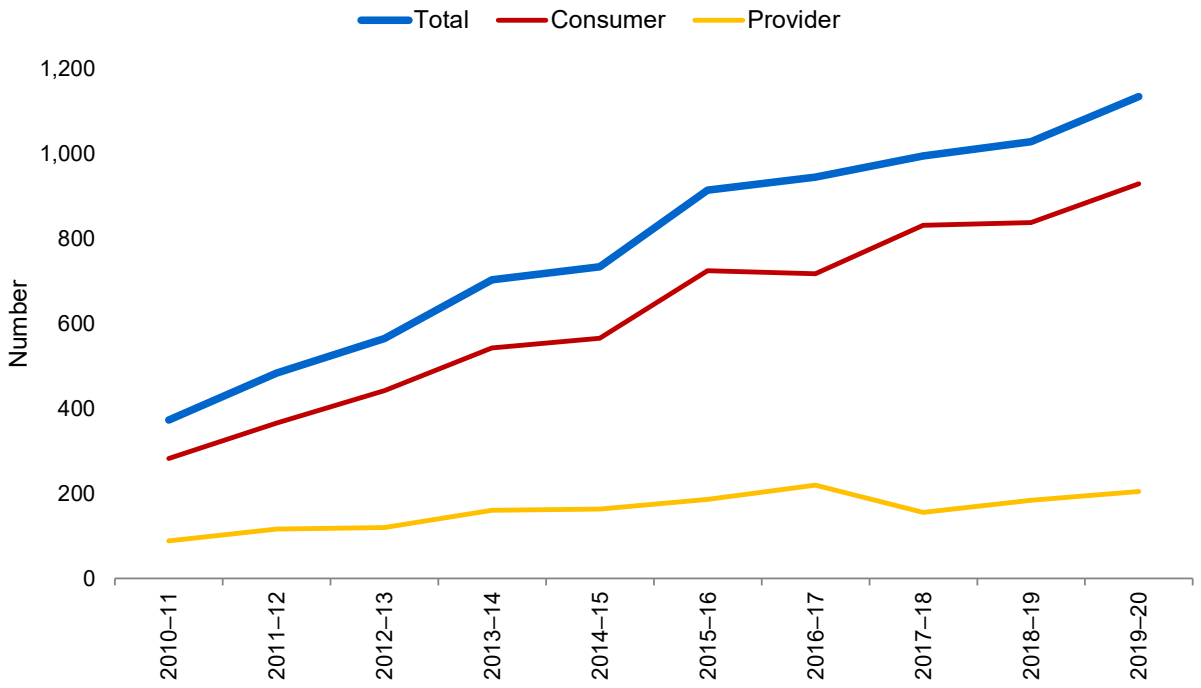
	Number			Weight (grams)		
State/Territory[a]	2018–19	2019–20	% change	2018–19	2019–20	% change
New South Wales	364	342	-6.0	5,755	6,919	20.2
Victoria	77	101	31.2	7,959	29,064	265.2
Queensland	34	60	76.5	3,316	6,171	86.1
South Australia	3	6	100.0	23	12	-47.8
Western Australia	60	109	81.7	870	8,625	891.4
Tasmania	8	15	87.5	96	1,085	1,030.2
Northern Territory	8	10	25.0	8	3	-62.5
Australian Capital Territory	22	9	-59.1	1,088	13	-98.8
Total	**576**	**652**	**13.2**	**19,115**	**51,892**	**171.5**

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

ARRESTS

The number of national hallucinogen arrests increased 204 per cent over the last decade, from 373 in 2010–11 to a record 1,135 in 2019–20. The number of national hallucinogen arrests increased 10 per cent this reporting period, from 1,029 in 2018–19. Consumer arrests accounted for the greatest proportion of arrests, accounting for 82 per cent of national hallucinogen arrests in 2019–20 (see Figure 30).

FIGURE 30: Number of national hallucinogen arrests, 2010–11 to 2019–20



Victoria reported the greatest percentage increase in the number of hallucinogens arrests this reporting period. Queensland accounted for the greatest proportion of national hallucinogens arrests in 2019–20 (43 per cent; see Table 18).

TABLE 18: Number and percentage change of national hallucinogen arrests, 2018–19 and 2019–20

	Arrests		
State/Territory[a]	2018–19	2019–20	% change
New South Wales	237	189	-20.3
Victoria	158	202	27.8
Queensland	389	483	24.2
South Australia	21	19	-9.5
Western Australia	193	221	14.5
Tasmania	16	8	-50.0
Northern Territory	6	4	-33.3
Australian Capital Territory	9	9	0.0
Total	**1,029**	**1,135**	**10.3**

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 2020d; ADF 2020e; WHO 2014).

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 2020d; DrugWise 2017a; 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 2020e; DrugWise 2017b; UNODC 2016; WHO 2014).

INTERNATIONAL TRENDS

The weight of 'ketamine and phencyclidine-type substances' seized globally decreased between 2017 and 2018. Despite this, during the 2014–18 period, ketamine was the second most dominant synthetic NPS seized globally (UNODC 2020a).

In 2018, 5,801.7 kilograms and 33.2 litres of ketamine and phencyclidine-type substances was seized globally. Myanmar accounted for the greatest proportion of this, with 2,360.2 kilograms seized. This is a decrease from 2017, when 10,804.9 kilograms and 870.6 litres was seized, with China accounting for 7,292.6 kilograms (UNODC 2020b).

The weight of ketamine seized in South-East Asia has increased significantly since 2015, primarily driven by ketamine manufacturing and trafficking in and through Myanmar. In 2019, at least four tonnes of ketamine was seized in South-East Asia, representing a 14-fold increase compared to 2014 (UNODC 2020c).

According to the WCO, the number of seizures of ketamine and phencyclidine-type substances within the NPS category increased 312 per cent in 2019, with the weight seized also increasing (specific figures are not available; WCO 2020).

The WCO reported a 40 per cent decrease in the number of GBL seizures between 2018 and 2019. In contrast, the weight seized during the same period increased by 149 per cent. GBL was the eighth most seized substance by number and the third by weight within the 'psychotropic substances' category in 2019, accounting for 15 per cent of the total weight seized. GBL accounted for the largest proportion of air seizures by weight (80 per cent), and for 23 per cent of mail seizures by weight. WCO data for GHB seizures was not available in 2019 (WCO 2020).

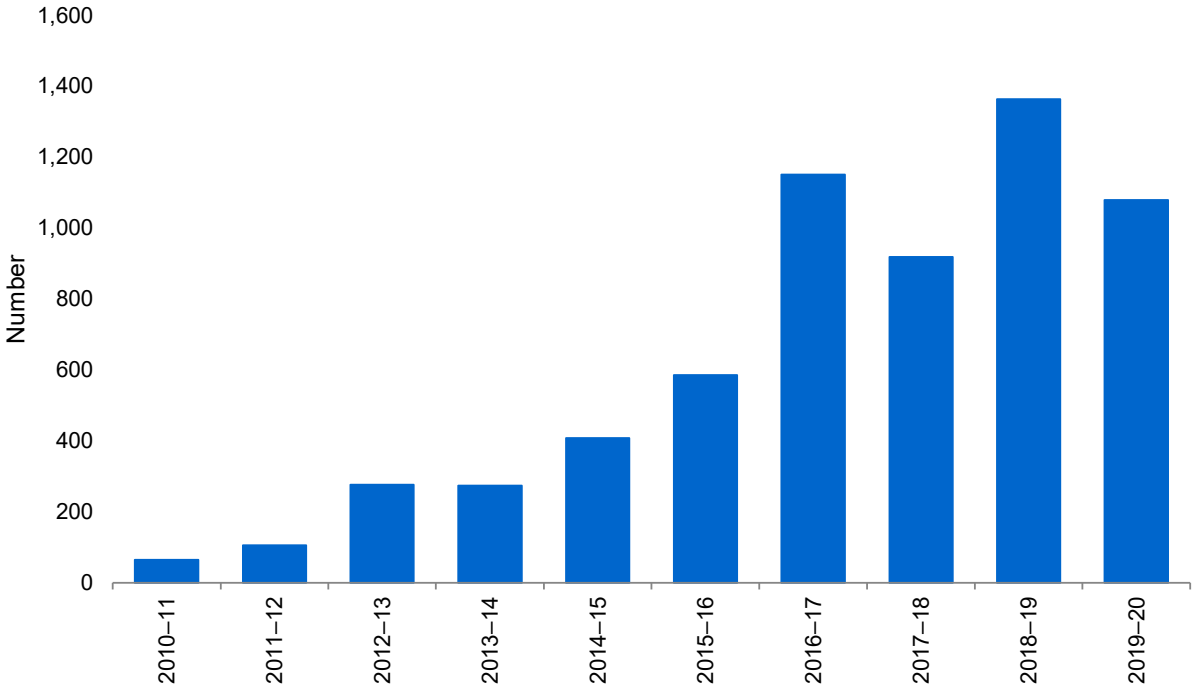
In 2019, the majority of GBL seizures continued to be reported by countries in Europe. The Netherlands was most frequently identified as the country of origin of seizures in Europe and Chile, while China (including Hong Kong) was identified to be the main country of origin for GBL seizures in Australia. No seizures of 1,4-BD were reported in 2019 (INCB 2021).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of detections of anaesthetics (including GHB, GBL and ketamine) at the Australian border displays an increasing trend over the last decade, increasing 1,560 per cent from 65 in 2010–11 to 1,079 in 2019–20. The number of anaesthetic detections decreased 21 per cent this reporting period from 1,363 in 2018–19 (see Figure 31).

FIGURE 31: Number of anaesthetic detections at the Australian border 2010–11 to 2019–20 (Source: Department of Home Affairs)



Similar to 2018–19, the majority of anaesthetics detections in 2019–20 were ketamine.

- Ketamine accounted for 35 per cent of the number of anaesthetic detections in 2010–11, increasing to 84 per cent in 2019–20, while GBL accounted for 63 per cent in 2010–11, decreasing to 13 per cent in 2019–20. GHB detections accounted for 2 per cent in 2010–11, increasing to 3 per cent in 2019–20.
- Of the 1,079 anaesthetics detections in 2019–20, 911 were ketamine (the second highest number on record), a 10 per cent increase from the 828 detections in 2018–19. Over the last decade the number of ketamine detections increased 3,861 per cent, from 23 in 2010–11.
- Of the 1,079 anaesthetics detections in 2019–20, 139 were GBL, a 69 per cent decrease from the 445 detections in 2018–19. Over the last decade the number of GBL detections increased 239 per cent, from 41 in 2010–11.
- The remaining 29 detections in 2019–20 were GHB, a 68 per cent decrease from the 90 detections in 2018–19. Over the last decade the number of GHB detections increased 2,800 per cent, from 1 in 2010–11.

IMPORTATION METHODS

In 2019–20, detections of anaesthetics occurred in the air cargo, air passenger/crew and international mail streams. By number, international mail accounted for the greatest proportion of anaesthetic detections (87 per cent), followed by air cargo (13 per cent), and air passenger/crew (<1 per cent). In 2019–20:

- Detections of ketamine occurred in the air cargo, air passenger/crew and international mail streams. By number, the international mail stream accounted for the greatest proportion of ketamine detections (92 per cent), followed by air cargo (7 per cent) and air passenger/crew(<1 per cent).

- Detections of GHB occurred in the air cargo, air passenger/crew and international mail streams. By number, the international mail stream accounted for the greatest proportion of GHB detections (86 per cent), followed by air cargo (10 per cent) and air passenger/crew (3 per cent).
- Detections of GBL occurred in the air cargo and international mail streams. By number, both the air cargo stream and international mail stream each accounted for 50 per cent of detections.

EMBARKATION POINTS

By number, China (including Hong Kong) was the primary embarkation point for anaesthetic detections at the Australian border in 2019–20. Other key embarkation points by number this reporting period include the UK, the Netherlands, Germany, India, France, Belgium, Italy, the US and Malaysia.

By number, the UK was the primary embarkation point for ketamine detections at the Australian border in 2019–20. Other key embarkation points by number this reporting period include the Netherlands, Germany, China (including Hong Kong), India, Belgium, Malaysia, France, Canada and Denmark.

By number, China (including Hong Kong) was the primary embarkation point for GHB and GBL detections at the Australian border in 2019–20. Other key embarkation points by number this reporting period include the Netherlands, the UK, Malaysia, the US, Switzerland and Germany.

DOMESTIC MARKET INDICATORS

According to NDSHS data:

- The proportion of the Australian population aged 14 years or older who reported having used GHB at least once in their lifetime remained stable at 1 per cent over the last decade.
- The proportion of the Australian population aged 14 years or older who reported having recently used GHB remained stable at <1 per cent over the last decade.
- The proportion of the Australian population aged 14 years or older who reported having used ketamine at least once in their lifetime increased over the last decade, from 1 per cent in 2010 to 3 per cent in 2019. In 2016 this proportion was 2 per cent.
- The proportion of the Australian population aged 14 years or older who reported having recently used ketamine increased over the last decade, from <1 per cent in 2010 to 1 per cent in 2019. In 2016 this proportion was <1 per cent (AIHW 2020).

According to IDRS data, 10 per cent of respondents reported the recent use of GHB/GBL/1,4-BD in 2020. No data is available for recent use of GHB/GBL/1,4-BD in 2019 (Peacock, et al. 2021).

According to EDRS data:

- The proportion of respondents reporting recent ketamine use increased over the last decade, from 16 per cent in 2011 to 43 per cent in 2020. In 2019 this proportion was 41 per cent.
- The reported median number of days of ketamine use increased over the last decade, from 2 days in 2011 to 3 days in 2020. In 2019 the median number of days was a record 4 days.
- The proportion of respondents reporting recent GHB/GBL use decreased over the last decade, from 7 per cent in 2011 to 6 per cent in 2020. In 2019 this proportion was 5 per cent.
- The reported median number of days of GHB/GBL use remained stable at 2 days in 2011 and 2020. In 2019 the median number of days was 3 days (Sindicich & Burns 2012; Peacock et al. 2020).

CLANDESTINE LABORATORIES

Over the last decade, the proportion of clandestine laboratories detected nationally manufacturing GHB/GBL increased from zero in 2010–11 to 5 per cent in 2019–20. The number of laboratories detected nationally manufacturing GHB/GBL increased 28 per cent this reporting period, from 18 in 2018–19 to a record 23 in 2019–20 (see *Clandestine Laboratories and Precursors* chapter).

PRICE

The price range for 1 gram of ketamine powder increased over the last decade, from between $50 and $180 in 2010–11 (reported in New South Wales) to between $180 and $260 in 2019–20. The price reported in 2018–19 ranged from $120 to $320.

Nationally, the price range for 1–1.5 millilitres of GHB/GBL remained relatively stable over the last decade, from between $3 and $8 in 2010–11 to between $2 and $10 in 2019–20. The price reported in 2018–19 ranged from $2 to $15. The national median price for 1–1.5 millilitres of GHB/GBL decreased from $7 in 2018–19 to $6.25 in 2019–20.

Nationally, the price range for 1 litre of GHB/GBL increased over the last decade, ranging between $2,200 and $3,000 in 2010–11 (reported in New South Wales) to between $900 and $5,000 in 2019–20. The price reported in 2018–19 ranged from $1,500 to $3,000.

AVAILABILITY

In a national study of people who regularly use ecstasy and other stimulants, the proportion of respondents reporting ketamine as easy or very easy to obtain increased over the last decade, from 52 per cent in 2011 to 57 per cent in 2020. In 2019 this proportion was 53 per cent. Data relating to the availability of GHB/GBL was unavailable for 2020 (Peacock et al. 2020).

PHARMACEUTICALS

MAIN FORMS

In Australia, the importation, manufacture, distribution and supply of pharmaceuticals is controlled under various pieces of 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 non-medical 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 2020f; EMCDDA 2015; 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. Most pharmaceutical opioids are produced and prescribed for pain relief (analgesics), as anaesthetics during surgery, or as therapeutic drugs to treat heroin and other opioid addictions. Common opioid-based medications in Australia include codeine, morphine, oxycodone, fentanyl, buprenorphine and tramadol; sold variously as tablets, capsules, liquid, lozenges, powder or skin patches (ADF 2020g; UNODC 2016).

INTERNATIONAL TRENDS

According to the World Drug Report, the weight of pharmaceutical opioids seized globally fluctuated from 2008 to 2018, peaking in 2014 at 203.0 tonnes. The weight of pharmaceutical opioids seized decreased 51 per cent, from 150.0 tonnes in 2017 to 73.0 tonnes in 2018. Tramadol and codeine comprised the majority of the weight of pharmaceutical opioids seized in 2018 (more than 95 per cent), with fentanyl accounting for 4 per cent of the weight seized (UNODC 2019; UNODC 2020a).

The WCO reported a 38 percent increase in the number of opiates[69] seizures, from 2,030 in 2018 to 2,795 in 2019. The weight of opiates seized increased 231 per cent, from 15,612.3 kilograms in 2018 to 51,689.0 kilograms in 2019. In 2019, opiates accounted for 55 per cent of the weight of narcotics seized in the Asia-Pacific region. Seizures of 'nervous system agents' (including substances such as painkillers, sedatives and anti-Alzheimer's medication) increased 231 per cent, from 462 in 2018 to 1,530 in 2019. The weight of nervous system agents seized increased 1,502 per cent in 2019 (WCO 2020).

DOMESTIC TRENDS

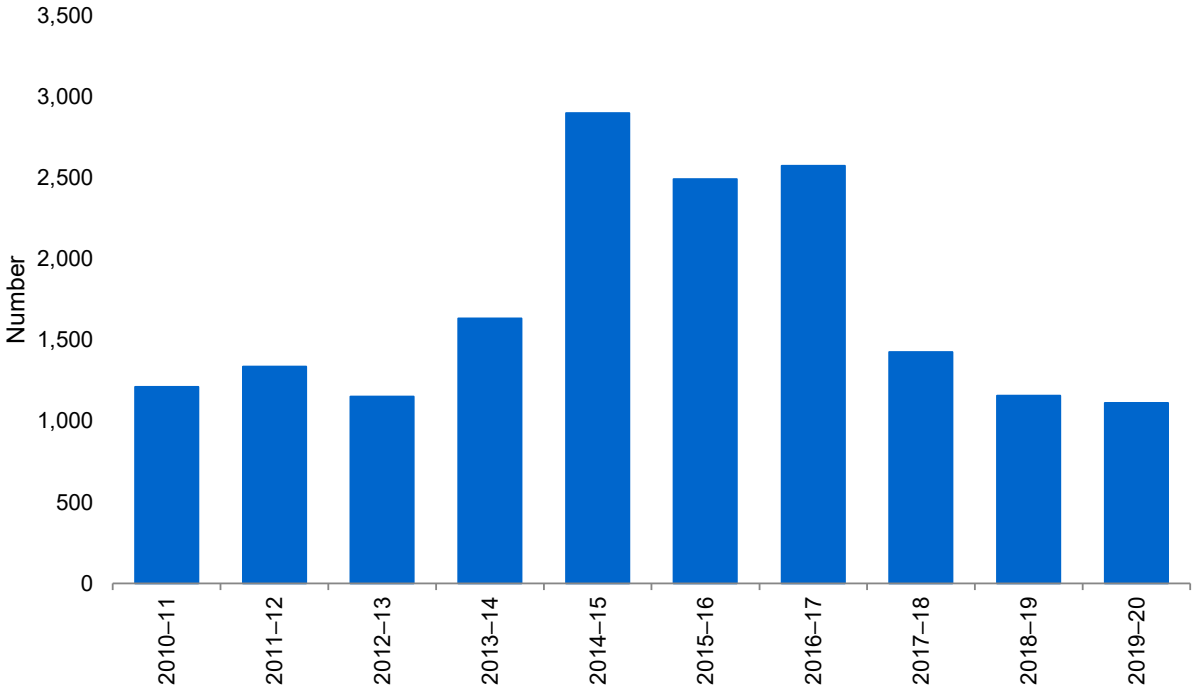
AUSTRALIAN BORDER SITUATION

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 negative or no effects, or contain a different active ingredient than expected.

Pharmaceutical detections reported by the Department of Home Affairs only reflect detections of benzodiazepines and opioids (including morphine, buprenorphine, methadone and oxycodone).[70] While fluctuating over the last decade, the number of pharmaceuticals detected at the Australian border decreased 8 per cent from 1,211 in 2010–11 to 1,112 in 2019–20, a 4 per cent decrease from 1,156 in 2018–19 (see Figure 32).

69 According to the WCO, the opiate category includes heroin, opium, poppy straw, methadone and morphine.
70 Benzodiazepines and opioids statistics only represent a component of the larger pharmaceutical category. As such, caution must be used when comparing data.

FIGURE 32: Number of pharmaceutical detections at the Australian border 2010–11 to 2019–20 (Source: Department of Home Affairs)



Similar to 2018–19, the majority (73 per cent) of pharmaceutical detections in 2019–20 were benzodiazepines.

- The number of benzodiazepine detections at the Australian border fluctuated over the last decade, decreasing 31 per cent from 1,173 in 2010–11 to 810 in 2019–20. Benzodiazepine detections peaked at 2,772 in 2014–15. This reporting period the number of detections decreased 11 per cent from 912 in 2018–19.
- The number of opioid detections at the Australian border increased 695 per cent over the last decade, from 38 in 2010–11 to a record 302 in 2019–20. This reporting period the number of detections increased 24 per cent from 244 in 2018–19.

IMPORTATION METHODS

In 2019–20, detections of benzodiazepines at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, international mail accounted for the greatest proportion of benzodiazepine detections (69 per cent), followed by air passenger/crew (21 per cent), air cargo (10 per cent) and sea cargo (<1 per cent).

In 2019–20, detections of opioids at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, international mail accounted for the greatest proportion of opioids detections (78 per cent), followed by air cargo (16 per cent), air passenger/crew (5 per cent) and sea cargo (1 per cent).

DOMESTIC MARKET INDICATORS

According to NDSHS[71] data:

- The proportion of the Australian population aged 14 years or older reporting the non-medical[72] use of any pharmaceuticals (excluding OTC[73]) at least once in their lifetime increased over the last decade, from 7 per cent in 2010 to 12 per cent in 2019. In 2016 this proportion was 13 per cent.
- The proportion of the Australian population aged 14 years or older reporting recent non-medical use of any pharmaceuticals (excluding OTC) remained stable at 4 per cent in both 2010 and 2019. In 2016 this proportion was 5 per cent (AIHW 2020; AIHW 2017a; AIHW 2011).

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 13 illicit and licit drugs. Since the Program began in August 2016, the population-weighted average consumption of oxycodone and fentanyl decreased in both capital city and regional sites. According to data from the NWDMP for August 2019 to August 2020:

- Fentanyl consumption was higher per capita in regional sites than capital city sites.
- The population-weighted average consumption of fentanyl decreased in both capital city and regional sites, with regional consumption in August 2020 the lowest level recorded by the Program.
- Oxycodone consumption was higher per capita in regional sites than capital city sites.
- The population-weighted average consumption of oxycodone decreased in both capital city and regional sites (ACIC 2021).

According to IDRS data:

- The proportion of respondents reporting the recent non-prescribed use of methadone decreased over the last decade, from 26 per cent in 2011 to a record low of 13 per cent in 2020. In 2019 this proportion was 15 per cent.
- The median number of days of non-prescribed methadone syrup use remained relatively stable over the last decade, increasing from 4 days in 2011 to 5 days in 2020. In 2019 the median number of days was 6.
- The proportion of respondents reporting recent non-prescribed use of buprenorphine decreased over the last decade, from 15 per cent in 2011 to a record low of 5 per cent in 2019 and 2020.
- The median number of days of non-prescribed buprenorphine use increased over the last decade, from 8 days in 2011 to 12 days in 2020. In 2019 the median number of days was 5.
- The proportion of respondents reporting recent non-prescribed use of morphine decreased over the last decade, from 39 per cent in 2011 to a record low of 15 per cent in 2020. In 2019 this proportion was 18 per cent.
- The median number of days of non-prescribed morphine use decreased over the last decade, from 13 days in 2011 to 12 days in 2019 and 2020.

71 From 2016, the pharmaceutical data provided in the NDSHS reflects improvements made to the quality of the lifetime use and recent use dataset, with over the counter (OTC) pharmaceuticals removed. As a result, caution should be exercised in comparing data from previous reporting periods.

72 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.

73 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 oxycodone decreased over the last decade, from 32 per cent in 2011 to a record low of 11 per cent in 2020. In 2019 this proportion was 15 per cent.
- The median number of days of non-prescribed oxycodone use remained stable at 4 days in 2011 and 2020. In 2019 the median number of days was 5.
- The proportion of respondents reporting recent non-prescribed fentanyl use decreased this reporting period, from 9 per cent in 2019 to 6 per cent in 2020. Historical data for the recent use of non-prescribed fentanyl is unavailable.
- The median number of days of non-prescribed fentanyl use more than halved this reporting period, decreasing from 5 days in 2019 to 2 days in 2020.
- The proportion of respondents reporting recent non-prescribed use of benzodiazepines decreased over the last decade, from 53 per cent in 2011 to a record low of 31 per cent in 2020. In 2019 this proportion was 32 per cent.
- Over the last decade, the median number of days of non-prescribed benzodiazepine (excluding alprazolam) use remained stable at 10 days in 2011 and 2020. In 2019 the median number of days was 7.
- The proportion of respondents reporting recent non-prescribed use of pharmaceutical stimulants decreased over the last decade, from 14 per cent in 2011 to 8 per cent in 2020. In 2019 this proportion was 7 per cent.
- Over the last decade, the median number of days of non-prescribed pharmaceutical stimulant use decreased from 4 days in 2011 to 3 days in 2020. In 2019 the median number of days was 5 (Stafford & Burns 2012; Peacock et al. 2021).

According to EDRS data:

- The proportion of respondents reporting recent use of non-prescribed low-dose codeine decreased over the last decade, from 12 per cent in 2011 to 9 per cent in 2020. In 2019 this proportion was 6 per cent.
- The proportion of respondents reporting recent use of non-prescribed pharmaceutical opioids decreased, from 12 per cent in 2019 to 10 per cent in 2020.
- The proportion of respondents reporting recent use of non-prescribed benzodiazepines increased over the last decade, from 33 per cent in 2011 to 40 per cent in 2020. In 2019 this proportion was 41 per cent.
- The proportion of respondents reporting recent use of non-prescribed pharmaceutical stimulants use increased over the last decade, from 27 per cent in 2011 to 39 per cent in 2020. In 2019 this proportion was 33 per cent (Sindicich & Burns 2012; Peacock et al. 2020).

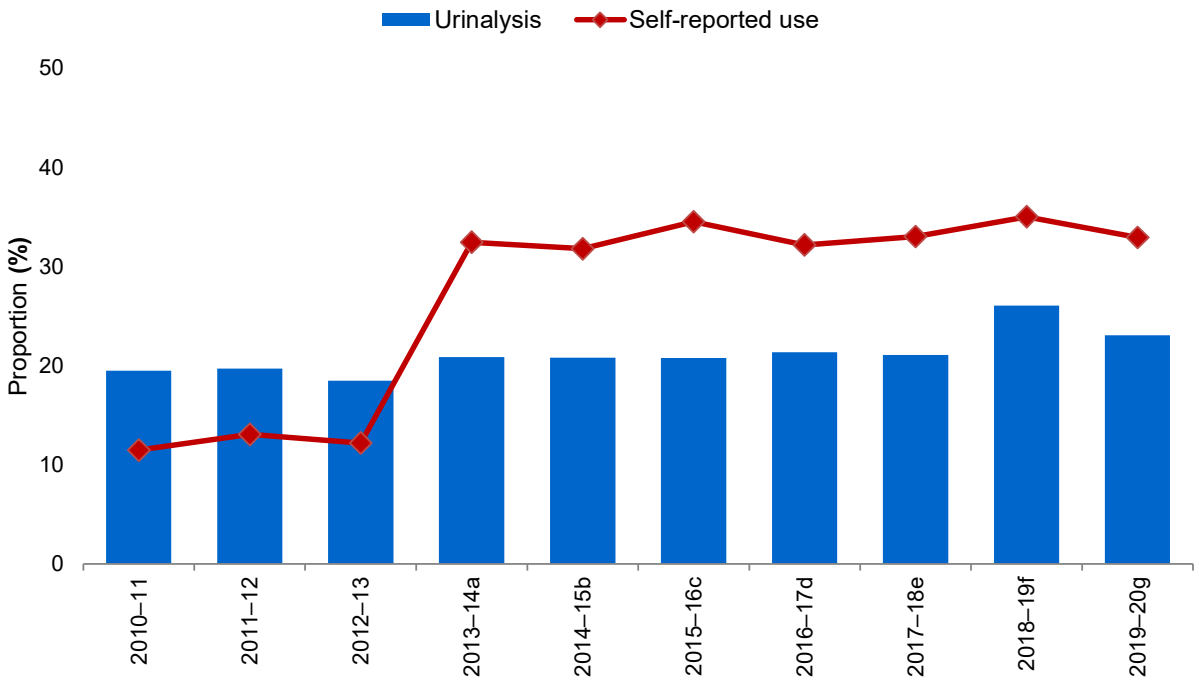
According to ANSPS data:

- The proportion of respondents reporting pharmaceutical opioids as the drug last injected more than halved over the last decade, decreasing from 16 per cent in 2010 to 6 per cent in 2019. This proportion was 7 per cent in 2018 (Heard et al. 2020).

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

- The proportion of detainees testing positive to benzodiazepines increased over the last decade, from 19 per cent in 2010–11 to 23 per cent in 2019–20. In 2018–19 this proportion was 26 per cent.[74]
- The proportion of detainees self-reporting the recent use[75] of benzodiazepines tripled over the last decade, from 11 per cent in 2010–11 to 33 per cent in 2019–20. In 2018–19 this proportion was 35 per cent (see Figure 33).
- The proportion of detainees testing positive for any opiates[76] decreased over the last decade, from 15 per cent in 2010–11 to 10 per cent in 2019–20. In 2018–19 this proportion was 9 per cent.
- The self-reported recent use of any opiates over the last decade more than doubled, increasing from 9 per cent in 2010–11 to 20 per cent in 2019–20. In 2018–19 this proportion was 19 per cent (see Figure 34).

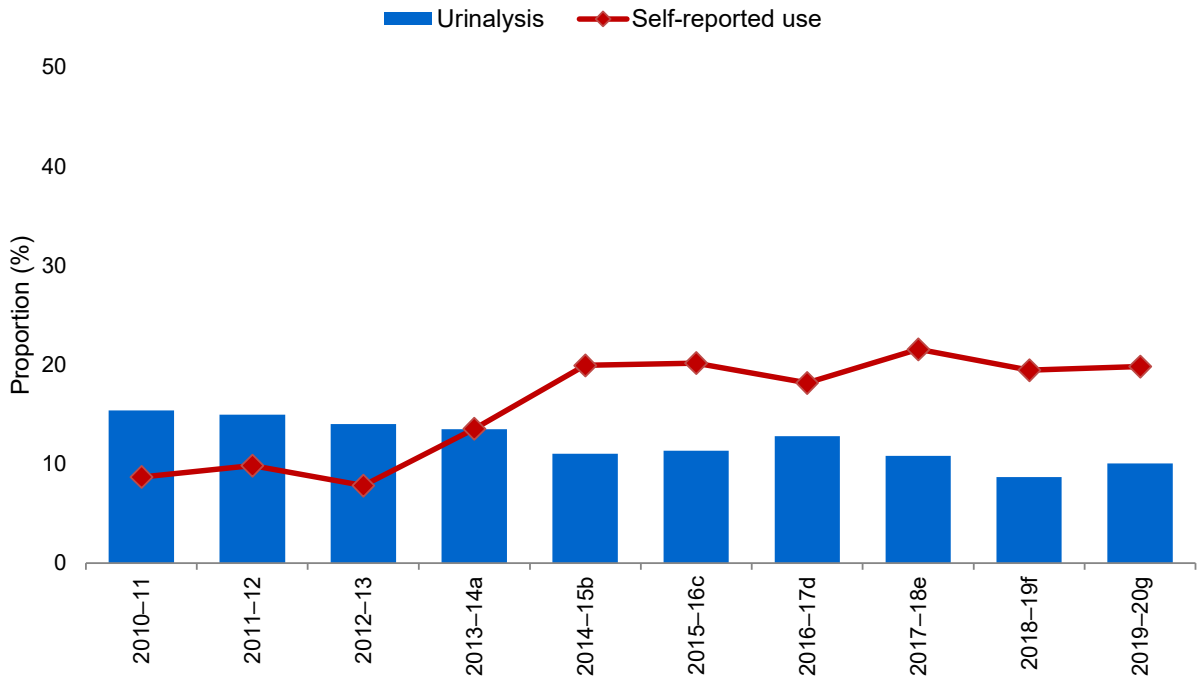
FIGURE 33: National proportion of detainees testing positive for benzodiazepines compared with self-reported recent use, 2010–11 to 2019–20 (Source: Australian Institute of Criminology)



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

74 Benzodiazepines and their metabolites can be detected in urine for 2 to 14 days after administration.
75 Recent use in DUMA program refers to self-reported use in the 12 months prior to arrest.
76 Opiates and their metabolites can be detected in urine on average 2 to 3 days after administration.

FIGURE 34: National proportion of detainees testing positive for any opiate other than heroin compared with self-reported use, 2010–11 to 2019–20 (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.
f. Urine was collected in the third quarter of 2018 in Adelaide, Brisbane and Perth; the fourth quarter of 2018 in Bankstown; and the first quarter of 2019 in Adelaide, Brisbane, Perth and Surry Hills.
g. Urine was collected in the third quarter of 2019 in Adelaide, Brisbane and Perth; the fourth quarter of 2019 in Bankstown; and the first quarter of 2020 in Adelaide, Brisbane, Perth and Surry Hills.

PRICE

New South Wales, Tasmania and Western Australia were the only jurisdictions to provide price data for opioid pharmaceuticals in 2019–20.

In 2019–20, the price reported in Tasmania for a single tablet of MS Contin ranged from $1 for 1 milligram, to $60 for one 60 milligram tablet and $100 for one 100 milligram tablet. In 2010–11, the price of a single tablet of MS Contin ranged between $30 and $100 (reported in New South Wales).

New South Wales was the only jurisdiction to provide price data for OxyContin in 2010–11 and 2019–20. The price range for a single OxyContin tablet remained relatively stable over the last decade, ranging between $30 and $100 in 2010–11 to between $20 and $100 in 2019–20. In 2018–19, the reported price ranged between $10 and $100. Tasmania reported price data for other units of OxyContin in 2019–20, including $60 for a 60 milligram tablet and $100 for a 100-milligram tablet.

The price for a single 100 microgram patch of fentanyl ranged between $90 and $300 in in 2019–20 (reported in New South Wales), compared with a national price range of between $25 and $250 in 2018–19. Historical price data for fentanyl is unavailable.

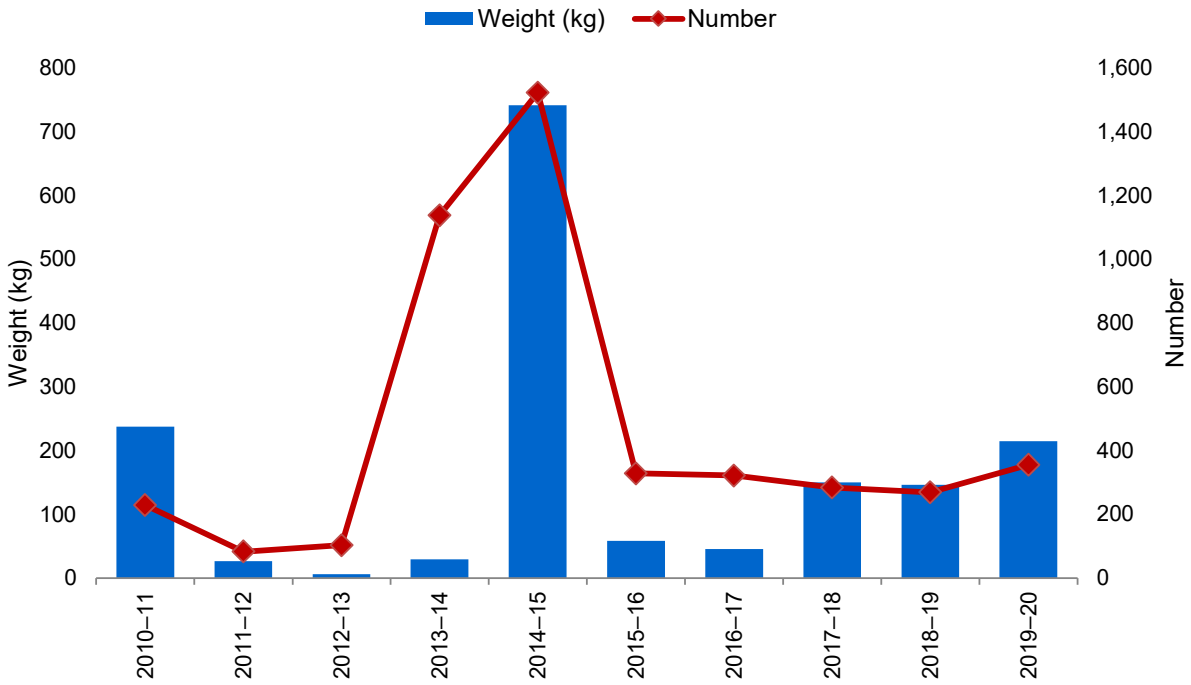
National law enforcement price data for a single benzodiazepine tablet is limited. Queensland reported a price of $10 per milligram in 2019–20. In 2018–19, the price per milligram was $25 (reported in Queensland).

SEIZURES

The number of national other opioid seizures increased 55 per cent over the last decade, from 229 in 2010–11 to 355 in 2019–20. This reporting period the number increased 32 per cent from 269 in 2018–19.

The weight of other opioids seized nationally decreased 9 per cent over the last decade, from 236.8 kilograms in 2010–11 to 214.7 kilograms in 2019–20. This reporting period the weight increased 47 per cent from 146.2 kilograms in 2018–19 (see Figure 35).

FIGURE 35: National other opioid seizures, by number and weight, 2010–11 to 2019–20



Victoria reported the greatest percentage increase in the number of other opioid seizures in 2019–20, while South Australia reported the greatest percentage increase in the weight of other opioids seized. This reporting period New South Wales accounted for the greatest proportion of the number of national other opioid seizures (59 per cent), while Victoria accounted for the greatest proportion of the weight of other opioids seized nationally (63 per cent; see Table 19).

TABLE 19: Number, weight and percentage change of national other opioid seizures, 2018–19 and 2019–20

	Number			Weight (grams)		
State/Territory[a]	2018–19	2019–20	% change	2018–19	2019–20	% change
New South Wales	177	208	17.5	92,962	63,170	-32.0
Victoria	22	48	118.2	13,456	135,493	906.9
Queensland	22	18	-18.2	20,694	386	-98.1
South Australia	2	4	100.0	1	2,069	206,800.0
Western Australia	13	26	100.0	18,962	11,399	-39.9
Tasmania	7	4	-42.9	31	16	-48.4
Northern Territory	0	1	–	0	200	–
Australian Capital Territory	26	46	76.9	123	2,054	1,569.9
Total	**269**	**355**	**32.0**	**146,229**	**214,787**	**46.9**

h. Includes seizures by state/territory police and AFP for which a valid seizure weight was recorded.

NEW PSYCHOACTIVE SUBSTANCES[77]

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'[78], 'herbal highs', 'bath salts', 'designer drugs' and 'research chemicals' (UNODC 2017a; UNODC 2017b; UNODC 2017c; Wermuth 2006).

Among the wide range of NPS available, 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).

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 2020h; EMCDDA 2017; UNODC 2016).

77 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.
78 Use of the term legal high may not reflect the true legal status of these substances under Australian legislation.

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 2020i).

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 (ACMD 2013; ADF 2020j; EMCDDA 2014; UNODC 2016).

INTERNATIONAL TRENDS

The illicit global trade in NPS[79] is relatively small, but includes substances that are of global concern, particularly synthetic opioid NPS such as fentanyl analogues. The UNODC distinguishes between plant-based NPS and synthetic NPS and both types recorded a decrease in the weight seized in 2018. For the third year in a row, kratom (*Mitragyna speciosa*) accounted for the greatest proportion of the weight of plant-based NPS seized globally (82 per cent), followed by khat (*Catha edulis*) and the hallucinogen *Salvia divinorum*. The weight of synthetic NPS seized globally continued to decrease, from 44 tonnes in 2017 to 10 tonnes in 2018. This decrease in part may be a consequence of some of the most widely used and most harmful NPS being put under national and international control. The number of emerging NPS with opioid effects increased nearly sevenfold, from 7 substances in 2014 (accounting for 2 per cent of all NPS) to 48 in 2018 (9 per cent of all NPS). While synthetic opioid NPS are fewer in number than other NPS categories, they have led to an increase in the number of overdose deaths in North America (UNODC 2020a).

According to the WCO, the number of NPS[80] seizures reported globally by WCO agencies increased 22 per cent, from 3,049 in 2018 to 3,716 in 2019. The weight of NPS seized decreased 55 per cent, from 21,070.1 kilograms in 2018 to 9,558.5 kilograms in 2019. In 2019 the number of seizures in all subcategories increased, with the exception of 'synthetic cannabinoids' which decreased from 752 seizures in 2018 to 245 seizures in 2019. The 'other substances' subcategory continued to account for the greatest proportion of the number of NPS seizures in 2019 (46 per cent), followed by the subcategory 'Lyrica (Pregabalin)' (18 per cent) and 'synthetic cathinones'. The US accounted for the greatest proportion of the number of NPS seizures in 2019 (55 per cent). This was followed by the United Arab Emirates (9 per cent), Denmark and Switzerland (6 per cent each), Saudi Arabia (5 per cent) and Norway (3 per cent; WCO 2020).

79 The UNODC classifies NPS as substances which are not under international control whose pharmacological effects mimic substances which are internationally controlled.

80 NPS includes Lyrica (pregabalin), synthetic cathinones, synthetic cannabinoids, fentanyl, ketamine and phencyclidine-type substances and other substances.

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of NPS border detections increased 6 per cent this reporting period, from 575 in 2018–19 to 609 in 2019–20.

In 2019–20, detections of NPS occurred in the air cargo, air passenger/crew and international mail streams. By number, international mail accounted for the greatest proportion of NPS detections (81 per cent), followed by air cargo (19 per cent) and air passenger/crew (<1 per cent).

DRUG PROFILING

There is a large number of NPS appearing on the Australian illicit drug market, with some only appearing 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.[81]

Among the many substances detected and reported since NPS profiling began in 2007–08, some have been more common than others in terms of the overall number of seizures and/or the weight of material seized (see Figure 36). The data below refers only to seizures made and examined by the AFP.

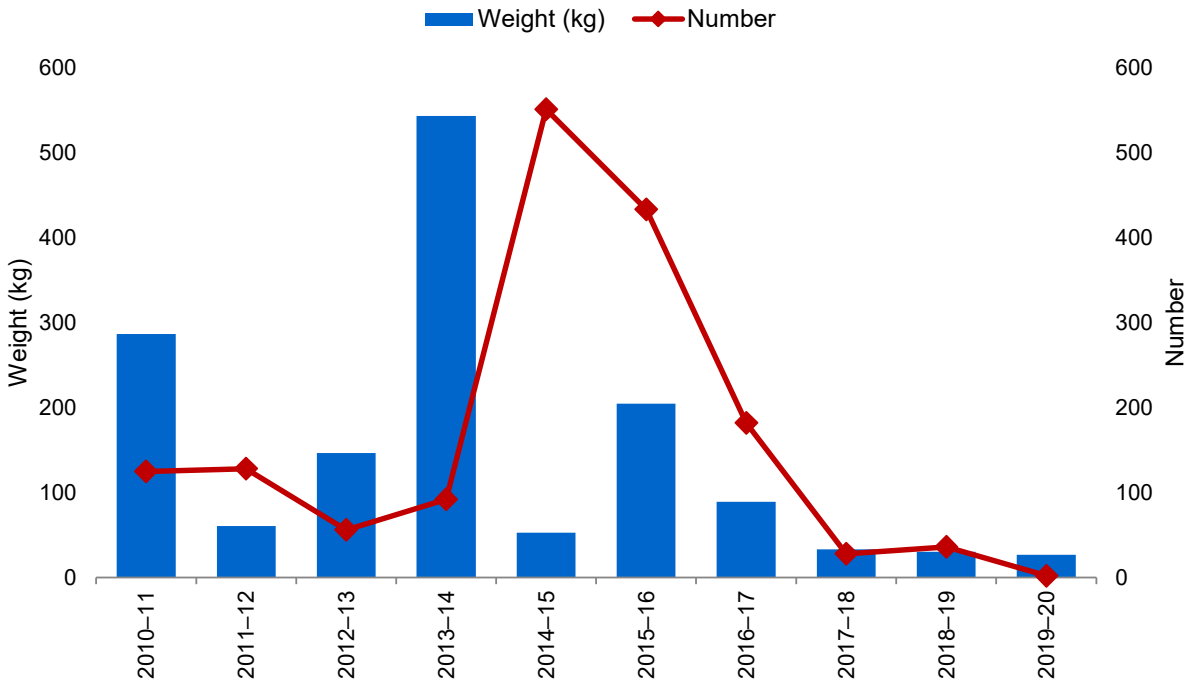
- There were no seizures of synthetic cannabinoids, tryptamine-type substances or other NPS in 2019–20.
- In 2019–20, amphetamine-type substances and cathinone-type substances each accounted for 50 per cent of the total number of analysed seizures.

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

- In 2019–20, amphetamine-type substances accounted for 82 per cent of the weight of analysed seizures.
- Cathinone-type substances accounted for 19 per cent of the weight of analysed seizures in 2019–20.
  - The seizure comprised of several substances including N-ethylheptedrone, 3,4-methylenedioxy N-tert-butyl cathinone (MDPT), 4-chloro N,N-dimethyl cathinone and 3,4-methylenedioxy N-benzyl cathinone (BMDP).

81 Other NPS include 2C-group substances, which are synthetic phenethylamines with psychedelic effects.

FIGURE 36: Number and weight of seizures selected for further analysis and found to contain novel substances and drug analogues, 2010–11 to 2019–20 (Source: Australian Federal Police, Forensic Drug Intelligence)[a]



b. The data above refers only to seizures made and examined by the AFP and examined by AFP crime scene teams.

DOMESTIC MARKET INDICATORS

NPS use was first included in the NDSHS in 2013 and included questions on new and emerging psychoactive substances and synthetic cannabinoids. According to NDSHS data:

- The proportion of the Australian population aged 14 years or older reporting having used a new and emerging psychoactive substance at least once in their lifetime increased, from <1 per cent in 2013 to 1 per cent in 2016 and 2019.
- The proportion of the Australia population aged 14 years or older reporting having recently used a new and emerging psychoactive substance remained stable at <1 per cent in 2013, 2016 and 2019.
- 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 per cent in 2013 to 3 per cent in 2016 and 2019.
- The proportion of the Australia population aged 14 years or older reporting having recently used synthetic cannabinoids decreased, from 1 per cent in 2013 to <1 per cent in 2016 and 2019 (AIHW 2020).

Since the NWDMP began measuring the NPS mephedrone and methylone in August 2016, the number of mephedrone detections increased in both capital cities and regional sites; while the number of methylone detections decreased in capital city sites and increased in regional sites. According to data from the NWDMP for August 2019 to August 2020:

- Mephedrone and methylone were the least consumed substances monitored by the Program. Both drugs were detected at a small number of sites and below levels at which they could be reliably quantified.

- The number of mephedrone detections increased from 38 to 56.
- The number of sites where mephedrone was detected decreased from 12 to 11.
- The number of methylone detections increased from 24 to 61.
- The number of sites where methylone was detected increased from 8 to 16 (ACIC 2021).

According to IDRS data:

- The proportion of respondents reporting the recent use of NPS decreased, from 11 per cent in 2019 to 8 per cent in 2020. Historical data for NPS is unavailable.
- The proportion of respondents reporting the recent use of substances mimicking the effects of cannabis decreased, from 6 per cent in 2019 to 5 per cent in 2020.
- The proportion of respondents reporting the recent use of substances mimicking the effects of opioids decreased, from 2 per cent in 2019 to 1 per cent in 2020 (Peacock et al. 2021; Peacock et al. 2019b).

According to EDRS data:

- The proportion of respondents reporting the recent use of NPS decreased over the last decade, from 40 per cent in 2011 to 23 per cent in 2020. In 2019 this proportion was 30 per cent.
- Over the last decade the median number of days of reported NPS use has remained low (2 days or less) for different forms of NPS used.
- The following trends were observed in the proportions of respondents reporting recent use of other substances within the NPS group:
  - Recent use of any 2C substance decreased over the last decade, from 14 per cent in 2011 to 5 per cent in 2020. In 2019 this proportion was 6 per cent.
  - Recent use of NBOMes decreased, from 9 per cent in 2014 (earliest available data) to 1 per cent in 2020. In 2018 and 2019 this proportion was 2 per cent.
  - Recent use of mephedrone decreased over the last decade, from 13 per cent in 2011 to no respondents reporting mephedrone use in 2020. In 2019 this proportion was 1 per cent.
  - Recent use of synthetic cannabinoids decreased, from 6 per cent in 2011 to 4 per cent in 2020. In 2019 this proportion was 3 per cent (Peacock et al. 2020).

PRICE

National law enforcement price data for NPS is limited. The price range for 1 to 1.5 grams of synthetic cannabinoids remained relatively stable over the last decade, from between $20 and $30 in 2010–11 (reported in Queensland for 1 gram) to between $20 and $25 in 2019–20 (reported in New South Wales for 1.5 grams). The price for 1.5 grams of synthetic cannabinoids ranged between $30 and $100 in 2018–19.

OTHER AND UNKNOWN NOT ELSEWHERE CLASSIFIED DRUGS

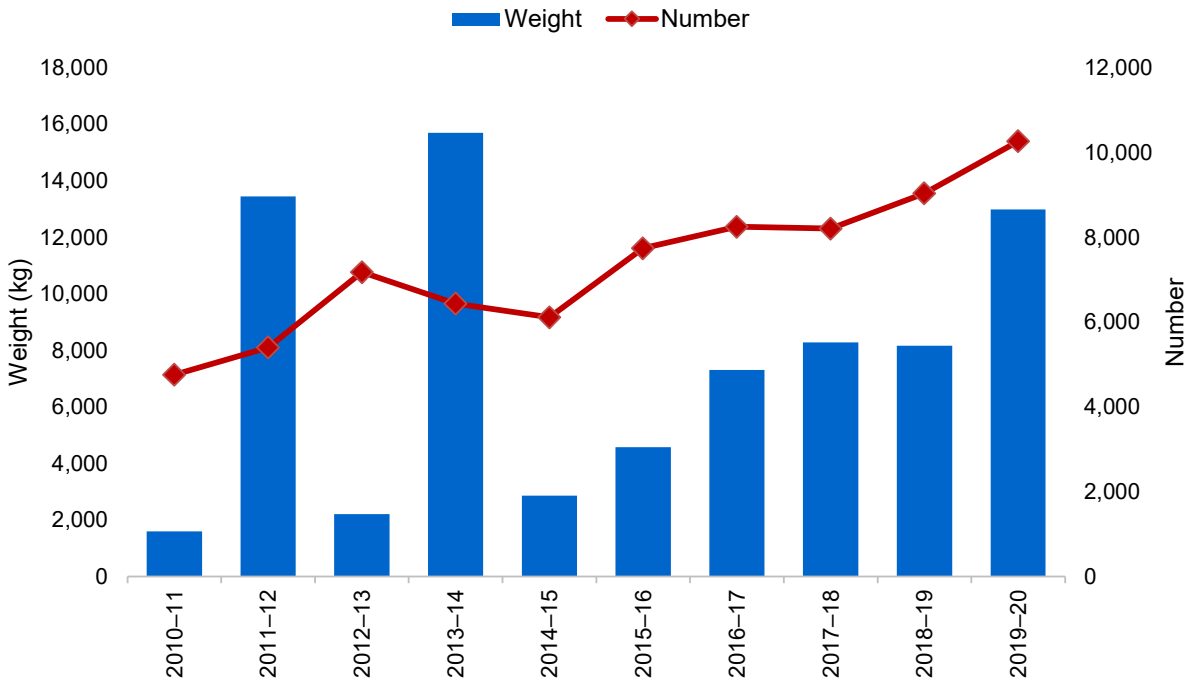
Data for national other and unknown not elsewhere classified (NEC) drug seizures and arrests capture those drugs and substances outside the specific drug categories contained in the *Illicit Drug Data Report*. This category contains a range of substances including precursors, anaesthetics, NPS, pharmaceuticals 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

The number of national other and unknown NEC drug seizures increased 116 per cent over the last decade, from 4,753 in 2010–11 to a record 10,260 in 2019–20. This reporting period the number of seizures increased 14 per cent from 9,039 in 2018–19.

The weight of national other and unknown NEC drugs seized increased 715 per cent over the last decade, from 1,593.5 kilograms in 2010–11 to 12,987.7 kilograms in 2019–20. This reporting period the weight seized increased 59 percent from 8,158.6 kilograms in 2018–19 (see Figure 37).

FIGURE 37: National other and unknown not elsewhere classified drug seizures, by number and weight, 2010–11 to 2019–20



Western Australia reported the greatest percentage increase in the number of other and unknown NEC drug seizures in 2019–20, while Queensland reported the greatest percentage increase in the weight of other and unknown NEC drugs seized. New South Wales continued to account for the greatest proportion of both the number (52 per cent) and weight (79 per cent) of other and unknown NEC drugs seized nationally (see Table 20).

TABLE 20: Number, weight and percentage change of national other and unknown not elsewhere classified drug seizures, 2018–19 and 2019–20

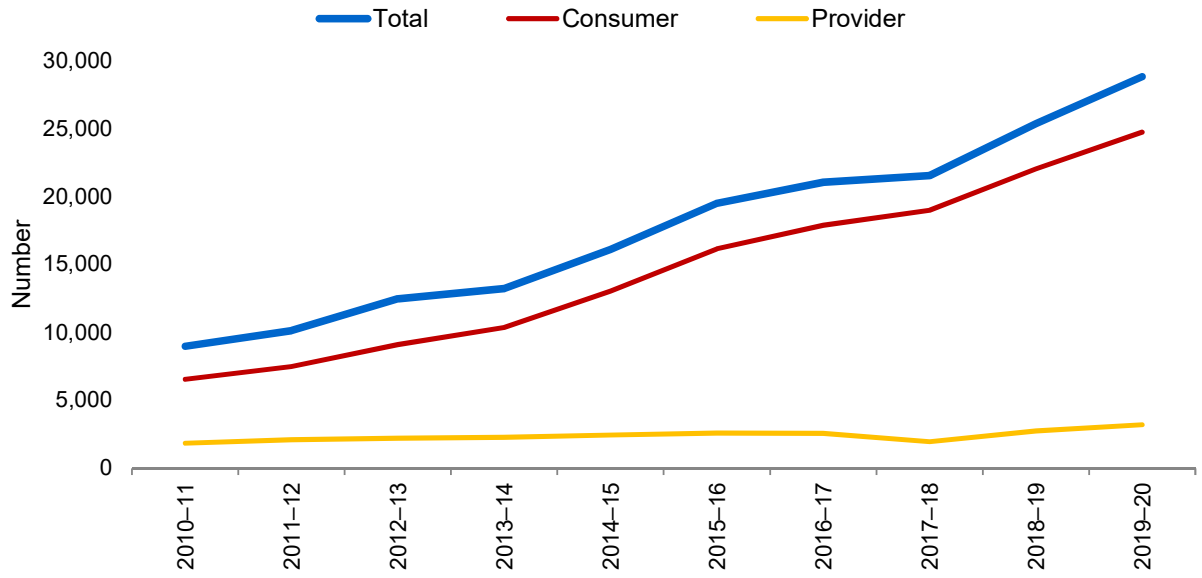
	Number			Weight (grams)		
State/Territory[a]	2018–19	2019–20	% change	2018–19	2019–20	% change
New South Wales	4,760	5,307	11.5	5,185,287	10,197,938	96.7
Victoria	789	612	-22.4	2,629,915	2,222,536	-15.5
Queensland	1,042	1,137	9.1	145,104	433,153	198.5
South Australia	23	28	21.7	11,216	5,501	-51.0
Western Australia	1,812	2,660	46.8	109,560	94,366	-13.9
Tasmania	186	236	26.9	3,666	3,036	-17.2
Northern Territory	225	165	-26.7	69,583	19,620	-71.8
Australian Capital Territory	202	115	-43.1	4,276	11,565	170.5
Total	**9,039**	**10,260**	**13.5**	**8,158,607**	**12,987,715**	**59.2**

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

ARRESTS

The number of other and unknown NEC drug arrests increased 221 per cent over the last decade, from 8,972 in 2010–11 to a record 28,812 in 2019–20, a 14 per cent increase from 25,351 in 2018–19. Consumer arrests account for the greatest proportion of arrests, accounting for 86 per cent of national other and unknown NEC drug arrests in 2019–20 (see Figure 38).

FIGURE 38: Number of national other and unknown not elsewhere classified drug arrests, by number and weight, 2010–11 to 2019–20



While starting from a low base, the Australian Capital Territory reported the greatest percentage increase in the number of other and unknown NEC drugs arrests this reporting period. Victoria accounted for the greatest proportion of national other and unknown NEC drug arrests in 2019–20 (31 per cent; see Table 21).

TABLE 21: Number and percentage change of national other and unknown not elsewhere classified drug arrests, 2018–19 and 2019–20

	Arrests		
State/Territory[a]	2018–19	2019–20	% change
New South Wales	3,123	4,011	28.4
Victoria	7,078	8,803	24.4
Queensland	7,319	7,877	7.6
South Australia	1,781	1,378	-22.6
Western Australia	5,432	6,118	12.6
Tasmania	510	558	9.4
Northern Territory	102	49	-52.0
Australian Capital Territory	6	18	200.0
Total	**25,351**	**28,812**	**13.7**

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

NATIONAL IMPACT

The illicit markets in Australia for substances within the 'other drugs' category are comparatively small, however they include a range of drugs which merit ongoing monitoring in order to identify new trends, as well as emerging areas of potential harm.

As a whole, the Australian markets for other drugs can be described as niche markets. In 2019–20, the markets for anabolic steroids and other selected hormones remained small and relatively stable. The markets for anaesthetics, illicit pharmaceuticals and NPS showed a mixed picture, while the tryptamine market shows signs of potential expansion.

ANABOLIC AGENTS AND OTHER SELECTED HORMONES

Indicators of anabolic agents and other selected hormones supply and demand point to a small and relatively stable market.

Indicators of demand for anabolic agents and other selected hormones (including surveys of people who use drugs) remained relatively stable. When comparing data for 2018–19 and 2019–20, indicators of supply (including border detections, seizure and arrest data) provide a mixed picture, with a decrease in the weight of steroids seized nationally as well as decreases in the number of national steroid seizures and arrests.

TRYPTAMINES

Indicators of tryptamine supply and demand point to a small market which shows signs of potential expansion.

Indicators of demand for tryptamines (including surveys of people who use drugs) point to an increase in demand. When comparing data for 2018–19 and 2019–20, indicators of supply (including border detections, price, seizure and arrest data) show an increase, including a record number of tryptamine detections at the Australian border, a record number of national hallucinogen arrests, an increase in the number and weight of hallucinogens seized nationally and a decrease in the national median price for a single LSD tablet.

ANAESTHETICS

Indicators of anaesthetic supply and demand provide a mixed picture of a small market.

Indicators of demand for anaesthetics (including surveys of people who use drugs) provide a mixed picture. When comparing data for 2018–19 and 2019–20, indicators of supply (including border detections, national clandestine laboratory detections and price data) also provide a mixed picture, with a record number of GHB/GBL laboratories detected nationally, an increase in the number of ketamine border detections to the second highest number on record and an increase in the price for 1 litre of GHB/GBL. During the same period there was a decrease in the number of anaesthetic and GHB/GBL border detections and a decrease in the national median price for 1–1.5 millilitres of GHB/GBL.

PHARMACEUTICALS

Indicators of supply and demand for illicit pharmaceuticals provide a mixed picture of a small market.

Indicators of demand for pharmaceuticals (including surveys of people who use drugs, a study of police detainees and wastewater analysis) show a mixed picture with no clear trends within or between specific drug types such as benzodiazepines, opiates, pharmaceutical stimulants and other pharmaceuticals. When comparing data for 2018–19 and 2019–20, indicators of supply (including border detections, seizure and arrest data) also provide a mixed picture, including a decrease in the number of pharmaceuticals detected at the Australian border and an increase in the number and weight of other opioids seized nationally.

NEW PSYCHOACTIVE SUBSTANCES

Indicators of supply and demand for NPS provide a mixed picture of a small and relatively stable market.

Indicators of demand for NPS (including surveys of people who use drugs and wastewater analysis) provide a mixed picture, with user surveys indicating NPS use remains relatively stable or is decreasing, while wastewater analysis of two NPS indicates very low use with small increases. When comparing data for 2018–19 and 2019–20, indicators of supply (including border detections and forensic profiling data) show an increase in the number of NPS detections at the Australian border and the continued prevalence of amphetamine-type substances and cathinone-type substances among the substances seized.

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