



CANNABIS



KEY POINTS

- Cannabis continues to be one of the largest illicit drug markets globally and remained the most seized drug in the world in 2017.
 - There was a small increase in the weight of cannabis herb seized in 2017, counterbalanced by a decrease in the weight of cannabis resin seized.
- Indicators of cannabis demand and supply in Australia provide a mixed picture, but overall point to a large and relatively stable market.
 - While the number of cannabis detections at the border decreased this reporting period, the weight of cannabis detected at the Australian border increased in 2018–19 and is the highest weight recorded in the last decade.
 - The number and weight of national cannabis seizures and the number of national cannabis arrests all decreased in 2018–19, but remain high.
 - According to the National Wastewater Drug Monitoring Program, the population-weighted average consumption of cannabis decreased in both capital city and regional sites from August 2018 to August 2019.



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 2015).

INTERNATIONAL TRENDS

Cannabis continues to be the most commonly used illicit drug worldwide. While reported cannabis use stabilised in many countries with established cannabis markets, an increase in consumption was recorded for emerging markets in many countries in Asia and Africa. Available indicators point to an increase in both indoor and outdoor cannabis cultivation between 2013 and 2017. Based on the number of countries reporting cannabis cultivation or related law enforcement activity, the United Nations Office on Drugs and Crime (UNODC) assessed that while outdoor cannabis cultivation is estimated to be more widespread globally, the increase in indoor cannabis cultivation is estimated to be three times that of outdoor cannabis cultivation during the same period (UNODC 2019a).

Based on UNODC data, cannabis remains the most seized drug worldwide. The combined weight of cannabis resin and cannabis herb seized globally decreased 3 per cent, from 6,453 tonnes in 2016 to 6,272 tonnes in 2017. The weight of cannabis resin seized globally decreased 31 per cent, from 1,683 tonnes in 2016 to 1,161 tonnes in 2017—ending the upward trend in cannabis resin seizures over the period 2011–16. In contrast, the weight of cannabis herb seized globally increased 7 per cent, from 4,770 tonnes in 2016 to 5,111 tonnes in 2017. Forty-nine per cent of the combined weight of cannabis herb and resin seized globally in 2017 was in the Americas, followed by 18 per cent in Asia, 17 per cent in Africa, 15 per cent in Europe and less than 1 per cent in Oceania. Data for the number of seizures for both cannabis resin and cannabis herb were not available (UNODC 2019a; UNODC 2019b; UNODC 2019c).

Similar to previous years, the Americas continued to account for the greatest proportion of the weight of cannabis herb seized globally in 2017 (60 per cent). In contrast to previous years where the largest proportion of cannabis herb was seized in North America, South America accounted for the greatest proportion seized in 2017 (38 per cent). The Near and Middle East/South-West Asian region, and Western and Central Europe accounted for the greatest proportion of the weight of cannabis resin seized in 2017 (UNODC 2019a).

According to the World Customs Organization (WCO), the number of cannabis seizures and the weight of cannabis seized globally by WCO agencies continued to decrease in 2018. The number of cannabis seizures decreased 7 per cent to 10,521 in 2018 and the weight of cannabis seized decreased 19 per cent to 683,002.6 kilograms in 2018. Similar to 2017, herbal cannabis accounted for the greatest proportion of the number and weight of cannabis seized. In contrast, the number of cannabis resin seizures and the weight of cannabis resin seized continued to increase. Compared to 2017, the number of cannabis resin seizures increased by 20 per cent in 2018 and the weight of cannabis resin seized increased by 25 per cent (WCO 2019).

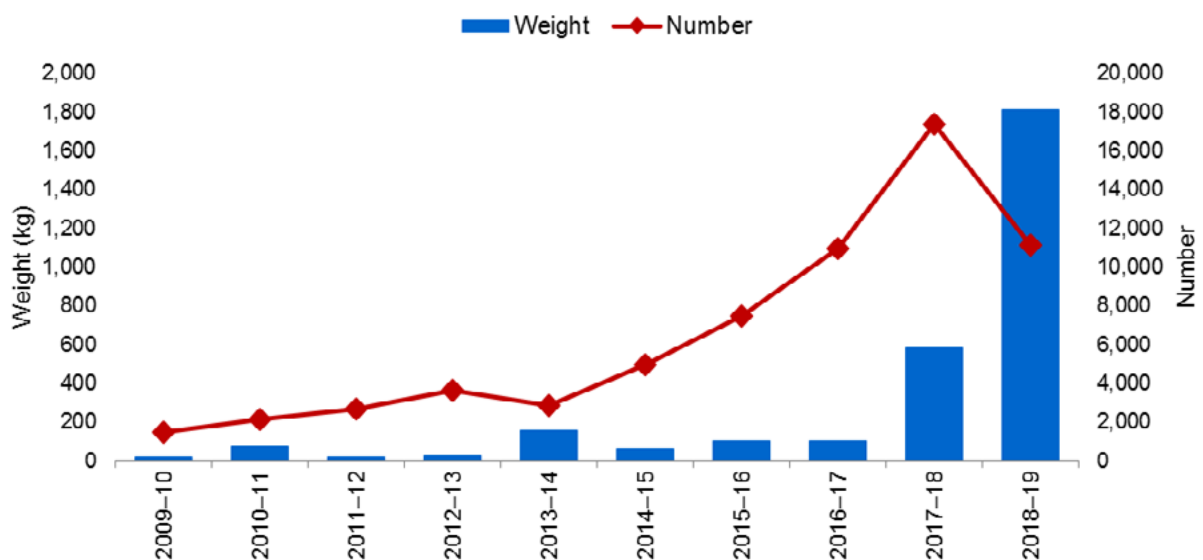
DOMESTIC TRENDS AUSTRALIAN BORDER SITUATION

The number of cannabis detections at the Australian border increased 666 per cent over the last decade, from 1,454 in 2009–10 to 11,133 in 2018–19. The number of cannabis detections decreased 36 per cent this reporting period from 17,383 in 2017–18.

The weight of cannabis detected increased 9,144 per cent over the last decade, from 19.6 kilograms in 2009–10 to 1,811.7 kilograms in 2018–19, the highest weight recorded in the last decade. The weight of cannabis detected increased 212 per cent this reporting period from 580.2 kilograms in 2017–18 (see Figure 10).

The 2018–19 cannabis detections included a single detection of 1,500 kilograms (see Appendix 2). In 2018–19, 32 of the 11,133 cannabis detections (<1 per cent) weighed one kilogram or more. With a combined weight of 1,618.7 kilograms, these 32 detections account for 89 per cent of the weight of cannabis detected in 2018–19.²⁹

FIGURE 10: Number and weight of cannabis detections at the Australian border 2009–10 to 2018–19 (Source: Department of Home Affairs)



29 See Appendix 2 for significant border detections of cannabis in 2018–19.



IMPORTATION METHODS

In 2018–19, detections of cannabis at the Australian border occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, the international mail stream accounted for the greatest proportion of cannabis detections (97 per cent), followed by air cargo (2 per cent), air passenger/crew (1 per cent) and sea cargo (<1 per cent). By weight, sea cargo accounted for the greatest proportion of detections (83 per cent), followed by international mail (11 per cent), air cargo (6 per cent) and air passenger/crew (<1 per cent).

EMBARKATION POINTS

In 2018–19, 49 countries were identified as embarkation points for cannabis detected at the Australian border, compared to 50 countries in 2017–18. By weight, the United States continued to be the primary embarkation point for cannabis detected in 2018–19. Other key embarkation points by weight this reporting period include Spain, the United Kingdom, China (including Hong Kong), France, Laos, Canada, the Netherlands, Taiwan and the Philippines.

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 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. The NWDMP began measuring cannabis consumption in August 2018. According to data from the NWDMP for August 2018 to August 2019:

- Cannabis consumption was higher per capita in regional sites than capital city sites.
- The population-weighted average consumption of cannabis in capital city sites decreased.
- The population-weighted average consumption of cannabis in regional sites decreased (ACIC 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:

- Over the last decade, the proportion of respondents reporting cannabis as their drug of choice remained relatively stable at 8 per cent as reported in 2010 and 2019. In 2018 this proportion was 7 per cent.

- The proportion of respondents reporting the recent use³⁰ of any form of cannabis remained relatively stable over the last decade, decreasing from 75 per cent in 2010 to 74 per cent in 2019. In 2018 this proportion was 73 per cent.
- The reported median number of days of cannabis use in the six months preceding interview decreased over the last decade, from 180 days in 2010 to 130 days in 2019. In 2018 the median number of days was 100 (Stafford & Burns 2011; Peacock et al. 2019a).

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 this national study:

- The proportion of respondents reporting cannabis as their drug of choice increased over the last decade, from 16 per cent in 2010 to 26 per cent in 2019. This proportion remained unchanged from 2018.
- The proportion of respondents reporting the recent use of cannabis increased over the last decade, from 80 per cent in 2010 to 85 per cent in 2019. In 2018 this proportion was 90 per cent.
- The reported median number of days of cannabis use in the six months preceding interview increased over the last decade, from 24 days in 2010 to 60 days in 2019. In 2018 the median number of days was 48 (Sindicich & Burns 2011; Peacock et al. 2019b).

The Drug Use Monitoring in Australia (DUMA) program collects criminal justice and drug 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.³¹ According to DUMA program data:

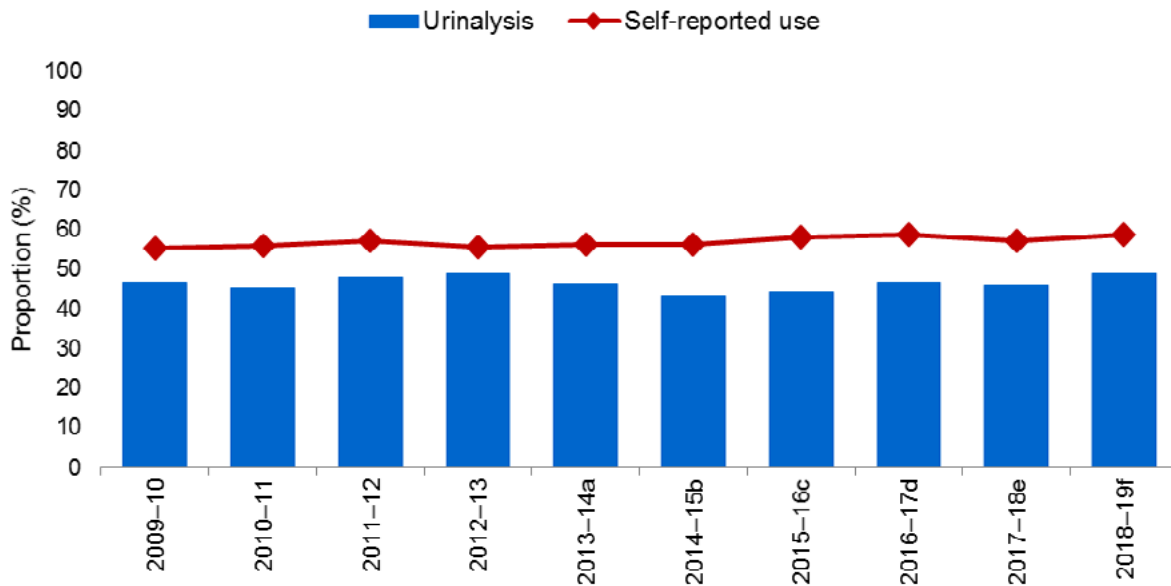
- Over the last decade the proportion of detainees testing positive to cannabis and self-reporting cannabis use have remained relatively stable.
- The proportion of detainees testing positive to cannabis over the last decade ranged from a low of 43 per cent in 2014–15 to a high of 49 per cent in 2012–13 and 2018–19. In 2017–18 this proportion was 46 per cent.
- The self-reported recent use³² of cannabis among detainees over the last decade ranged from 55 per cent in 2009–10 to 59 per cent in 2016–17 and 2018–19. In 2017–18, this proportion was 57 per cent (see Figure 11).

30 In both the IDRS and EDRS studies, recent use refers to reported use in the six months preceding interview.

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

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

FIGURE 11: National proportion of detainees testing positive for cannabis compared with self-reported recent use, 2009–10 to 2018–19 (Source: Australian Institute of Criminology)



- Urine was collected in the third and fourth quarter of 2013 and the first quarter of 2014.
- Urine was collected in the third quarter of 2014 and the first and second quarter of 2015.
- Urine was collected in the third quarter of 2015 and the first and second quarter of 2016.
- Urine was collected in the third quarter of 2016 and the second quarter of 2017.
- 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.
- 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.

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

- The proportion of respondents reporting cannabis use at least once in their lifetime increased over the last decade, from 14 per cent in 2008 to 17 per cent in 2017. In 2014 this proportion was 16 per cent.
- The proportion of respondents reporting having used cannabis at least once in the past month also increased over the last decade, from 6 per cent in 2008 to 8 per cent in 2017. In 2014 this proportion was 7 per cent.
- Data collected between 1996 and 2017 indicates that cannabis is the most commonly used illicit substance among secondary students, with prevalence and frequency of use increasing in older students (Guerin & White 2018; Guerin & White 2019).

CLANDESTINE LABORATORIES

The number of detections of cannabis oil extraction laboratories remained relatively stable this reporting period, increasing from 17 in 2017–18 to 18 in 2018–19. South Australia accounted for the majority of detections (12), followed by Victoria (5) and New South Wales (1) (see *Clandestine Laboratories and Precursors* chapter).

PRICE

At the street level, the price of cannabis is generally measured as a 'deal' (approximately 1 gram). Nationally, the price for 1 gram of hydroponic cannabis head remained relatively stable over the last decade, ranging between \$20 and \$100 in 2009–10 to between \$10 and \$100 in 2018–19. In 2017–18 the reported price ranged from \$20 to \$50. The national median price for 1 gram of hydroponic cannabis head also remained relatively stable over the last decade (\$25 in 2009–10 and \$23.70 in 2018–19). In 2017–18 the national median price was \$25.

Nationally, the price for 1 ounce (28 grams) of hydroponic cannabis head remained relatively stable over the last decade, ranging between \$250 and \$500 in 2009–10 to between \$200 and \$500 in 2018–19. In 2017–18 the reported price ranged between \$200 and \$450. The national median price for 1 ounce of hydroponic cannabis head decreased over the last decade, from \$350 in 2009–10 to \$302.50 in 2018–19, an increase from \$280 in 2017–18.

Nationally, the price for a single mature hydroponic cannabis plant remained relatively stable over the last decade, ranging between \$2,000 and \$5,000 in 2009–10 to between \$3,000 and \$5,000 in 2018–19. In 2017–18 the reported price ranged between \$2,000 and \$5,000.

The price range for 1 gram of resin decreased over the last decade, from between \$40 and \$50 in 2009–10 (reported in New South Wales and Queensland) to between \$25 and \$50 in 2018–19 (reported in Queensland and Tasmania). The 2018–19 price remained unchanged from 2017–18.

AVAILABILITY

User surveys indicate that the availability of hydroponic cannabis remained relatively stable this reporting period, while the reported availability of bush cannabis³³ increased.

In a 2019 national study of people who regularly inject drugs, the proportion of respondents reporting hydroponic cannabis as 'easy' or 'very easy' to obtain decreased, from 89 per cent in 2018 to 88 per cent in 2019. In the same study the proportion of respondents reporting bush cannabis as easy or very easy to obtain increased, from 77 per cent in 2018 to 78 per cent in 2019. While showing an overall decrease in availability over the last decade, these figures are similar to the proportions reported in 2010 for hydroponic cannabis (92 per cent) and bush cannabis (79 per cent; Stafford & Burns 2011; Peacock et al. 2019a).

33 Bush cannabis refers to cannabis grown outdoors.



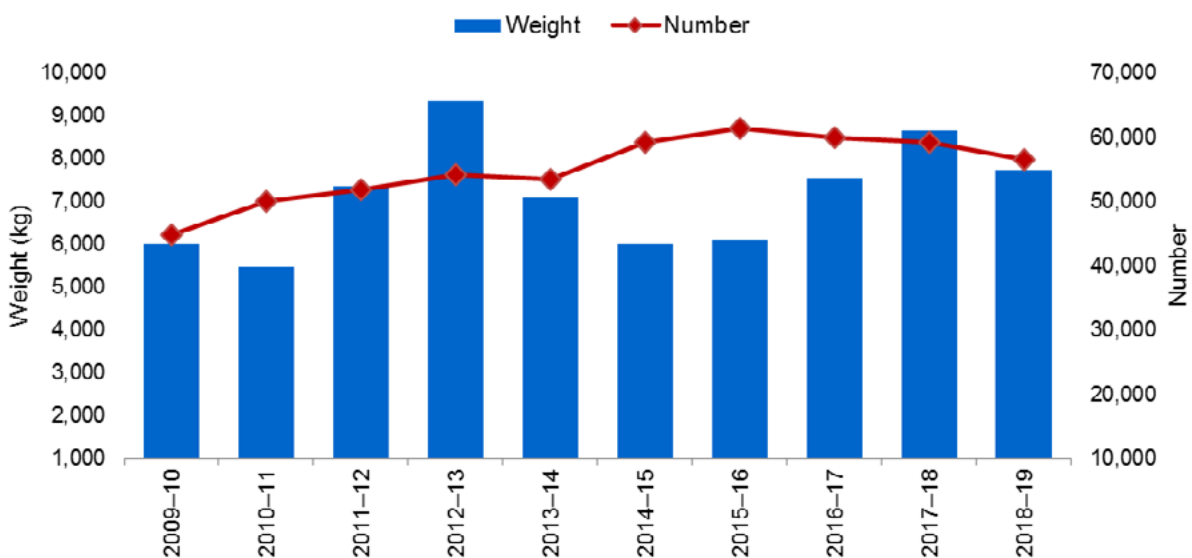
In a 2019 national study of people who regularly use ecstasy and other stimulants, the proportion of respondents reporting hydroponic cannabis as easy or very easy to obtain increased, from 84 per cent in 2018 to 90 per cent in 2019. In the same study the proportion of respondents reporting bush cannabis as easy or very easy to obtain increased, from 75 per cent in 2018 to 78 per cent in 2019. These figures are similar to the proportions reported in 2010, with small increases reported for the availability of hydroponic cannabis (87 per cent) and bush cannabis (73 per cent; Sindicich & Burns 2011; Peacock et al. 2019b).

SEIZURES

The number of national cannabis seizures increased 26 per cent over the last decade, from 44,736 in 2009–10 to 56,491 in 2018–19. The number of national cannabis seizures decreased 5 per cent this reporting period from 59,139 in 2017–18.

The weight of cannabis seized nationally increased 29 per cent over the last decade, from 5,989.8 kilograms in 2009–10 to 7,740.8 kilograms in 2018–19. The weight of cannabis seized nationally decreased 11 per cent this reporting period from 8,655.9 kilograms in 2017–18 (see Figure 12).

FIGURE 12: National cannabis seizures, by number and weight, 2009–10 to 2018–19



The Australian Capital Territory reported the greatest percentage increase in both the number and weight of cannabis seized in 2018–19. This reporting period New South Wales accounted for the greatest proportion of the number (31 per cent) of national cannabis seizures, while Victoria accounted for the greatest proportion of the weight of cannabis seized nationally (41 per cent; see Table 5).

TABLE 5: Number, weight and percentage change of national cannabis seizures, 2017–18 and 2018–19

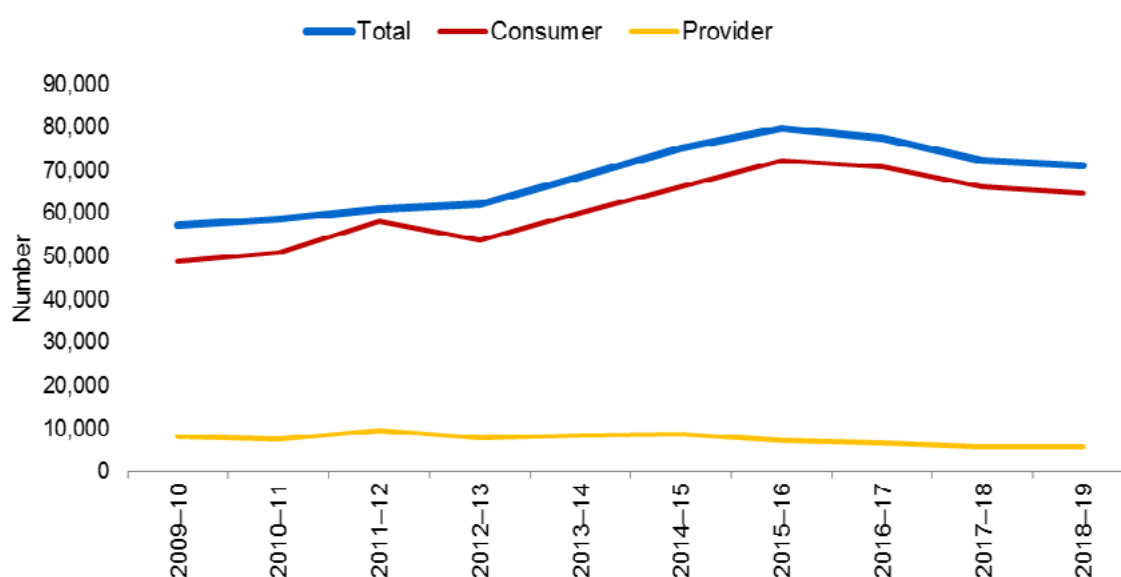
State/Territory ^a	Number			Weight (grams)		
	2017–18	2018–19	% change	2017–18	2018–19	% change
New South Wales	17,720	17,261	-2.6	2,373,144	2,197,338	-7.4
Victoria	3,312	3,524	6.4	1,434,393	3,184,656	122.0
Queensland ^b	16,543	16,955	2.5	2,558,050	1,105,706	-56.8
South Australia	366	116	-68.3	506,229	223,684	-55.8
Western Australia ^c	16,771	14,240	-15.1	1,254,008	392,922	-68.7
Tasmania	1,897	1,799	-5.2	213,959	220,887	3.2
Northern Territory	1,922	1,941	1.0	163,708	71,331	-56.4
Australian Capital Territory	608	655	7.7	152,507	344,362	125.8
Total	59,139	56,491	-4.5	8,655,998	7,740,886	-10.6

- a. Includes seizures by state/territory police and the Australian Federal Police for which a valid seizure weight was recorded.
- b. The 2018–19 data provided by the Queensland Police Service reflects improvements made to the quality of the drug seizure dataset. As a result, caution should be exercised in comparing data from previous reporting periods.
- c. The 2018–19 data provided by the Western Australia Police Force reflects improvements made to the quality of the drug seizure dataset. As a result, caution should be exercised in comparing data from previous reporting periods.

ARRESTS

Overall, the number of national cannabis arrests increased 24 percent over the last decade, from 57,170 in 2009–10 to 71,151 in 2018–19, although since 2015–16 the number of arrests decreased. The number of national cannabis arrests decreased 2 per cent this reporting period from 72,381 in 2017–18. Consumer arrests continue to account for the greatest proportion of arrests, accounting for 91 per cent of national cannabis arrests in 2018–19 (see Figure 13).

FIGURE 13: Number of national cannabis arrests, 2009–10 to 2018–19



The Northern Territory reported the greatest percentage increase in cannabis arrests in 2018–19. Queensland accounted for the greatest proportion of national cannabis arrests this reporting period (31 per cent; see Table 6).

TABLE 6: Number and percentage change of national cannabis arrests, 2017–18 and 2018–19

State/Territory ^a	Arrests		
	2017–18	2018–19	% change
New South Wales	16,679	16,224	-2.7
Victoria	9,675	10,485	8.4
Queensland	21,126	21,780	3.1
South Australia	1,672	1,141	-31.8
South Australia (CENs) ^b	8,961	8,093	-9.7
Western Australia	9,342	8,917	-4.5
Western Australia (CIRs) ^c	1,763	1,546	-12.3
Tasmania	1,591	1,435	-9.8
Northern Territory	507	555	9.5
Northern Territory (DINs) ^d	675	732	8.4
Australian Capital Territory	338	188	-44.4
Australian Capital Territory (SCONs) ^e	52	55	5.8
Total	72,381	71,151	-1.7

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

Cannabis continues to be the most commonly used illicit drug worldwide, with increases in consumption reported in many countries in Asia and Africa between 2016 and 2017. While there was a small decrease in the weight of cannabis seized worldwide in 2017, it remains the most seized drug globally, with cannabis herb continuing to account for the greatest proportion of the weight of cannabis seized. The number of cannabis seizures and the weight of cannabis seized globally by WCO agencies continued to decrease in 2018, with herbal cannabis continuing to account for the greatest proportion of both the number and weight of cannabis seized.

Indicators of cannabis demand and supply in Australia provide a mixed picture, but overall point to a large, relatively stable market.

Indicators of cannabis demand include surveys of people who regularly use drugs, police detainees and wastewater analysis.

- According to a national study of people who regularly inject drugs, both the reported recent use of cannabis and median days of use increased from 2018 to 2019.
- According to a national study of people who regularly use ecstasy and other stimulants, the reported recent use of cannabis decreased from 2018 to 2019, while the median days of use increased.
- According to a national study of police detainees, both the proportion of detainees testing positive for cannabis and self-reported cannabis use increased in 2018–19.
- According to a national study of secondary students, cannabis was the most commonly reported drug used by secondary school students in 2017, with the prevalence and frequency of use increasing in older students.
- The NWDMP indicates that cannabis consumption was higher per capita in regional sites than capital city sites. When comparing data for August 2018 to August 2019, the population-weighted average consumption of cannabis decreased in both capital city and regional sites.

Indicators of cannabis supply include border detection, seizure, arrest, price and clandestine laboratory data. Compared to 2017–18, in 2018–19:

- The number of cannabis detections at the Australian border decreased, while the weight detected increased to the highest weight recorded in the last decade (noting that a single detection accounted for 83 per cent of the weight detected in 2018–19).
- While the number and weight of national cannabis seizures and the number of national cannabis arrests decreased, they remain high.
- The national median price for 1 gram of hydroponic cannabis head decreased slightly.
- The number of detections of cannabis oil extraction laboratories remained relatively stable, increasing from 17 in 2017–18 to 18 in 2018–19.

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