CANNABIS

KEY POINTS

- There was a record 7 504 cannabis detections at the Australian border in 2015–16, the majority of which related to cannabis seeds.
- There was a record 61 334 national cannabis seizures in 2015–16, with the weight of cannabis seized nationally this reporting period remaining relatively stable.
- There was a record 79 643 national cannabis arrests in 2015–16.



MAIN FORMS

Grown outdoors and in a variety of climates, the cannabis plant is also commonly cultivated indoors using hydroponic technology. Cannabis plants are grouped into two categories—hemp and marijuana. Hemp, which is fibrous and low in psychoactive components, can be cultivated for fibre, food and fuel, with hemp roots, stalks and stems primarily used to produce clothing, paper and skin care products. Marijuana, commonly referred to as cannabis, is high in psychoactive components and its flowering heads, leaves, resin and oil are commonly used as an illicit drug. Two common subspecies within the cannabis genus from which cannabis is harvested are *Cannabis indica* and *Cannabis sativa* (Agri-Food Canada 2016; EMCDDA 2015; NCPIC 2015).

The potency of cannabis varies and is influenced by a number of factors including plant variety and the method of cultivation, preparation and storage. There are three main forms of cannabis—herb, resin and oil. Herbal cannabis is the least potent form of cannabis. Consisting of the dried flowers and leaves of the cannabis plant, it is usually smoked. Cannabis resin (hasish) is produced from the compressed resin glands of the cannabis plant. Resin can be smoked, or may be added to food and eaten. Cannabis oil, the most potent form of cannabis, is a thick oil obtained from the resin. Cannabis oil is generally applied to cannabis herb or tobacco and smoked (EMCDDA 2015; NCPIC 2015). The main forms of cannabis and methods of administration are outlined in Table 12.

| Form | Description | Properties | Method of administration |
|-----------------------------|--|-------------------------|---|
| Herbal cannabis | The leaves and flowering heads | Low levels of THC | Smoked as a rolled cigarette or inhaled through a water pipe or 'bong' |
| Cannabis resin (hashish) | Made from the resinous material of the cannabis plant, dried and compressed into balls, blocks or sheets; colour ranges from light brown to black | Medium levels of THC | Crumbled and smoked in a pipe or bong, rolled into a cigarette with cannabis leaf or tobacco, or cooked with food and eaten, most notably as 'hash cookies' |
| Cannabis oil | Viscous oil extracted using a solvent such as acetone, isopropanol or methanol; colour ranges from amber to dark brown | High levels of THC | Small amounts applied to cannabis or tobacco cigarettes; can also be heated and the vapour inhaled |

TABLE 12: Main forms of cannabis

Cannabis has more than 70 unique chemicals that are collectively referred to as cannabinoids. The most recognised cannabinoid compound and the main psychoactive component of the cannabis plant is delta-9-tetrahydrocannabinol (THC), which is generally concentrated in the flowering head of the plant.¹ Cannabidiol (CBD), which is also present in cannabis, is believed to have antipsychotic properties, lessening the psychoactive effects of THC (NCPIC 2011).

¹ THC is found in most parts of the cannabis plant, but is most plentiful in the flowers and small leaves surrounding them.

Cannabis is a depressant drug, slowing both cognitive and physical responses. Cannabis may also produce hallucinogenic effects when large quantities are used. Effects of cannabis use may include a sense of mild euphoria and relaxation, changes in sensory perception, loss of inhibitions and talkativeness. Short-term effects of use may include blurred vision, increased heart rate and bloodshot eyes. Long-term effects of cannabis use may include memory loss, mood swings, paranoia, impaired cognitive function and basic motor coordination. Cannabis use may cause a condition called drug-induced psychosis, exacerbate existing psychotic symptoms and may decrease the chance of recovery from a psychotic episode. Cannabis users with a psychotic illness may experience increased hallucinations, delusions and other symptoms and have a higher rate of hospitalisation for psychosis. A recent study by scientists at the University of Edinburgh identified heavy cannabis use as a potential cause of reduced bone density and an increased risk of fracture (ADF 2016; NIDA 2016; SANE 2016; Sophocleous et al 2016).

Synthetic cannabinoids are discussed in the 'Other Drugs' chapter.

INTERNATIONAL TRENDS

Cannabis remains the most widely cultivated, produced, trafficked and used drug globally. In 2014, cannabis in its various forms was intercepted in 95.0 per cent of reporting countries and accounted for over half of the 2.2 million drug seizure cases reported to the United Nations Office on Drugs and Crime (UNODC). Cannabis consumption has remained relatively stable globally, despite major changes in some regions, particularly in North America and Western and Central Europe where cannabis use has increased (UNODC 2016).

Cannabis is the most widely used drug in Europe. Herbal cannabis and cannabis resin are the two most commonly available forms in Europe, with the market dominated by herbal cannabis grown within the European Union. Europe remains one of the world's largest consumer markets for resin. Morocco and Afghanistan appear to be the world's two largest producer and exporter countries of cannabis resin, followed to a lesser extent by Lebanon, India and Pakistan. The UNODC suggests that Afghanistan has overtaken Morocco in terms of the quantity of resin produced. Despite this, Afghan resin does not currently appear to be widely available in Europe, with Morocco remaining the main source of cannabis resin for Europe (EMCDDA 2016, UNODC 2016).

The Americas accounted for around three quarters of cannabis herb seized globally in 2014, followed by Africa (14.0 per cent) and Europe (6.0 per cent). The largest amount of cannabis herb was seized in North America, which accounted for 37.0 per cent of global cannabis herb seizures in 2014, followed by South America (24.0 per cent) and the Caribbean (13.0 per cent). Western and Central Europe accounted for 40.0 per cent of global cannabis resin seizures in 2014, followed by North Africa (32.0 per cent) and the Near and Middle East (25.0 per cent). Spain alone accounted for 26.0 per cent of global resin seizures in 2014 (UNODC 2016).

The total number of cannabis seizures by World Customs Organization (WCO) agencies increased 0.7 per cent, from 14 002 in 2014 to 14 101 in 2015. The weight seized increased 0.4 per cent, from 1 254 266 kilograms in 2014 to 1 258 736 kilograms in 2015. North America continues to account for the greatest proportion of the number and weight of cannabis seized, accounting for 78.1 per cent of the number and 79.6 per cent of the weight in 2015. Herbal cannabis continues to be the main form of the drug seized, accounting for 88.2 per cent of the number and 82.7 per cent of the weight of cannabis seized in 2015. Cannabis resin accounted for 8.9 per cent of the number and 15.9 per cent of the weight of cannabis seized in 2015 (WCO 2016).

DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

The number of detections of cannabis at the Australian border continued to increase this reporting period, with a record 7 504 detections in 2015–16, a 51.6 per cent increase from the 4 949 detections in 2014–15. The total weight of cannabis detected this reporting period increased 69.1 per cent, from 60.2 kilograms in 2014–15 to 101.8 kilograms in 2015–16 (see Figure 26).

Cannabis detected at the Australian border this reporting period was in seed, leaf, liquid, powder and resin form. In 2015–16, 93.6 per cent of cannabis detections at the Australian border were of cannabis seeds. This reporting period 28 cannabis detections weighed one kilogram or more. Combined, these 28 detections weigh 64.8 kilograms and account for 63.7 per cent of the total weight of cannabis detected in 2015–16.

FIGURE 26: Number and weight of cannabis detections at the Australian border, 2006–07 to 2015–16 (Source: Department of Immigration and Border Protection)



SIGNIFICANT BORDER DETECTIONS

Significant border detections of cannabis in 2015–16 include:

- 6.6 kilograms of cannabis detected on 29 December 2015, concealed in nutrient powder, via international mail from the United States (US) to Melbourne
- 6.1 kilograms of cannabis detected on 28 October 2015, concealed in tubs, via international mail from the US to Melbourne
- 6.0 kilograms of cannabis detected on 3 August 2015, via air cargo from the US to Sydney
- 3.0 kilograms of cannabis detected on 4 August 2015, concealed in a cardboard box, via air cargo from Lithuania to Sydney
- 3.0 kilograms of cannabis detected on 19 August 2015, not concealed, via air cargo from Denmark to Sydney.

These 5 detections have a combined weight of 24.7 kilograms and account for 24.3 per cent of the total weight of cannabis detected at the Australian border in 2015–16.

IMPORTATION METHODS

While detections of cannabis at the Australian border also occurred across the air cargo, air passenger/crew and sea cargo streams this reporting period, the majority of detections occurred in the international mail stream, in weights ranging from 6.6 kilograms to less than one gram.

In 2015–16, the international mail stream accounted for 98.4 per cent of the number and 33.4 per cent of the weight of cannabis detected at the Australian border. While the air cargo stream only accounted for 1.2 per cent of the number of cannabis detections in 2015–16, these detections account for 65.5 per cent of the weight of cannabis detected this reporting period (see Figures 27 and 28).

FIGURE 27: Number of cannabis detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



FIGURE 28: Weight of cannabis detections at the Australian border, as a proportion of total detections, by method of importation, 2015–16 (Source: Department of Immigration and Border Protection)



EMBARKATION POINTS

In 2015–16, 38 countries were identified as embarkation points for cannabis detected at the Australian border, compared with 41 countries in 2014–15.

By number, the United Kingdom (UK) was the primary embarkation point for cannabis detections in 2015–16 with 2 874 detections. Other key embarkation points this reporting period include the Netherlands (2 152 detections), Switzerland (1 176 detections), Germany (467 detections), Canada (297 detections), the US (120 detections) and Spain (103 detections). Combined, these 7 embarkation points account for 95.8 per cent of the number of cannabis detections at the Australian border in 2015–16.

By weight, the US (66.4 kilograms), Lithuania (8.2 kilograms) and Denmark (8.0 kilograms) were the most significant embarkation points for cannabis detected at the Australian border this reporting period. Combined, these 3 embarkation points account for 81.1 per cent of the weight of cannabis detected at the Australian border in 2015–16 (see Figure 29).

CANNABIS

border, 2015–16

FIGURE 29: Key embarkation points for cannabis detections, by weight, at the Australian border, 2015–16

Top 10 embarkation points by weight: US, Lithuania, Denmark, Canada, UK, Netherlands, China (including Hong Kong), Iran, South Africa and Latvia.

DOMESTIC MARKET INDICATORS

According to the 2013 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, a decrease from 35.4 per cent in 2010. In the same survey, 10.2 per cent reported recent² cannabis use, compared with 10.3 per cent in 2010 (AIHW 2014).

In a 2015 national study of regular injecting drug users, the proportion of respondents reporting the recent³ use of cannabis remained stable at 73.0 per cent. Within this regular drug injecting population, the reported median days of cannabis use in the six months preceding interview increased, from 96 days in 2014 to 120 days in 2015. Early findings from the 2016 study indicate the proportion of respondents reporting recent cannabis use has remained stable at 73.0 per cent, with the reported median days of cannabis use increasing to 135 days (see Figure 30; Stafford & Breen 2016; Stafford et al 2016).

² In the NDSHS, recent use refers to reported use in the 12 months preceding interview.

³ 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.



FIGURE 30: Proportion of a regular injecting drug user population reporting recent cannabis use and median days of use, 2007 to 2016 (Source: National Drug and Alcohol Research Centre)

a. Reported figures for 2016 are preliminary.

In the same 2015 study, the proportion of respondents reporting cannabis as their drug of choice decreased, from 5.0 per cent in 2014 to 4.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 6.0 per cent (Stafford & Breen 2016; Stafford et al 2016).

In a 2015 national study of regular ecstasy users, the proportion of respondents reporting the recent use of cannabis increased, from 83.0 per cent in 2014 to 87.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 86.0 per cent. Within this regular ecstasy user population, the reported median days of cannabis use in the six months preceding interview in 2015 was 50 days, an increase from the 32 days reported in 2014. Early findings from the 2016 study indicate the reported median day of cannabis use has decreased to 49 days (see Figure 31; Sindicich et al 2016; Stafford et al 2016).



FIGURE 31: Proportion of a regular ecstasy drug user population reporting recent cannabis use and median days of use, 2007 to 2016 (Source: National Drug and Alcohol Research Centre)

a. Reported figures for 2016 are preliminary.

In the same 2015 study, the proportion of respondents reporting cannabis as their drug of choice increased, from 25.0 per cent in 2014 to 29.0 per cent in 2015. Early findings from the 2016 study indicate this has decreased to 21.0 per cent (Sindicich et al 2016; Stafford et al 2016).

The Drug Use Monitoring in Australia (DUMA) program, which examines drug use and offending patterns among police detainees in Australia, comprises an interviewer-assisted self-report survey and the voluntary provision of a urine sample which is subjected to urinalysis to detect licit and illicit drug use.⁴ The proportion of detainees testing positive via urinalysis for cannabis increased from 43.1 per cent in 2014–15 to 44.4 per cent in 2015–16.⁵ Self-reported recent use⁶ of cannabis also increased, from 56.2 per cent in 2014–15 to 58.3 per cent in 2015–16 (see Figure 32).





a. Urine was collected in the third and fourth quarters of 2013 and the first quarter of 2014.b. Urine was collected in the third quarter of 2014 and the first and second quarters of 2015.c. Urine was collected in the third quarter of 2015 and the first and second quarters of 2016.

The number of cannabis oil extraction laboratories detected in Australia increased 160.0 per cent this reporting period, from 10 in 2014–15 to 26 in 2015–16. Queensland reported 10 detections, followed by Victoria with 8, South Australia with 7 and Western Australia with 1. The 26 laboratories detected in 2015–16 is the highest number reported since related reporting began in 2007–08 (see *Clandestine laboratories and precursors* chapter).

⁴ Detainees can participate in the survey without providing a urine sample. Cases with missing data are excluded from the relevant analysis.

⁵ The ability to detect cannabis in urine up to 30 days after use should be considered when interpreting the results.

⁶ Recent use in the DUMA program refers to self-reported use in the 12 months prior to arrest.

PRICE

Nationally, cannabis prices remained relatively stable in 2015–16. The price of 1 gram of hydroponic head this reporting period ranged between \$10 and \$50. The price of 1 ounce⁷ of hydroponic cannabis head in 2015–16 ranged between \$160 and \$450, while the price for a single mature hydroponic cannabis plant ranged between \$2 000 and \$5 000.

AVAILABILITY

In a 2015 national study of regular injecting drug users, the proportion of respondents reporting hydroponic cannabis as easy or very easy to obtain increased, from 91.0 per cent in 2014 to 92.0 per cent in 2015. Early findings from the 2016 study indicate this has remained stable at 92.0 per cent. In the same study, the proportion of respondents reporting 'bush'⁸ cannabis as easy or very easy to obtain increased, from 72.0 per cent in 2014 to 76.0 per cent in 2015. Early findings from the 2016 study indicate this has further increased to 78.0 per cent (Stafford & Breen 2016; Stafford et al 2016).

In a 2015 study of regular ecstasy users, the proportion of respondents reporting hydroponic cannabis as easy or very easy to obtain decreased, from 92.0 per cent in 2014 to 91.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 93.0 per cent. In the same study, the proportion of respondents reporting bush cannabis as easy or very easy to obtain remained stable at 79.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 91.0 per cent this has increased to 93.0 per cent. In the same study, the proportion of respondents reporting bush cannabis as easy or very easy to obtain remained stable at 79.0 per cent in 2015. Early findings from the 2016 study indicate this has increased to 81.0 per cent (Sindicich et al 2016; Stafford et al 2016).

SEIZURES AND ARRESTS

The number of national cannabis seizures increased 3.5 per cent this reporting period, from 59 271 in 2014–15 to a record 61 334 in 2015–16. The weight of cannabis seized nationally increased 1.3 per cent, from 6 004.7 kilograms in 2014–15 to 6 081.5 kilograms in 2015–16 (see Figure 33).





⁷ An ounce equates to approximately 28 grams.

⁸ Bush cannabis refers to cannabis grown outdoors.

Western Australia reported the greatest percentage increase (12.3 per cent) in the number of cannabis seizures in 2015–16, while Victoria reported the greatest percentage increase in the weight of cannabis seized (185.6 per cent). New South Wales accounted for the greatest proportion of national cannabis seizures this reporting period (31.0 per cent), followed by Queensland (30.0 per cent). Combined, these two states account for 61.0 per cent of the number of national cannabis seizure in 2015–16. Victoria accounted for the greatest proportion of the weight of cannabis seizure in 2015–16. Victoria accounted for the greatest proportion of the weight of cannabis seized nationally this reporting period (26.2 per cent), followed by New South Wales (25.4 per cent) and South Australia (18.4 per cent). Combined, these three states account for 70.0 per cent of the weight of cannabis seized nationally in 2015–16 (see Table 13).

| | Number | | | Weight | | |
|------------------------------|---------|---------|----------|-----------|-----------|----------|
| State/Territory ^a | 2014–15 | 2015–16 | % change | 2014–15 | 2015–16 | % change |
| New South Wales | 18 015 | 18 992 | 5.4 | 1 451 608 | 1 542 518 | 6.3 |
| Victoria | 4 668 | 4 123 | -11.7 | 558 814 | 1 596 235 | 185.6 |
| Queensland | 17 532 | 18 435 | 5.2 | 832 619 | 817 730 | -1.8 |
| South Australia | 537 | 465 | -13.4 | 1 307 241 | 1 116 109 | -14.6 |
| Western Australia | 12 993 | 14 595 | 12.3 | 269 642 | 284 023 | 5.3 |
| Tasmania | 2 823 | 1 908 | -32.4 | 170 338 | 195 482 | 14.8 |
| Northern Territory | 1 995 | 2 077 | 4.1 | 332 264 | 240 489 | -27.6 |
| Australian Capital Territory | 708 | 739 | 4.4 | 1 082 230 | 288 993 | -73.3 |
| Total | 59 271 | 61 334 | 3.5 | 6 004 756 | 6 081 579 | 1.3 |

TABLE 13: Number, weight and percentage change of national cannabis seizures, 2014–15 and 2015–16

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

Cannabis continues to account for the greatest proportion of national illicit drug arrests in Australia. The number of national cannabis arrests increased 6.0 per cent this reporting period, from 75 105 in 2014–15 to a record 79 643 in 2015–16. Consumer arrests continue to account for the greatest proportion of arrests, comprising 90.7 per cent of national cannabis arrests in 2015–16 (see Figure 34).



FIGURE 34: Number of national cannabis arrests, 2006–07 to 2015–16

The Northern Territory reported the greatest percentage increase in cannabis arrests this reporting period. Queensland accounted for the greatest proportion of national cannabis arrests in 2015–16 (31.8 per cent), followed by New South Wales (22.4 per cent). Combined, these two states account for 54.1 per cent of national cannabis arrests in 2015–16 (see Table 14).

| | Arrests | | | |
|--------------------------------------|---------|---------|----------|--|
| State/Territory ^a | 2014–15 | 2015–16 | % change | |
| New South Wales | 16 795 | 17 809 | 6.0 | |
| Victoria | 10 292 | 9 717 | -5.6 | |
| Queensland | 23 850 | 25 307 | 6.1 | |
| South Australia ^b | 2 173 | 1 973 | -9.2 | |
| South Australia (CENs) | 9 191 | 9 608 | 4.5 | |
| Western Australia | 7 942 | 9 434 | 18.8 | |
| Western Australia (CIRs) | 1 877 | 2 099 | 11.8 | |
| Tasmania | 1 446 | 1 452 | 0.4 | |
| Northern Territory | 464 | 1 048 | 125.9 | |
| Northern Territory (DINs) | 644 | 768 | 19.3 | |
| Australian Capital Territory | 334 | 333 | -0.3 | |
| Australian Capital Territory (SCONs) | 97 | 95 | -2.1 | |
| Total | 75 105 | 79 643 | 6.0 | |

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

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

NATIONAL IMPACT

Cannabis remains the dominant illicit drug in Australia in terms of arrests, seizures and use. Surveys of regular injecting drug user and regular ecstasy drug user populations indicate the proportion of respondents reporting recent cannabis use remains stable. While surveys of police detainee populations indicate an increase in both the self-reported use and proportion of respondents who tested positive for cannabis in 2015–16, figures remain relatively stable.

With the exception of cannabis seeds, resin and oil, widespread domestic cultivation generally makes the trafficking of cannabis into Australia unnecessary or unprofitable. There was a record 7 504 detections of cannabis at the Australian border in 2015–16. The weight of cannabis detected increased to 101.8 kilograms this reporting period and is the second highest weight reported in the last decade. Cannabis seeds continue to account for the majority of detections, accounting for 93.6 per cent in 2015–16.

The international mail stream was the primary importation method by number for detections of cannabis at the Australian border in 2015–16, while air cargo was the primary importation method by weight. The number of embarkation points identified for cannabis detections at the Australian border decreased this reporting period, from 41 in 2014–15 to 38 in 2015–16. The UK was the prominent embarkation point by number for cannabis detections this reporting period, while the US was the prominent embarkation point by weight.

The number of national cannabis seizures increased to a record 61 334 in 2015–16, with the weight of cannabis seized increasing 1.3 per cent to 6 081.5 kilograms. National cannabis arrests continued to increase this reporting period, with a record 79 643 arrests in 2015–16.

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