



CANNABIS

KEY POINTS

- While the weight of cannabis detections at the Australian border remains low, the number of detections is the highest recorded in the last decade.
- Cannabis seeds continue to account for the greatest proportion of cannabis border detections.
- Despite reported decreases in cannabis use, the weight of national cannabis seizures and the number of arrests increased in 2009–10.

MAIN FORMS

Cannabis is derived from the *cannabis sativa* plant and is the world’s most widely cultivated and consumed illicit drug. While it can be grown in almost any climate, it is increasingly cultivated using indoor hydroponic technology (NCPIC 2009; UNODC 2006). In 2006, it was reported that growers could harvest up to 6 crops a year using indoor cultivation, with a yield per unit area, per year, 16 times greater than that obtained through traditional outdoor cultivation (UNODC 2006).

Cannabis plants can be grouped into 2 categories—hemp and marijuana. Hemp is a cannabis plant with a low psychoactive component, which can be cultivated for fibre, food and fuel. In contrast, marijuana, commonly referred to as cannabis, is a plant high in psychoactive components and its flowering heads, leaves, resin and oil are commonly used as a drug (Fielding & Morrison 2010; Pinarkara et al 2009).

There are 3 main forms of cannabis: cannabis herb, cannabis resin and cannabis oil. Cannabis herb includes the dried flowers and leaves of the cannabis plant. It is the least potent of all the cannabis products and is usually smoked. Cannabis resin is the pressed secretions of the plant, commonly known as ‘hashish’. Resin can be smoked or added to food and eaten. Cannabis oil, the most potent cannabis product, is a thick oil obtained from resin which can be smoked (NCPIC 2009; UNODC 2006) (see Table 4).

TABLE 4: Main forms of cannabis

Form	Description	Properties	Method of administration
Herbal cannabis	The leaves and flowering heads	Low levels of Delta-9-tetrahydrocannabinol (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 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

Cannabis has more than 70 unique chemicals that are collectively referred to as cannabinoids. Delta-9 tetrahydrocannabinol (THC) is believed to be responsible for most of the psychoactive effects of cannabis (UNODC 2006). Cannabidiol (CBD) is a chemical present in cannabis that is an antipsychotic and believed to have a balancing effect with THC, reducing symptomatic effects like anxiety and paranoia (Bhattacharyya et al 2009).

In most genetically modified strains of modern cannabis, particularly ‘skunk’, CBD has been reduced to negligible levels through selective breeding practices to increase THC content. The elimination of CBD may play a key role in the development of psychosis¹ (Fielding & Morrison 2010; Potter et al 2005).

¹ Psychosis refers to a number of mental illnesses where people experience difficulty in telling what is real and what is not, with an individual suffering from hallucinations and delusion (NCPIC 2008).

Cannabis is classified as a central nervous system depressant. Short-term use is associated with feelings of relaxation, talkativeness, drowsiness and a sense of wellbeing. Cannabis use can also lead to feelings of anxiety and paranoia, and cause a loss of coordination (NCPIC 2009). Heavy or frequent use has been associated with increased levels of mental health problems—including depression, decreases in memory, learning abilities and motivation—leading to a decline in school performance and a range of negative employment associated outcomes (NCPIC 2008; QADREC 2010).

Research indicates that initiation of cannabis use before the age of 16 years increases the likelihood of problems relating to use and dependence. However, most users who experience a problem with use reduce or stop using cannabis without assistance (QADREC 2010).

INTERNATIONAL TRENDS

Cannabis is the most widely used illicit drug in the world, with evidence of cannabis cultivation in almost all countries worldwide (UNODC 2010b). In the United States of America (US), cannabis continues to be widely available due in part to rising cultivation in Mexico and the increased cultivation of high-potency cannabis by Asian organised criminal groups (NDIC 2010). Elsewhere, the United Nations Office on Drugs and Crime (UNODC) has observed that the indoor cultivation of cannabis continues to be a lucrative business, with several national studies indicating an increasing trend towards indoor cultivation (UNODC 2010b).

Afghanistan remains the world's largest producer of hashish, despite cultivating less cannabis per hectare than other global producers. In 2009, an estimated 10 000 to 24 000 hectares of cannabis were cultivated in Afghanistan, with an average yield per hectare of 145 kilograms. This crop is estimated by the UNODC to have produced between 1 500 and 3 500 metric tonnes of cannabis resin (UNODC 2010a). Reduced labour and production costs continue to underpin Afghanistan's sizeable cannabis market, which returns a greater net income per hectare than opium.

Cannabis remains the main illicit drug consumed in Europe. Figures reported by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in 2009 estimate about 12 million Europeans had used cannabis in the past month. Between 1 500 and 2 000 metric tonnes of cannabis is estimated to be consumed in the European Union (EU) each year (EMCDDA 2009). Morocco remains the main supplier of cannabis to the EU, with shipments often trafficked via Spain. However, a European study—mapping the major cannabis trafficking routes into and within Europe—has seen a shift from cannabis resin produced in Morocco toward European-grown herbal cannabis, mainly from Albania (EMCDDA 2009).

In the United Kingdom (UK), domestic cannabis cultivation also remains high, with 80 per cent of cannabis thought to be domestically cultivated. In 2009–10, the UK Home Office reported that it had seized 176.6 tonnes of cannabis nationally (Europol 2009).

During 2009–10, countries recording seizures of cannabis herb or resin in excess of 1 tonne included Brazil, Colombia, Liberia, Mexico, Spain and Venezuela. Notable seizures included the detection of 13 metric tonnes of cannabis by Mexican authorities in May 2010 and a Brazilian seizure of 5 tonnes of cannabis trafficked from Paraguay (JIMP 2010).

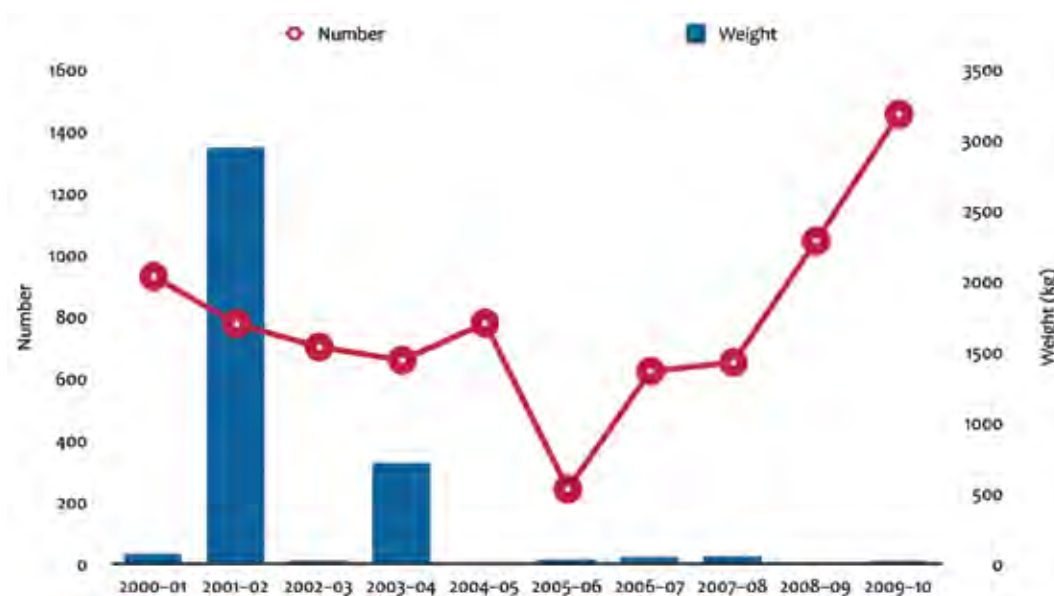
DOMESTIC TRENDS

AUSTRALIAN BORDER SITUATION

Cannabis is difficult to conceal, with its strong odour making consignments vulnerable to detection. With the exception of cannabis resin, oil and seeds, widespread domestic cultivation generally means trafficking cannabis into Australia is unnecessary or unprofitable.

During this reporting period, the total number of detections at the Australian border increased by 39 per cent, from 1 044 in 2008–09 to 1 454 in 2009–10. In comparison with 2008–09, the weight of detections of cannabis product increased by 128 per cent from 8.6 kilograms to 19.6 kilograms in 2009–10. While the weight of detections remains low, the number of detections is the highest recorded since 2000–01 (see Figure 19).

FIGURE 19: Number and weight of cannabis detections at the Australian border, 2000–01 to 2009–10 (Source: Australian Customs and Border Protection Service)



During this reporting period, the number of individual border detections over 100 grams increased from 10 in 2008–09 to 26 in 2009–10 and accounted for 84 per cent of the total weight of cannabis detections. Additionally, the number of detections above 1 kilogram increased from 3 in 2008–09 to 6 in 2009–10. The largest cannabis detection this reporting period was 3.5 kilograms of hemp oil. The majority (86 per cent) of cannabis border detections in 2009–10 involved seeds.² However, most detections contained only a small number of seeds intended for home cultivation.

² Treated hemp seeds and shelled food products are included in reported cannabis detection figures.

SIGNIFICANT BORDER DETECTIONS

Significant border detections of cannabis in 2009–10 included:

- 3.5 kilograms of hemp oil detected on 6 January 2010 in air cargo from the US to Brisbane
- 2.7 kilograms of cannabis seeds detected on 1 January 2010 in the postal stream from the US to Melbourne
- 1.3 kilograms of herbal capsules and liquid detected on 14 March 2010 in air cargo from the US to Melbourne
- 1 kilogram of cannabis leaf detected on 2 February 2010 on a small boat from Papua New Guinea to Thursday Island
- 1 kilogram of cannabis seeds detected on 14 March 2010 in the postal stream from the UK to Brisbane
- 1 kilogram of cannabis seeds detected on 7 April 2010 in parcel post from the UK to Melbourne.

The 6 detections listed above have a combined weight of 10.5 kilograms, which accounts for 54 per cent of the total weight of cannabis products detected at the Australian border in 2009–10.

IMPORTATION METHODS

In 2009–10, the postal stream accounted for 96.1 per cent of cannabis detections by number and 49.9 per cent of detections by weight (see Figures 20 and 21). Methods of cannabis concealment identified during this reporting period included mail articles, cards, wallets, clothing, and air passenger's baggage.

FIGURE 20: Number of cannabis detections at the Australian border, as a proportion of total detections, by method of importation, 2009–10 (Source: Australian Customs and Border Protection Service)

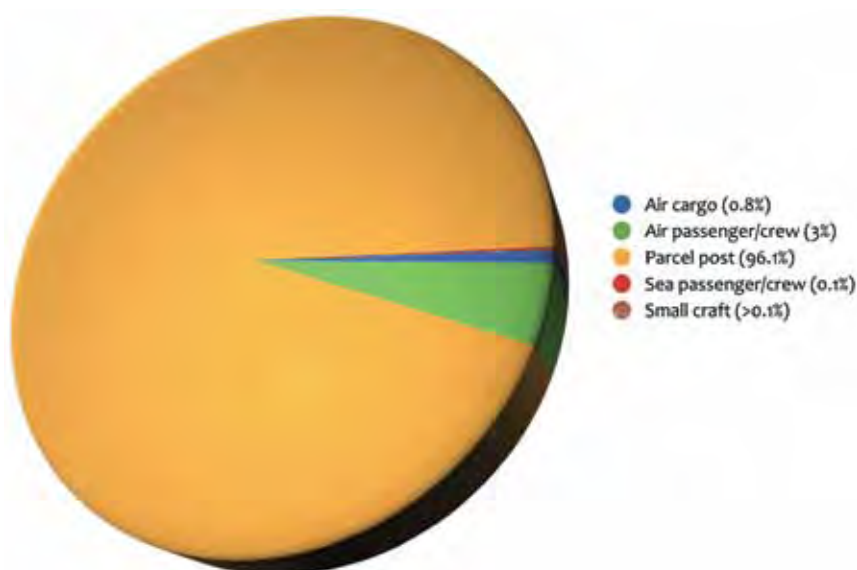
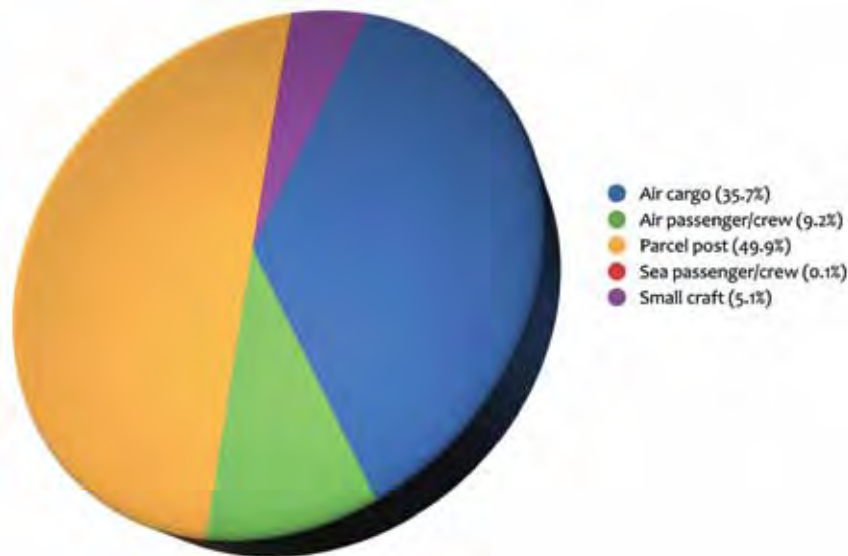


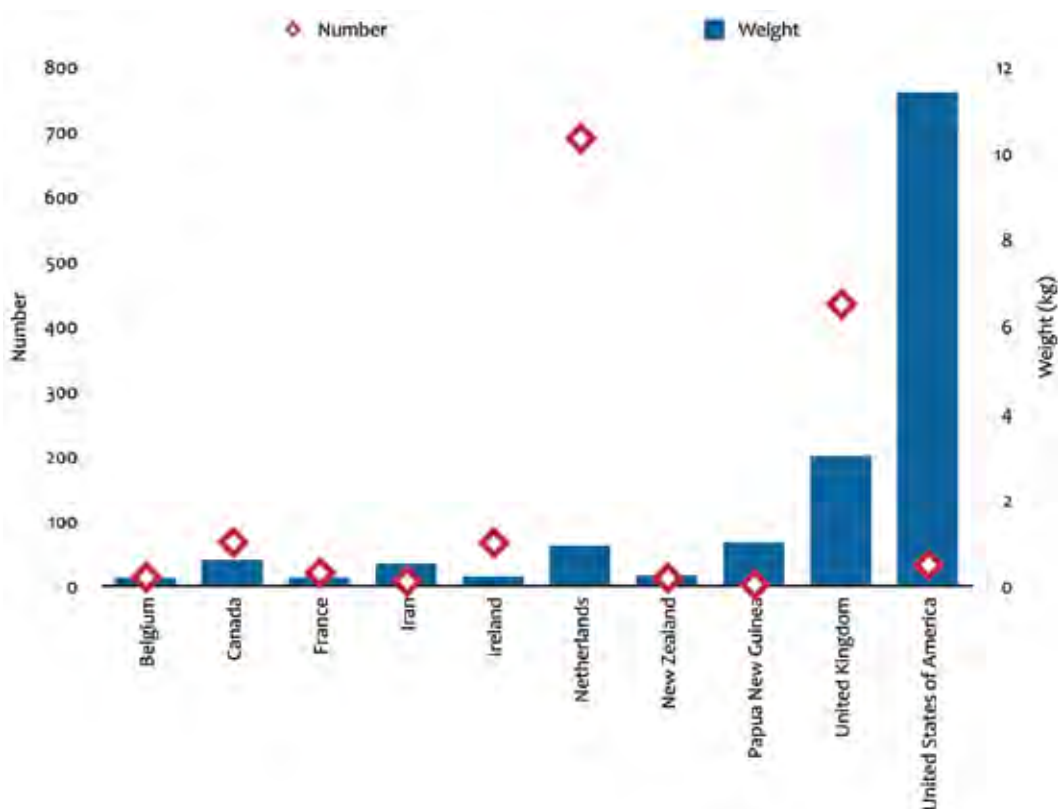
FIGURE 21: Weight of cannabis detections at the Australian border, as a proportion of total detections, by method of importation, 2009–10 (Source: Australian Customs and Border Protection Service)



EMBARKATION POINTS

Since 2007–08, the Netherlands has remained the prominent country of embarkation for cannabis detections at the Australian border. In 2009–10, there were 689 attempted importations from the Netherlands, followed by 434 from the UK. Consistent with findings in 2008–09, the prominent country of embarkation, by weight, was the US with 11.4 kilograms, followed by the UK and Papua New Guinea (see Figure 22).

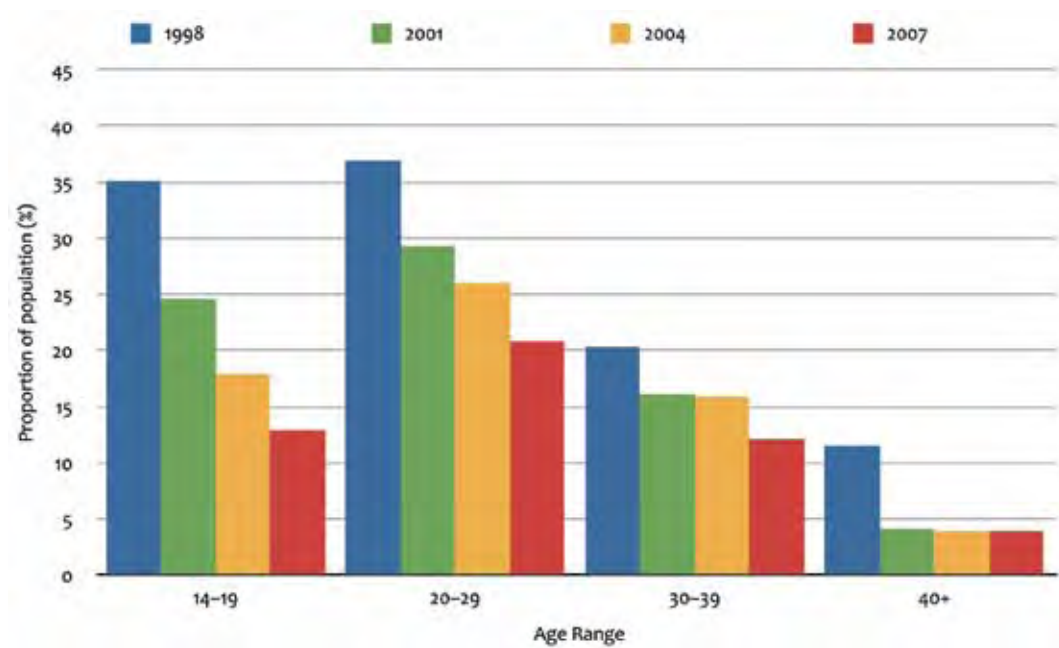
FIGURE 22: Country of embarkation for cannabis importations of more than 100 grams, detected at the Australian border, 2009–10 (Source: Australian Customs and Border Protection Service)



DOMESTIC MARKET INDICATORS

Across all surveys of the Australian population, cannabis remains the most commonly used illicit drug in Australia. Despite this, since 1998, the National Drug Strategy Household Survey (NDSHS) has reported a significant decrease in recent cannabis use among the Australian population aged 14 years and over—decreasing from 17.9 per cent in 1998 to 9.1 per cent in 2007. This decrease is particularly noticeable in the 14 to 19 year age group, which decreased from 35 per cent in 1998 to 12.9 per cent in 2007 (see Figure 23).

FIGURE 23: Recent cannabis use as a proportion of the Australian population, 1998–2007 (Source: Australian Institute of Health and Welfare 2000, 2002, 2005, 2008)



In a 2009 national study of regular injecting drug users, 76 per cent of respondents reported cannabis use in the 6 months prior to interview (recent use), of which 50 per cent reported daily use. Cannabis herb was the most common form used, with only 6 per cent reporting use of cannabis resin and 3 per cent using cannabis oil (Stafford & Burns 2010).

In a 2009 national study of regular ecstasy users, 82 per cent of respondents reported cannabis use in the 6 months prior to interview. Only 20 per cent of recent users reported daily use (Sindicich & Burns 2010).

Cannabis extraction laboratories continue to be detected, but numbers remain low. In 2009–10, a total of 3 clandestine laboratories designed to extract cannabis oil were detected nationally—the same number as detected each year since 2007–08. Of the laboratories detected during this reporting period, 2 were detected in the Northern Territory and 1 in South Australia (see *Clandestine laboratories and precursors* chapter).

PRICE

The price per gram of cannabis within Australia has remained relatively stable over the past decade, ranging between \$20 and \$75. Regional areas, particularly in the Northern Territory, continue to report the highest prices. In 2009–10, the price for a gram of cannabis ranged from between \$20 and \$50. For an ounce³ of cannabis, prices ranged from between \$180 and \$500.

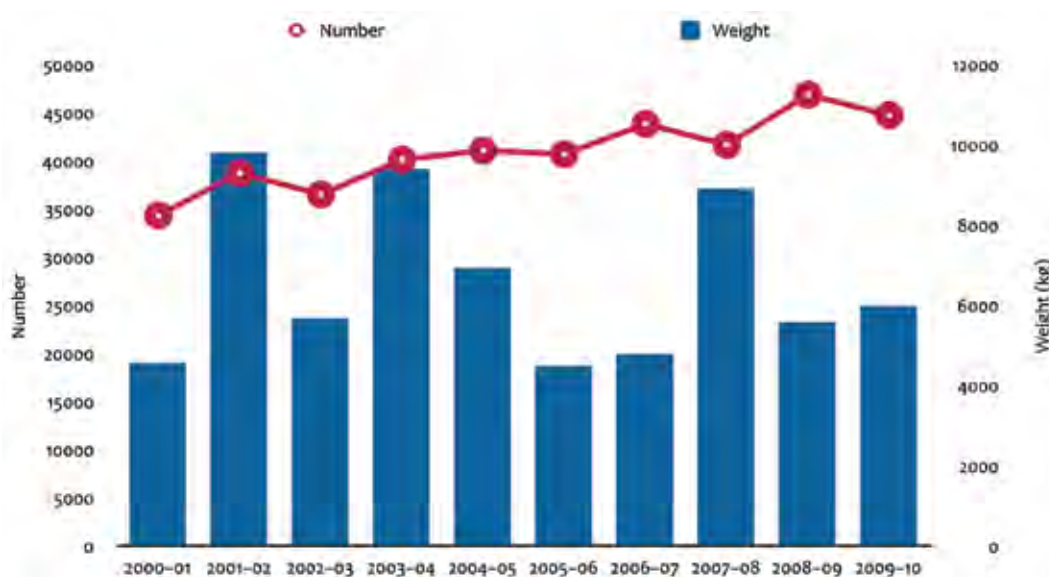
AVAILABILITY

In 2009, national studies of regular injecting drug users and regular ecstasy users reported similar levels of cannabis availability. A total of 88 per cent of regular injecting drug users and 82 per cent of regular ecstasy users described cannabis as easy or very easy to obtain.

SEIZURES AND ARRESTS

In the last decade, cannabis has been the predominant illicit drug seized in Australia. In 2009–10, cannabis accounted for 70 per cent of the number and 76 per cent of the weight of national illicit drug seizures. The number of cannabis seizures decreased by 4.6 per cent, from 46 875 in 2008–09 to 44 736 in 2009–10. However, the number of seizures remains historically high. During this reporting period there was a small increase in the weight of cannabis seizures from 5 573 kilograms in 2008–09 to 5 989 kilograms in 2009–10 (see Figure 24).

FIGURE 24: National cannabis seizures, by weight and number, 2000–01 to 2009–10



³ An ounce equates to approximately 28 grams.

During 2009–10, Queensland and South Australia were the only jurisdictions to report a decrease in the number of cannabis seizures. The Australian Capital Territory reported the greatest percentage increase for both number and weight during 2009–10. Queensland has historically accounted for the greatest number of cannabis seizures, however, in 2009–10 it was second to New South Wales. Since 2004–05, Victoria has accounted for the greatest proportion of the total weight of cannabis seized (see Table 5).

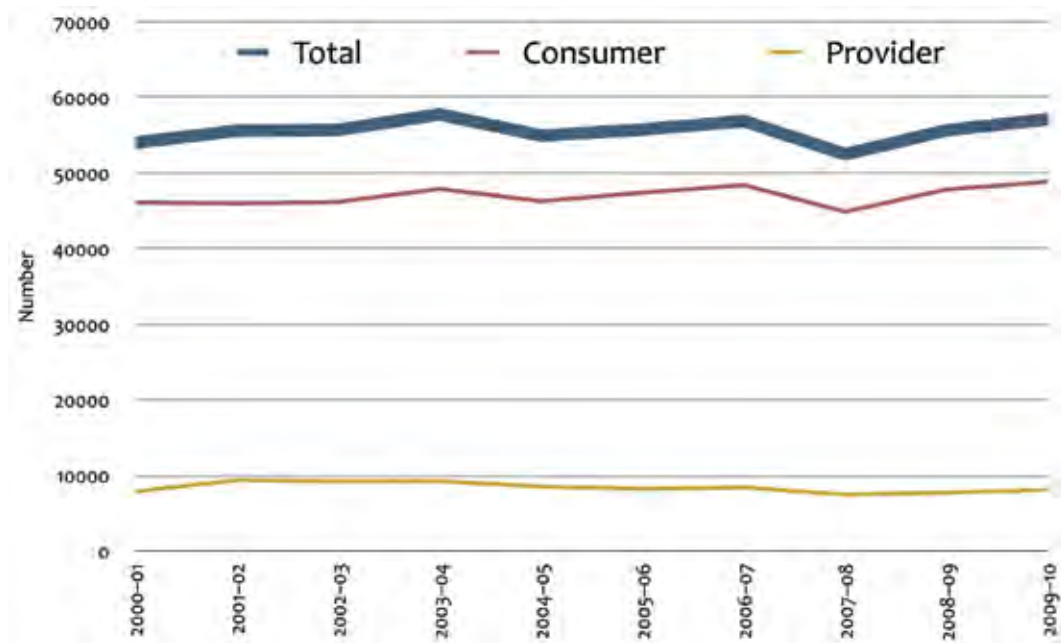
TABLE 5: Number, weight and percentage change of national cannabis seizures, 2008–09 and 2009–10

State/territory ^a	Number			Weight (grams)		
	2008–09	2009–10	% change	2008–09	2009–10	% change
New South Wales	12 491	14 018	12.2	1 430 342	1 237 079	-13.5
Victoria	3 272	3 292	0.6	1 653 744	1 964 766	18.8
Queensland	17 082	12 946	-24.2	628 319	644 686	2.6
South Australia	471	433	-8.1	860 979	695 637	-19.2
Western Australia	9 572	9 599	0.3	450 005	406 486	-9.7
Tasmania	2 302	2 551	10.8	223 242	214 799	-3.8
Northern Territory	1 087	1 133	4.2	131 459	85 469	-35.0
Australian Capital Territory	598	764	27.8	194 928	740 957	280.1
Total	46 875	44 736	-4.6	5 573 018	5 989 879	7.5

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

In 2009–10, the number of national cannabis arrests increased slightly and is currently the highest reported since 2003–04. While provider arrests increased by 5 per cent in 2009–10, they have remained relatively stable since 2000–01. In 2009–10, consumers accounted for 86 per cent of national cannabis arrests in Australia (see Figure 25).

FIGURE 25: Number of national cannabis arrests, 2000–01 to 2009–10



In 2009–10, cannabis arrests accounted for 67.1 per cent of national illicit drug related arrests. There was a small increase in cannabis arrests, from 55 638 in 2008–09 to 57 170 in 2009–10. South Australia reported the greatest percentage increase in arrests. Despite Queensland reporting decreases in arrest numbers since 2005–06, it continued to account for the greatest proportion of cannabis arrests (see Table 6).

TABLE 6: Number and percentage change of national cannabis arrests, 2008–09 and 2009–10

State/territory ^a	Arrests		% change
	2008–09	2009–10	
New South Wales	12 201	12 752	4.5
Victoria	6 884	7 066	2.6
Queensland	16 588	16 325	-1.6
South Australia	2 167	2 518	16.2
South Australia (CENs) ^b	6 973	7 530	8.0
Western Australia	6 315	6 274	-0.6
Western Australia (CINs) ^c	1 328	1 391	4.7
Tasmania	1 827	1 934	5.9
Northern Territory	597	597	0.0
Northern Territory (DINs) ^d	456	466	2.2
Australian Capital Territory	228	244	7.0
Australian Capital Territory (SCONs) ^e	74	73	-1.4
Total	55 638	57 170	2.8

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

b. Cannabis Expiation Notices.

c. Cannabis Infringement Notices.

d. Drug Infringement Notices.

e. Simple Cannabis Offence Notices.

NATIONAL IMPACT

There is an ongoing market for cannabis seed importations, however, the number of cannabis border detections is low, reflecting the scale of domestic cannabis cultivation and risks associated with cannabis importations.

In 2009–10, the weight of cannabis product detected at the Australian border increased by 128 per cent to 19.6 kilograms. Despite this increase, the weight of cannabis border detections remains historically low. The number of individual cannabis detections over 100 grams increased from 10 in 2008–09 to 26 in 2009–10, with the number of detections over 1 kilogram increasing from 3 in 2008–09 to 6 in 2009–10. The number of cannabis detections is the highest recorded since 2000–01. In 2009–10, over 86 per cent of detections involved cannabis seeds.

There have been 3 clandestine laboratories designed to extract cannabis oil detected in Australia in each reporting period since 2007–08. However, the jurisdictions reporting detections have changed. In 2009–10, the Northern Territory detected 2 cannabis oil extraction laboratories and South Australia reported 1 laboratory. Cannabis oil extraction laboratories have previously been detected in New South Wales, Queensland, South Australia and the Australian Capital Territory.

Despite decreases in the reported use of cannabis, it remains the dominant illicit drug in Australia in terms of arrests, seizures and use. This reporting period, cannabis accounted for 70 per cent of national seizures by number, 76 per cent by weight and 67 per cent of all illicit drug related arrests. Cannabis arrests have remained relatively stable over the last decade. While the number of cannabis seizures decreased, cannabis was the only illicit drug to report an increase in the weight of seizures in 2009–10.

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