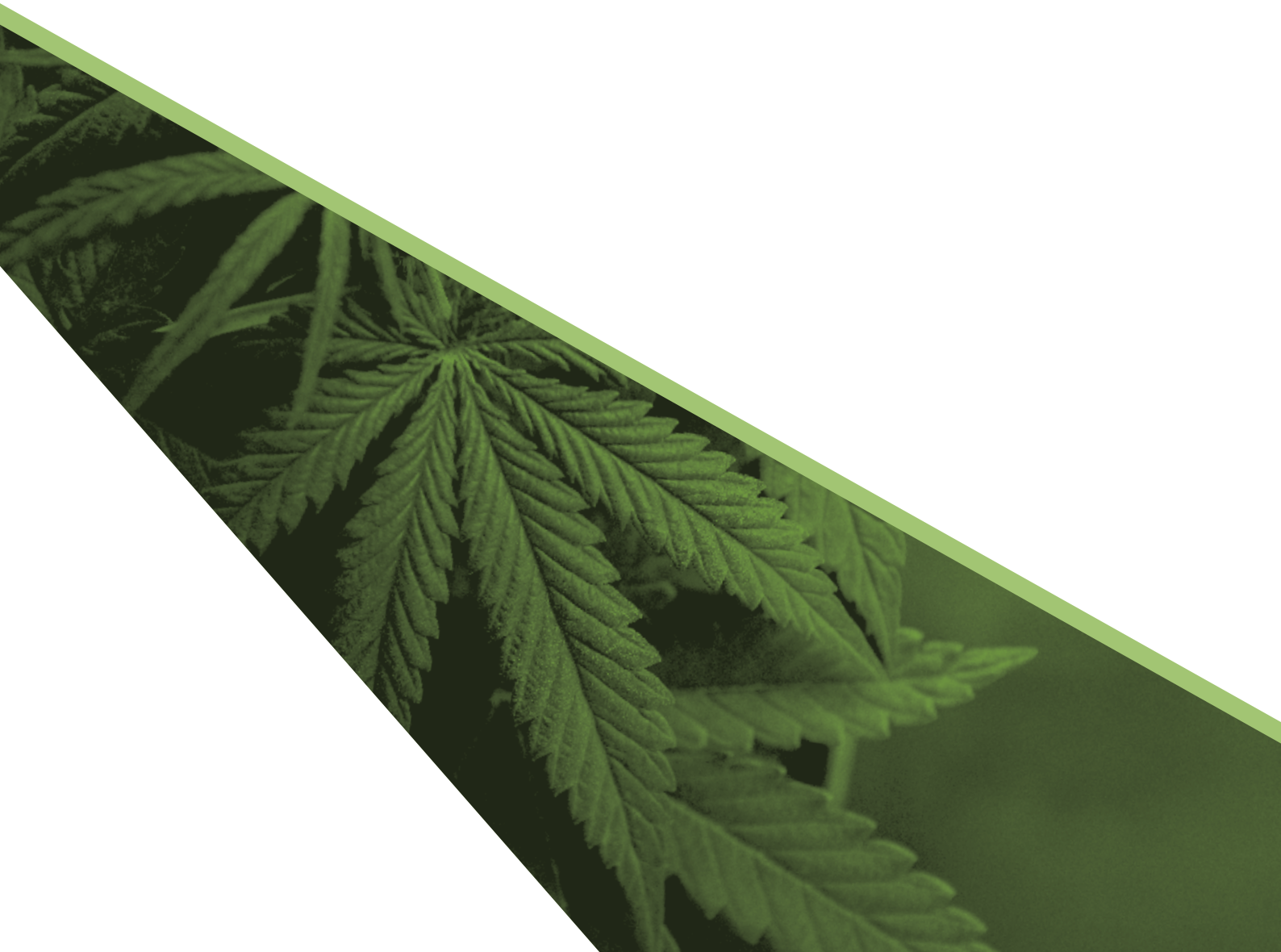


CANNABIS

➤ KEY POINTS

- Cannabis is cultivated globally and remains the most frequently used and seized illicit drug worldwide.
- Indicators of cannabis supply and demand in Australia provide a mixed picture, but overall point to a large, relatively stable market in 2016–17. Specifically:
 - There was a record 10 987 cannabis detections at the Australian border in 2016–17.
 - The number of national cannabis seizures decreased this reporting period from a record high in 2015–16, while the weight of cannabis seized in 2016–17 increased.
 - While national cannabis arrests decreased this reporting period, the 77 549 arrests reported in 2016–17 is the second highest on record.





MAIN FORMS

Cannabis is derived from plants within the Cannabis genus, in particular the two species *Cannabis sativa* and *Cannabis indica*.

- Cannabis plants can grow in a range of climates, as well as indoors through the use of hydroponic cultivation.
- The primary cannabinoid and main psychoactive ingredient in cannabis is delta-9-tetrahydrocannabinol, commonly known as THC, which is concentrated in the leaves and flowering head of the plant.
- The three main forms of cannabis are herb, resin and oil.
 - Herbal cannabis comprises the dried flowers and leaves of the plant, is usually smoked, and is the least potent form.
 - Cannabis resin ('hashish') is produced from the compressed resin glands of the cannabis plant. Resin can be smoked or added to food.
 - Cannabis oil, the most potent form of cannabis, is obtained from the resin and generally applied to cannabis herb or tobacco and smoked (CIS 2011a; CIS 2011b).

INTERNATIONAL TRENDS

Unlike other plant-based drugs (notably opiates and cocaine), whose large-scale cultivation is limited to certain geographic regions, the cannabis plant is cultivated globally. The United Nations Office on Drugs and Crime (UNODC) reports that between 2010 and 2015 cannabis cultivation was reported in 135 countries. In contrast, opium poppy is illicitly cultivated in an estimated 50 countries worldwide (though mostly in Asia) and coca bush cultivation in approximately 8 countries (all located in the Americas). Consequently, cannabis remains the most frequently used and seized drug worldwide. In 2015, global seizures of cannabis herb and resin reached over 7 000 tonnes. The UNODC assesses that whereas trafficking in cannabis herb is largely intraregional, the trafficking of cannabis resin is both intra and interregional, with Morocco remaining the key source country for cannabis resin, followed by Afghanistan, Lebanon, India and Pakistan (UNODC 2017).

At a regional level, the Americas accounted for 64.0 per cent of the weight of cannabis herb seized globally in 2015 (primarily Mexico, followed by the United States (US), Paraguay and Brazil). This was followed by Africa (notably Nigeria, Egypt and Morocco) at 28.0 per cent. The Near and Middle-East and South-West Asia (mostly in Pakistan, Afghanistan and the Islamic Republic of Iran) accounted for the greatest proportion of the weight of cannabis resin seized globally in 2015 (38.0 per cent), followed by Western and Central Europe (35.0 per cent; UNODC 2017).

In 2016, both the total number and weight of cannabis seizures reported by World Customs Organization (WCO) agencies decreased. The weight of cannabis seized decreased by nearly 20.0 per cent, from 1 261 138 kilograms in 2015 to 1 010 264 kilograms in 2016. The number of cannabis seizures decreased by over 10.0 per cent, from 14 101 in 2015 to 12 530 in 2016. Despite these decreases, cannabis remained the most frequently seized drug in 2016. The greatest proportion of cannabis seizures among WCO agencies, by number and weight,



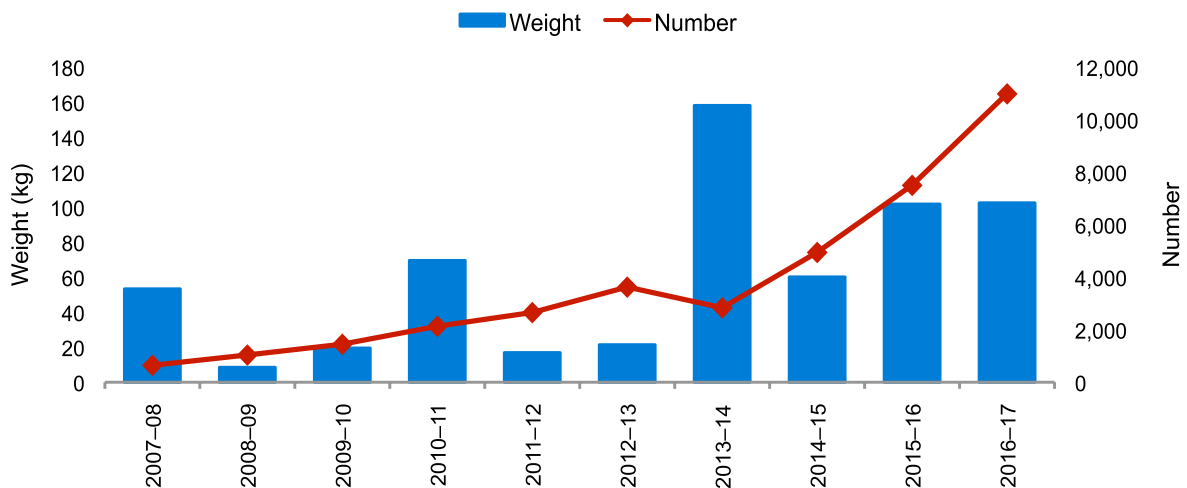
continue to occur in the US, which accounted for 73.1 per cent (9 155 individual seizures) of the total number of seizures in 2016.¹ Herbal cannabis remains the most frequently seized form of cannabis across all WCO member agencies, accounting for 85.8 per cent of the number of cannabis seizures, followed by cannabis resin (11.1 per cent)² (WCO 2017).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of cannabis detections at the Australian border continued to increase this reporting period, with a record 10 987 detections in 2016–17, a 46.4 per cent increase from the 7 504 detections reported in 2015–16. The total weight of cannabis detected this reporting period remained relatively stable, increasing from 101.8 kilograms in 2015–16 to 102.5 kilograms in 2016–17 (see Figure 10). In 2016–17, 15 cannabis detections weighed one kilogram or more. Combined, these 15 detections weighed 68.2 kilograms and account for 66.5 per cent of the total weight of cannabis detected this reporting period.³

FIGURE 10: Number and weight of cannabis detections at the Australian border, 2007–08 to 2016–17 (Source: Department of Home Affairs)



IMPORTATION METHODS

In 2016–17, detections of cannabis occurred in the international mail, air and sea cargo and air passenger/crew streams. This reporting period the international mail stream accounted for 98.8 per cent of the number and 49.1 per cent of the weight of cannabis detected at the Australian border. The air cargo stream accounted for 0.5 per cent of the number and 44.4 per cent of the weight of cannabis detected this reporting period. The sea cargo stream accounted for less than 0.1 per cent of the number and 4.8 per cent of the weight of cannabis detections in 2016–17, with the air passenger/crew stream accounting for 0.6 per cent of the number and 1.7 per cent of the weight.⁴

1 The total weight of cannabis seizures in the US in 2016 was not stated in the WCO's *Illicit Trade Report 2016*.
 2 The total number and weight of seizures for all forms of cannabis were not stated in the WCO's *Illicit Trade Report 2016*.
 3 See Appendix 1 for significant border detections of cannabis in 2016–17.
 4 Figures for importation methods of cannabis detections in 2016–17 will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/>>.

EMBARKATION POINTS

In 2016–17, 49 countries were identified as embarkation points for cannabis detected at the Australian border, compared with 38 countries in 2015–16. By weight, the US was the most significant embarkation point for cannabis detected at the Australian border in 2016–17. Other key embarkation points by weight this reporting include the United Kingdom, China, Iran, the Netherlands, Germany, Spain, Greece, Switzerland and Lithuania.

DOMESTIC MARKET INDICATORS

According to the 2016 National Drug Strategy Household Survey (NDSHS), 34.8 per cent of the Australian population aged 14 years and older reported using cannabis at least once in their lifetime. This figure remains unchanged from that reported in 2013. In the same survey, the reported recent⁵ use of cannabis increased, from 10.2 per cent in 2013 to 10.4 per cent in 2016 (AIHW 2017).

A national study of regular injecting drug users indicate that although the proportion of respondents reporting recent⁶ cannabis use has remained relatively stable since 2014, the frequency of use has increased during the same period.

- In the 2016 study, the proportion of respondents reporting the recent use of cannabis remained stable at 73.0 per cent, decreasing to 72.0 per cent in 2017.
- Within this user population, the reported median days of cannabis use in the six months preceding interview increased, from 120 days in 2015 to 135 days in 2016. This further increased to 140 days in 2017.⁷
- In the same 2016 study, the proportion of respondents reporting cannabis as their drug of choice increased, from 4.0 per cent in 2015 to 6.0 per cent in 2016. This decreased to 5.0 per cent in 2017 (Karlsson & Burns 2018; Stafford & Breen 2017a).

A national study of regular ecstasy users also indicates an increase in the frequency of cannabis use.

- In the 2016 study, the proportion of respondents reporting recent cannabis use decreased, from 87.0 per cent in 2015 to 86.0 per cent in 2016. This increased to 89.0 per cent in 2017.
- Within this user population, the reported median days of cannabis use in the six months preceding interview decreased from 50 days in 2015 to 49 days in 2016. In 2017, this increased to 60 days.⁸
- In the same 2016 study, the proportion of respondents reporting cannabis as their drug of choice decreased, from 29.0 per cent in 2015 to 21.0 per cent in 2016. In 2017, this increased to 28.0 per cent (Uporova et al. 2018; Stafford & Breen 2017b).

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

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

7 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/>>.

8 A figure for this data will be available on the Crime Statistics Australia website. See <<http://crimestats.aic.gov.au/>>.

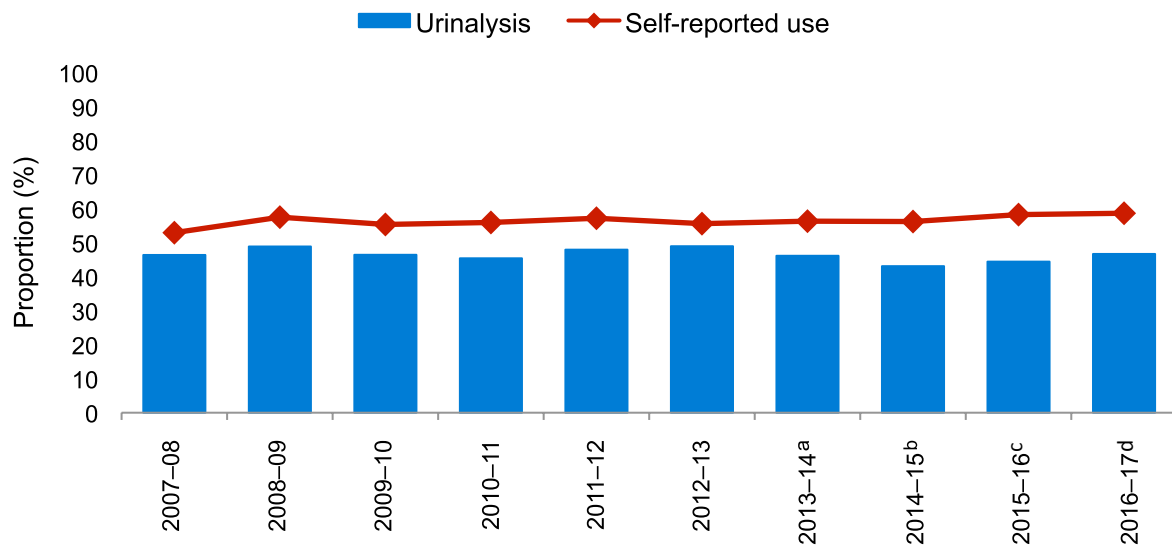




The Drug Use Monitoring in Australia (DUMA) program, which examines drug use and offending patterns among police detainees, comprises an interviewer-assisted self-report survey and the voluntary provision of a urine sample which is subjected to urinalysis to detect licit and illicit drug use.⁹

- The proportion of detainees testing positive to cannabis¹⁰ via urinalysis increased this reporting period, from 44.4 per cent in 2015–16 to 46.7 per cent in 2016–17.
- Self-reported recent cannabis use¹¹ remained relatively stable this reporting period, increasing from 58.2 per cent in 2015–16 to 58.6 in 2016–17.
- Long-term trends in the proportion of detainees testing positive to cannabis and self-reported cannabis use have remained relatively stable over the past decade (Figure 11).

FIGURE 11: National proportion of detainees testing positive for cannabis compared with self-reported recent use, 2007–08 to 2016–17 (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 first quarter of 2017.

The number of cannabis oil extraction laboratories detected in Australia decreased 19.2 per cent this reporting period, from 26 in 2015–16 to 21 in 2016–17.

- This reporting period South Australia reported 9 detections, followed by Victoria with 8, New South Wales with 3 and Queensland with 1.
- The 21 laboratories detected in 2016–17 is the second highest number on record since related reporting began in 2007–08 (see *Clandestine laboratories and precursors* chapter).

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

10 The ability to detect cannabis in urine for up to 30 days after use should be considered when interpreting the results.

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



PRICE

Cannabis prices remained relatively stable in 2016–17. Nationally, the price of 1 gram of hydroponic cannabis head remained stable this reporting period, ranging between \$10 and \$50. The price of 1 ounce¹² of hydroponic cannabis head ranged between \$200 and \$450 in 2016–17, compared with a price range between \$160 and \$450 in 2015–16. Similar to 2015–16, New South Wales and Queensland were the only states to report a price for a single mature hydroponic cannabis plant, which remained relatively stable this reporting period, ranging between \$2 000 and \$5 000.

AVAILABILITY

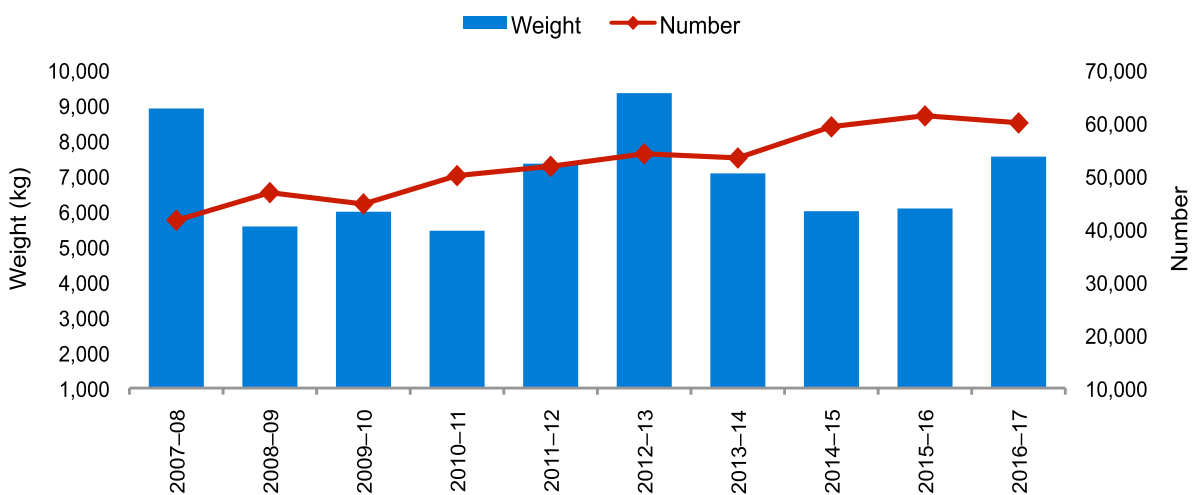
In a 2016 national study of regular injecting drug users, the proportion of respondents reporting hydroponic cannabis as easy or very easy to obtain remained stable at 92.0 per cent. This figure remained unchanged in 2017. In the same study, the proportion of respondents reporting ‘bush’¹³ cannabis as easy or very easy to obtain increased, from 76.0 per cent in 2015 to 78.0 per cent in 2016. This decreased to 75.0 per cent in 2017 (Karlsson & Burns 2018; Stafford & Breen 2017a).

In a 2016 national study of regular ecstasy users, the proportion of respondents reporting hydroponic cannabis as easy or very easy to obtain increased, from 91.0 per cent in 2015 to 93.0 per cent in 2016. This further increased to 94.0 per cent in 2017. In the same study, the proportion of respondents reporting bush cannabis as easy or very easy to obtain increased, from 79.0 per cent in 2015 to 81.0 per cent in 2016. This decreased to 76.0 per cent in 2017 (Uporova et al. 2018; Stafford & Breen 2017b).

SEIZURES AND ARRESTS

The number of national cannabis seizures decreased by 2.2 per cent this reporting period, from 61 334 in 2015–16 to 60 006 in 2016–17. The weight of cannabis seized nationally this reporting period increased 24.1 per cent, from 6 081.5 kilograms in 2015–16 to 7 547.8 kilograms in 2016–17 (see Figure 12).

FIGURE 12: National cannabis seizures, by number and weight, 2007–08 to 2016–17



12 An ounce equates to approximately 28 grams.

13 Bush cannabis refers to cannabis grown outdoors.



The Northern Territory reported the greatest percentage increase in the number of cannabis seizures in 2016–17, while Western Australia reported the greatest percentage increase in the weight of cannabis seized. This reporting period New South Wales accounted for the greatest proportion of national cannabis seizures (29.6 per cent), followed by Queensland (29.4 per cent) and Western Australia (26.4 per cent). Combined, these three states account for 85.4 per cent of the number of national cannabis seizures in 2016–17. Victoria accounted for the greatest proportion (31.7 per cent) of the weight of cannabis seized nationally this reporting period, followed by New South Wales (25.5 per cent). Combined, these two states account for 57.2 per cent of the weight of cannabis seized nationally in 2016–17 (see Table 7).

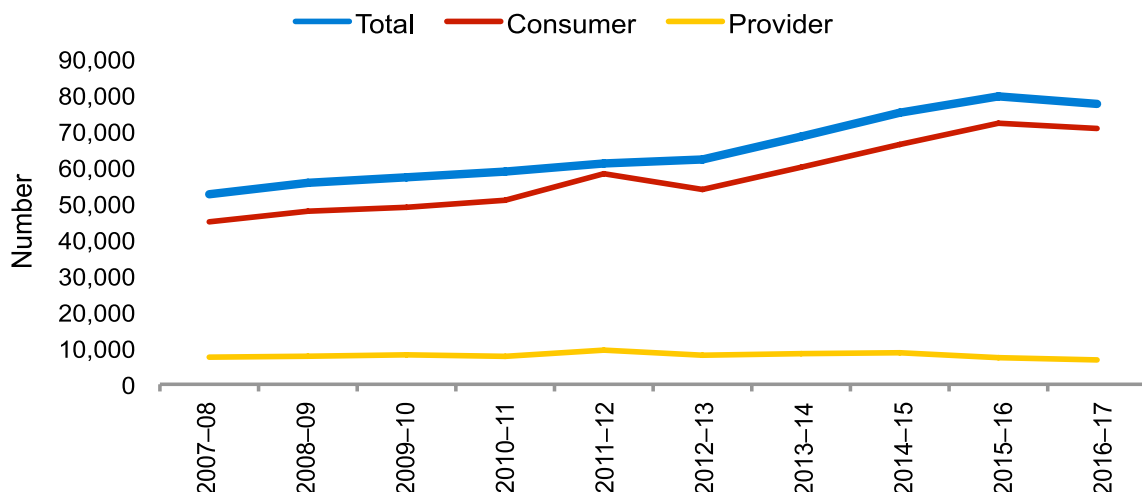
TABLE 7: Number, weight and percentage change of national cannabis seizures, 2015–16 and 2016–17

State/Territory ^a	Number			Weight (grams)		
	2015–16	2016–17	% change	2015–16	2016–17	% change
New South Wales	18 992	17 749	-6.5	1 542 518	1 926 599	24.9
Victoria	4 123	3 426	-16.9	1 596 235	2 390 703	49.8
Queensland	18 435	17 667	-4.2	817 730	917 625	12.2
South Australia	465	423	-9.0	1 116 109	697 732	-37.5
Western Australia	14 595	15 852	8.6	284 023	968 240	240.9
Tasmania	1 908	1 857	-2.7	195 482	267 008	36.6
Northern Territory	2 077	2 267	9.1	240 489	202 815	-15.7
Australian Capital Territory	739	765	3.5	288 993	177 106	-38.7
Total	61 334	60 006	-2.2	6 081 579	7 547 828	24.1

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

The number of national cannabis arrests decreased by 2.6 per cent this reporting period, from 79 643 in 2015–16 to 77 549 in 2016–17. Consumer arrests continue to account for the greatest proportion of arrests, comprising 91.2 per cent of national cannabis arrests in 2016–17 (see Figure 13).

FIGURE 13: Number of national cannabis arrests, 2007–08 to 2016–17



Western Australia reported the greatest percentage increase in cannabis arrests this reporting period. Queensland accounted for the greatest proportion of national cannabis arrests in 2016–17 (30.7 per cent), followed by New South Wales (21.6 per cent). Combined, these two states account for 52.3 per cent of national cannabis arrests in 2016–17 (see Table 8).

TABLE 8: Number and percentage change of national cannabis arrests, 2015–16 and 2016–17

State/Territory ^a	Arrests		
	2015–16	2016–17	% change
New South Wales	17 809	16 765	-5.9
Victoria	9 717	10 164	4.6
Queensland	25 307	23 836	-5.8
South Australia	1 973	1 877	-4.9
South Australia (CENs) ^b	9 608	9 200	-4.2
Western Australia	9 434	10 523	11.5
Western Australia (CIRs) ^c	2 099	2 004	-4.5
Tasmania	1 452	1 460	0.6
Northern Territory	1 048	627	-40.2
Northern Territory (DINs) ^d	768	707	-7.9
Australian Capital Territory	333	304	-8.7
Australian Capital Territory (SCONs) ^e	95	82	-13.7
Total	79 643	77 549	-2.6

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

b. Cannabis Expiation Notices.

c. Cannabis Intervention Requirements.

d. Drug Infringement Notices.

e. Simple Cannabis Offence Notices.

NATIONAL IMPACT

Despite recent decreases in the number and weight of global cannabis seizures between 2015 and 2016, international data indicates that cannabis is the most frequently used and seized illicit drug worldwide, with cannabis reportedly grown in over 135 countries.

Indicators of cannabis demand, including surveys of drug users and police detainees, suggest that cannabis use has remained relatively stable.

- According to the 2016 NDSHS, reported lifetime cannabis use has remained stable, with a small increase in reported recent use.
- According to a national survey of police detainees, both the proportion of detainees self-reporting cannabis use and those testing positive to cannabis remained relatively stable in 2016–17.

Indicators of cannabis supply include border detection, seizure, arrest and clandestine laboratory data.

- During this reporting period both the number and weight of cannabis detected at the Australian border increased, with the 10 987 detections in 2016–17 the highest number on record.
- While both the number of national cannabis seizures and arrests decreased this reporting period, they are the second highest on record.



- The weight of cannabis seized nationally increased this reporting period.
- The number of cannabis oil extraction laboratories detected nationally decreased in 2016–17; however the 21 detections this reporting period is the second highest on record since reporting began in 2007–08 and is a sevenfold increase on figures reported earlier in the decade.

REFERENCES

- Australian Institute of Health and Welfare (AIHW) 2017, *National Drug Strategy Household Survey 2017: detailed findings*, Drug Statistics series No. 31, Australian Institute of Health and Welfare, Canberra, viewed 27 November 2017, <<https://www.aihw.gov.au/getmedia/15db8c15-7062-4cde-bfa4-3c2079f30af3/21028.pdf>>.
- Cannabis Information and Support (CIS) October 2011a, *What is Cannabis?*, viewed 11 December 2017, <<https://cannabissupport.com.au/workplace-and-clinical-resources/publications/factsheets/what-is-cannabis/>>.
- Cannabis Information and Support (CIS) October 2011b, *Cannabis or marijuana?*, viewed 11 December 2017, <<https://cannabissupport.com.au/workplace-and-clinical-resources/publications/factsheets/cannabis-or-marijuana/>>.
- Karlsson, A & Burns, L 2018, *Australian Drug Trends 2017: Findings from the Illicit Drug Reporting System (IDRS)*, Australian Drug Trends Series No. 181, National Drug and Alcohol Research Centre, University of New South Wales, Sydney.
- Stafford, J & Breen, C 2017a, *Australian Drug Trends 2016: Findings from the Illicit Drug Reporting System (IDRS)*, Australian Drug Trends Series No. 163, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, viewed 27 November 2017, <https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/national-idrs_2016_finalwith-customs.pdf>.
- Stafford, J & Breen, C 2017b, *Australian trends in ecstasy and related drug markets 2016. Findings from Ecstasy and Related Drugs Reporting System (EDRS)*, Australian Drug Trends Series No. 172, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, viewed 27 November 2017, <https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/National_EDRS_%202016_FINALwith%20customs.pdf>.
- United Nations Office on Drugs and Crime (UNODC) 2017, *World Drug Report 2017*, United Nations.
- Uporova, J, Karlsson, A, Sutherland, R & Burns, L 2018, *Australian trends in ecstasy and related drug markets 2017, Findings from Ecstasy and Related Drugs Reporting System (EDRS)*, Australian Drug Trends Series No. 190, National Drug and Alcohol Research Centre, University of New South Wales, Sydney.
- World Customs Organization (WCO) 2017, *Illicit Trade Report 2016*, WCO, Brussels.

