Legal and Social Issues Committee

Inquiry into the use of Cannabis in Victoria

Submission

March 2021

It is too easy to judge people who use drugs.

Legal or illegal, the misuse of any psychoactive substance impacts us all.

At Penington Institute, we think it's far more productive to prevent and tackle drug use in a safe, effective and practical way. Risky behaviours are part of being human.

Our focus is on making individuals and families safer and healthier, helping communities, frontline services and governments reduce harm, respect human rights and improve the rule of law.

Founded by needle exchange workers and people with lived experience of drug use and incarceration in 1995 as a peak body, the Association of Needle Exchanges (ANEX) grew into Penington Institute, named in honour of Emeritus Professor David Penington AC, who led Australia's early and world-leading approach to HIV/AIDS. Professor Penington led government-appointed enquiries on illicit drugs, improving evidence-based approaches around the world.

Like Professor Penington, who remains our Patron to this day, we confront the most important issues and champion innovative evidence-based action to improve people's lives – no matter how challenging our perspective might appear.

A not-for-profit organisation, Penington Institute's research and analysis provides the evidence needed to help us all rethink drug use and create change for the better.

We focus on promoting effective strategies, frontline workforce education and public awareness activities. Our work has a positive impact on people, health and law enforcement systems, the economy and society.

An independent voice of reason on drug policy, we are a straight-talking ally for practical insights, information and evidence-based action for people in need.

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Executive summary

Penington Institute welcomes the opportunity to make a submission to the Parliamentary Inquiry into the use of Cannabis in Victoria. In our submission, we have assessed models from international jurisdictions that have had success in addressing the issue of cannabis use.[1]

This submission presents evidence on the best means to achieve the various outcomes identified in the Terms of Reference, particularly through effective evidence-based harm reduction approaches. Our submission does not address the question of whether cannabis should be available in Victoria; data show that it is already widely available. Instead, our submission focuses on the ways in which cannabis can be effectively controlled to minimise harms, especially in terms of preventing early onset use, with its particular risks and harms, and keeping cannabis out of the hands of criminals.

Given the current state of the evidence on cannabis use, our submission focuses on the following key points:

1. The **current approach to cannabis use in Victoria is not working**. Enforcement-based approaches that focus on criminalisation cost around $1.7 billion each year and have proven ineffective at reducing the availability of cannabis and levels of cannabis use in Australia. The ABS estimated that $7.1 billion was spent on illicit drugs in Australia in 2010, more than half of which (3.8 billion) was spent on cannabis. The margins made by cannabis distributors in 2010 were estimated at $3.7 billion.[2] Enforcement of cannabis laws diverts valuable police and other criminal justice system resources away from more serious and harmful crimes such as family violence and sexual offending. The resulting black market in cannabis allows organised crime groups to thrive, providing significant funding for illicit operations around far more dangerous drugs. Criminalisation exacerbates minority over-representation in the criminal justice system, removes any possibility of product quality control and means limited opportunities exist for education about prevention and harm reduction.
2. There is a changing view in the community with regard to cannabis; **current policy does not reflect contemporary community attitudes**.
3. Cannabis has a low harm profile compared with other licit and illicit drugs, and **the harms of cannabis use are better managed through other mechanisms** (social, health and community services).
4. Experiences from other countries have demonstrated that legalisation and regulation of cannabis is an effective way to improve community health and safety compared with a criminal justice response. Many of the health, mental health and social harms associated with cannabis use are related to its illegal nature; careful and evidence-based **strict legal regulation of cannabis** would significantly reduce these harms.

On the basis of the evidence, Penington Institute makes the following recommendations to the Inquiry:

1. That the Victorian Government develops a regulated cannabis market that adopts a public health approach and that prioritises prevention, education and treatment.
2. That the cannabis regulation model adopts the following principles designed to counter current harms:
    a. Policy addressing cannabis use in Victoria is based on sound evidence.
    b. Cannabis use is treated as a public health issue, in the same way as alcohol and tobacco are treated.
    c. The focus of the approach is on protecting public health by minimising potential risks and harms.

d. Active prevention, education and treatment are key, with a particular focus on preventing or delaying cannabis use among young people.
e. Baseline data and ongoing surveillance and research activities are used to monitor and evaluate the impact of reform.

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Penington Institute's view

Penington Institute is concerned about the harm caused to our communities by illicit drug use, including cannabis. We believe that the best way to minimise harms associated with cannabis is to focus on prevention, education and treatment.

At the same time, though, we are also concerned that the current Victorian criminal justice system response to cannabis and the inequitable application of diversionary practices has not worked in reducing cannabis use or addressing the harms. Even the various forms of decriminalisation of cannabis that have occurred in some jurisdictions are limited in their capacity to reduce harm, as the supply of cannabis is unregulated, remaining in the hands of criminals.

Instead, Penington Institute recommends that there is a strong case for a conservative regulatory approach that seeks to limit the adverse impacts of a new legal market for plant-based cannabis, with continued criminalisation of synthetic cannabinoid receptor agonists. Such an approach would focus on prevention, education and treatment and would tightly control the production, distribution, purchase and use of cannabis.

The strict legal regulation of cannabis can best protect public health and safety.

Much can be learned from overseas jurisdictions and Canada is of note. As it worked towards legalisation and regulation of cannabis, the Canadian Task Force on Marijuana Legalization and Regulation identified a number of elements of a new regime.[3]

- Legalisation of the possession of a certain quantity of cannabis obtained within a regulated legal framework, thereby addressing concerns about criminal records and burdens on the justice system for simple possession offences.
- Establishment of a strict, well-regulated system for the production and distribution of cannabis, thereby addressing concerns about the quality, safety and potency of legally available cannabis, and the control of access for those eligible to possess it.
- Continued enforcement of laws and sanctions against possession, production and distribution of cannabis outside the regulated legal framework.
- Support for prevention and education activities, addiction treatment, counselling, law enforcement and other services to deal with the negative aspects of cannabis use and abuse.
- Education and awareness activities to ensure the risks of cannabis are known, particularly to youth.
- Baseline data and ongoing surveillance and research activities to monitor and evaluate the impact of the new framework.

These elements form the basis of a proposed model of strict legal regulation of cannabis in Victoria, described in detail towards the end of this submission.

Introduction

The use of cannabis has been illegal in Australia for almost 100 years, based on the 1925 *International Opium Convention.*[4] While the original version of the Convention had targeted only opium and coca, cannabis was added at the last minute at the request of the delegation from Egypt, claiming that cannabis caused widespread insanity.

Despite its continuing prohibition in many jurisdictions around the world, cannabis continues to be the most widely used and trafficked drug worldwide, with an estimated 192 million people – roughly 3.9% of the global population aged 15 to 64 – having used cannabis at least once in 2018.[5]

The same holds true for Australia.[6]

While young people who use cannabis typically are not heavy users,[7] it is concerning that almost one in ten young people have used cannabis in the previous year. Along with the widespread use of cannabis across the Australian community, there is strong evidence that our current prohibitionist approach is not working.

Given the potential harms associated with cannabis use, particularly for those with pre-existing vulnerabilities, Penington Institute submits that we need a different model to allow for better protection of public health and safety – a regime of strict legal regulation that focuses on prevention, education and treatment.

The evidence on the harms of alcohol and tobacco is strong and broadly accepted. In acknowledging how harmful these two substances can be, governments the world over have combined legislative reform and public health campaigns to promote prevention, increase access to treatment and minimise harm among those who use these legal drugs and to other people around them.

As long as a substance remains illegal, however, this sort of public health approach cannot be adopted as effectively – the stigma and fear of exposure associated with using an illegal drug prevents open and honest discussion, thus limiting opportunities to educate and inform. Similarly, with the scare-mongering associated with cannabis[8] – as with all illicit drugs – the credibility of such messaging among target audiences is arguably damaged. We need a more effective model to prevent cannabis-related harm in Victoria, one which is evidence-based and takes into consideration the actual harms caused by cannabis.

The harms caused by cannabis warrant consideration

There is evidence that cannabis or cannabinoids have beneficial therapeutic effects for the treatment of a range of illnesses and conditions, such as chronic pain, chemotherapy-induced nausea and spasticity associated with multiple sclerosis.[9] There is also some evidence, although not as strong, that cannabis or cannabinoids are therapeutically effective for other conditions, such as sleep disturbances, Tourette syndrome and post-traumatic stress disorder.[10]

With more than two million Australians using cannabis every year, clearly a large number of people believe that they derive some benefit from the drug.[11]

The evidence on the potentially harmful effects of cannabis on people's health and mental health, however, is more conflicting. The literature on the consequences of cannabis use has fundamental limitations; although cannabis use is *correlated* with many adverse outcomes, it is much harder to ascertain whether cannabis use *causes* those outcomes.[12]

Nonetheless, a body of research is emerging about the potential effects of chronic, heavy cannabis use.

Potential harm to physical and mental health

Cannabis is less addictive than other drugs, including heroin, tobacco, barbiturates, benzodiazepines and alcohol,[13] but the potential for dependence remains, particularly with heavy use.[14] However, there is no evidence of any risk of single drug overdose from plant-based cannabis.[15]

Cannabis has at least two key active components that operate separately on receptors in the brain and body, affecting its potential to cause harm: THC and CBD. THC is responsible for the euphoric 'high' associated with cannabis when the dose is sufficiently large. In contrast, CBD counteracts the effects of THC, and offers strong anti-emetic and analgesic effects.[16] As medicinal cannabis is a regulated substance, its ratio of CBD to THC is controlled; as recreational cannabis remains illegal, there are no controls on content, with cannabis increasingly bred to contain high levels of THC and negligible CBD.[17]

Despite potential harms to physical health,[18] the harm of cannabis relative to legal drugs is very small. The proportion of the total burden of disease and injury in Australia attributable to cannabis use in 2015 was just 0.2%, compared with 4.5% attributable to alcohol use and 9.3% to tobacco.[19]

The relationship between cannabis use and mental health is more complex: comorbidity means that it is extremely difficult to determine causality. Nonetheless, a review of high-quality studies reported substantial evidence of a statistical association between cannabis use and the development of schizophrenia or other psychoses, and moderate evidence of a statistical association between cannabis use and increased risk of disorders such as depression and anxiety among people with bipolar disorder. For each of these, risks were found to be highest amongst those who used cannabis the most heavily.[20]

However, the effects of cannabis vary based on the levels of THC and CBD in different strains of the plant. Research has found a link between high-potency cannabis and the risk of psychosis, but only for cannabis with a high THC content; cannabis with CBD content similar to or greater than its THC content shows no increase in the risk of psychosis.[21] This is because CBD dampens the effect of THC to a significant extent.[22]

While it is difficult to unravel the causal chain of these associations, it is apparent that there is a relationship between heavy cannabis use – especially cannabis with a high THC content[23] – and some mental health disorders, particularly among people with a pre-existing genetic or other vulnerability, who are likely at higher risk for episodic drug-induced psychosis.[24]

Despite concerns about such potential harms, Australian data show that cannabis accounts for an extremely small proportion of the burden of disease and injury due to mental ill-health. Only a small proportion (less than 2%) of the burden caused by schizophrenia, anxiety disorders and depressive disorders combined was attributable to cannabis use in 2011.[25]

These potential risks highlight the importance of a targeted cannabis education campaign around cannabis for people with pre-existing vulnerabilities. Such a campaign may be seen as analogous to approaches taken to other groups with specific vulnerabilities: rather than a ban on sugar, for example, people who have diabetes are educated around their sugar intake. The same approach can be taken with cannabis.

Potential risk of accidental injury

Simulation studies have shown that cannabis can affect cognitive and behavioral performance, particularly in tasks requiring sustained attention, in ways that may increase the risk of road accidents.[26] However, the most recent Australian research on both CBD and THC found that CBD does

not affect driving ability at all, while moderate amounts of THC produce only a 'mild driving impairment' over a relatively short period.[27]

Cannabis accounted for an extremely small proportion (1.4%) of the burden of disease and injury due to road traffic injuries in Australia in 2011, while more than 10% of the burden was caused by alcohol.[28]

In the US, research on crash fatality rates in Colorado and Washington showed that deaths did not significantly increase following legalisation and remained similar to rates in states that had not legalised cannabis.[29] Further, a large study conducted by the National Highway Traffic Safety Administration found no significant increase in crash risk attributable to cannabis after controlling for drivers' age, gender, race and the presence of alcohol.[30]

Potential harm to young people

Young people appear to be at heightened risk of drug-related harms for a range of reasons, including the effects of regular use on their developing brains.[31] There is moderate evidence of a statistical association between cannabis use and increased risk of physical injury, including respiratory distress, among pediatric populations, as well as a statistical association between heavy cannabis use and impairment in the cognitive domains of learning, memory and attention. Substantial evidence indicates that initiating cannabis use at an early age is a risk factor for the development of problem cannabis use. However, there is limited evidence of a statistical association between cannabis use and impaired academic outcomes, increased rates of unemployment and/or low income or impaired social functioning.[32]

Cannabis is often claimed to be a 'gateway drug' for young people – that is, using cannabis will lead to trying 'harder' illegal substances. But there is robust evidence that, while many people who use more dangerous illicit drugs initiated their illicit drug use with cannabis, most people who use cannabis do not progress to 'harder' drug use.[33]

Prohibition is not working

The costs of prohibition

Given the potential harms caused by cannabis use – especially heavy use, and particularly among young people and those with genetic or other vulnerabilities – it is vital that we adopt the most effective, evidence-based approach to minimising these harms. But the widespread use of cannabis makes it clear that our current prohibitionist approach is not working.

This failure is imposing substantial financial and social costs on our community.

Financial costs

There is a large cannabis market in Victoria. Police data show that cannabis was the most common drug among use and possession offences for the year ending June 2020, with 10,511 offences, accounting for more than one-third (34.9%) of these offences.

In the three years to June 2019, 3,097 people were sentenced in the Magistrates' Court to a total effective term of imprisonment for simple possession under s 73(1) of the *Drugs, Poisons And Controlled Substances Act 1981* (Vic).[34] Of these, 40.1% (1,242 people) received a term of less than three months, 28.1% (871 people) received a term of three to six months and 19.5% (604 people) were sentenced to six to 12 months in prison. At almost $320 net operating expenditure per prisoner per day in Victoria in 2018-19,[35] cannabis possession offences cost the Victorian taxpayer around $35 million per year in prison costs alone.[36]

In its review of imprisonment and recidivism, the Queensland Productivity Commission acknowledged the extremely high financial costs of prohibition and recommended legalising the use and supply of both cannabis and MDMA.[37]

Recent research has identified the high costs of law enforcement relating to cannabis in Australia in 2015-16:[38]

- $1.1 billion spent on imprisonment
- $475 million spent on police
- $62 million spent on courts
- $52 million spent on legal aid and prosecution
- $25 million spent on community corrections

With more than $1.7 billion spent on law enforcement relating to cannabis, significant resources are being allocated to a drug that has not, on its own, been responsible for a single unintentional overdose death in the last 11 years, if ever.[39]

The high costs of prohibition are of particular concern when considering the scientific evidence on the harms of different psychoactive substances, which places cannabis low on the harm scale, well behind both alcohol and tobacco.[40]

Social costs

In addition to the financial costs of prohibition, there is growing recognition of its social costs – that that the criminalisation of cannabis is not only ineffective at controlling its use and availability in the community, but is likely to produce its own harms.[41]

It is clear that prohibition creates a black market for cannabis that is controlled by criminals: the link between organised crime and the illicit cannabis market is well established.[42] As with other illicit drugs, the cannabis market funds other criminal acts that create more harm than cannabis, including the importation of ice and heroin to Australia.[43] In 2015 the hydroponic cannabis industry was estimated to produce around $1.5 billion wholesale value for the national black market, with much of the money reinvested in illicit drugs that have higher risk but greater reward.[44] The retail value of this black market has been estimated at $8 billion each year,[45] with senior police now believing that 'the syndicates controlling Australia's multi-billion-dollar cannabis black market are far more powerful than they had previously suspected'.[46]

In Victoria, the vast majority of seized cannabis plants are cultivated in crop houses established by organised crime groups keen to take advantage of the high profitability of cannabis. Victoria Police has identified syndicates that operate multiple such houses, using the cannabis income 'to fund other illegal activity including the manufacture of other illicit drugs including methamphetamine and heroin'.[47]

Prohibition actively creates crime. The illegality of drugs means that they are worth enormous amounts of money to those who control their supply, providing a substantial profit motive for criminal groups to enter and control the trade. For the 3,000 kilograms of cannabis seized by Victoria Police in 2018-19,[48] the street value was more than $60 million.[49]

If cannabis supply was removed from the black market and taken out of the hands of criminals, this important source of funding for criminal activities would be removed.

Prohibition of cannabis means that people who want to buy cannabis for personal use must turn to criminals to do so, exposing themselves to the interpersonal violence and other crime that typically

occurs in drug markets.[50] It also places them in a context where they have access to other, more dangerous drugs, such as ice.

Prohibition exposes people to unnecessary involvement with the criminal justice system if caught – unnecessary as there is little risk to broader public safety from cannabis use. Such people become the victims of prohibition. This is of particular concern among minority groups who are already over-represented in the criminal justice system, such as Aboriginal and Torres Strait Islander peoples.

While all states and territories in Australia have a police diversion scheme for low-level cannabis offences, police discretion means that Indigenous peoples are disproportionately targeted for drug-related law enforcement and are more likely to be funneled into the criminal justice system rather than being offered diversionary processes.[51] While data from Victoria do not appear to be available, data from NSW show that police are far less likely to divert Aboriginal and Torres Strait Islander people found in possession of a small amount of cannabis: police were four times more likely to issue a cannabis caution to non-Indigenous people, with 40% of non-Indigenous people receiving a caution compared with only 11% of Indigenous people.[52]

An evaluation of the Victoria Police Cannabis Cautioning Program found that there was no difference in reoffending rates between people who had been diverted via a caution and those who had not. Diversion programs in the context of the criminalisation of cannabis are therefore not effective in controlling cannabis use.[53]

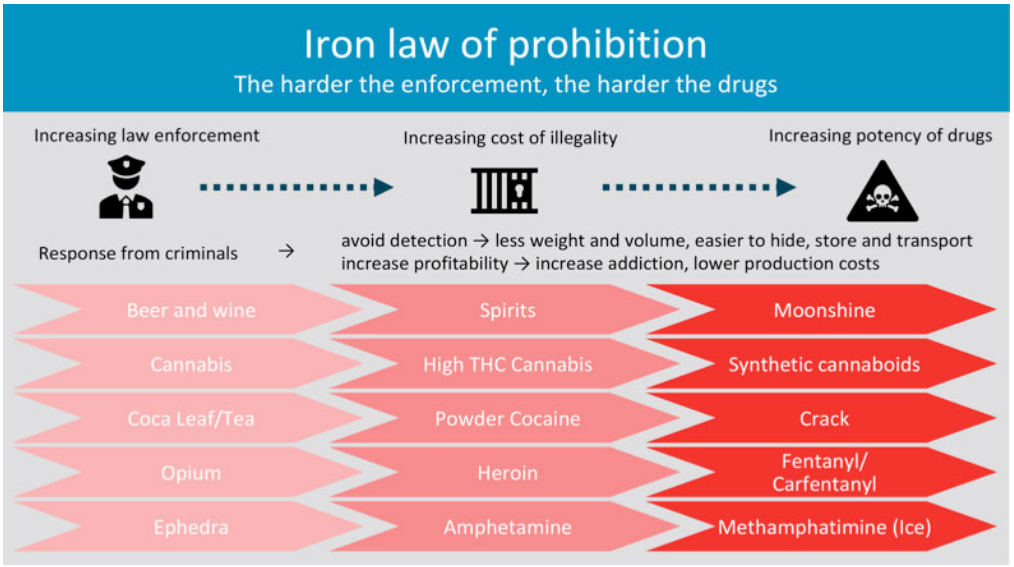
Victoria Police data show that 60% of cannabis possession or use offences occurred on their own in 2019, with no other offending.[54] This means that cannabis possession/use policing is more often than not targeting people who are committing no other crime.

'The iron law of prohibition'

When a drug is illegal, there is no means for regulating the strength of the product or its content. This means that people who manufacture and supply drugs can make them more addictive by increasing the potency of their product. A more addictive product means more return customers.

Generally, the more intensive the law enforcement of a drug, the more potent the drug becomes (the 'iron law of prohibition'[55]): drug markets are driven by economic processes that encourage the production and supply of more potent and profitable drugs and preparations.[56] Figure 1 illustrates this effect.

Figure 1: The impact of prohibition on the development of more harmful high-potency drugs



Source: Queensland Productivity Commission, 2019, p. 21

On the basis of this so-called 'iron law of prohibition' levels of tetrahydrocannabinol (THC) in cannabis products have increased dramatically. For example, the estimated potency of herbal cannabis in Europe doubled from 5% in 2006 to 10% a decade later, while the estimated potency of cannabis resin in Europe doubled from around 8% to 17% in that period.[57] The average THC content in confiscated cannabis samples in the US increased from less than 4% in the early 1990s to more than 15% in 2018.[58] Similarly, analysis in Australia found cannabis with a high average potency: three-quarters of the samples contained at least 10% THC, while around half contained at least 15% THC.[59] There is clear evidence that the risk of harms associated with cannabis use increase as the amount of THC increases.[60]

Criminalisation also creates a market for synthetic cannabinoids; the development of new synthetic cannabinoids has led to more than 180 different types of these more potent versions of cannabis now being available.[61] These are far more dangerous than naturally-derived products[62] – unintentional overdose deaths due to cannabis in Australia in recent years have been entirely due to these synthetic products.[63]

The need for a new approach: Arguments for market regulation

Regulated markets allow for quality control. Research has shown that the cannabis available in contexts where its use is prohibited has variable THC levels, with no transparency for the consumer. In jurisdictions where cannabis production is regulated, the cannabis produced contains lower levels of THC and higher levels of CBD – a secondary psychoactive compound with numerous beneficial medicinal properties, including the treatment of mental health problems such as depression, anxiety and post-traumatic stress disorder.[64] Regulated cannabis markets allow for more effective means of controlling access and allow concentrations of both THC and CBD to be determined by policy.

Regulated markets also allow for greater quality control and quality assurance during the production process. There has been growing recognition of the adverse impacts of some cannabis growing practices, particularly the use of harmful chemicals. Major concerns have been raised around additives such as pesticides, but particularly around the use of plant growth regulators (PGRs). These PGRs limit plant size and stimulate bud production, but many have been banned from use on food crops after

being identified as carcinogens.[65] One study of cannabis growers in Australia, Denmark and the UK found that hydroponic growers were 12 times more likely to use such chemicals than natural growers. Use of such additives is a concern as research shows they can be transferred into cannabis smoke.[66] As a result, numerous jurisdictions have established guidelines to ensure the quality, safety and efficacy of cannabis products, mandating controls on various contaminants.[67]

A global shift: The evidence from overseas & Australia

To address the potential harms of illegal markets, several jurisdictions, most notably Canada and an increasing number of states in the US, have legalised cannabis for recreational use in recent years. Several more countries, including Mexico,[68] Israel[69] and Luxembourg,[70] are working towards legalisation, while many others, Australia included, have enacted reforms to increase access to medicinal cannabis. This global move toward regulating cannabis and its use through means other than the criminal justice system has been driven by a wealth of evidence on the harms of prohibition and the awareness of more effective ways of preventing harms from cannabis use.

Canada

Following the lead of Uruguay, which legalised cannabis in 2013, Canada legalised the possession, cultivation and commercial supply of cannabis for personal use in October 2018. The *Cannabis Act* focuses on protecting public health and safety, illustrating the shift occurring in the control and regulation of cannabis globally.[71]

The Act aims to accomplish three goals:[72]

- To keep cannabis out of the hands of youth
- To keep profits out of the pockets of criminals
- To protect public health and safety by allowing adults access to legal cannabis

Overall, there was no significant increase in the use of cannabis in Canada following legalisation, with use among people aged 18-24 and heavy users remaining unchanged. Among adolescents aged 15-17, the proportion reporting cannabis use *declined* following legalisation: from 19.8% prior to legalisation to 10.4% afterwards.[73]

There was no change in the percentage of people who reported driving within two hours of consuming cannabis, while the proportion of people who reported having been a passenger in a car driven by someone who had consumed cannabis within the previous two hours actually fell following legalisation.[74]

The legal cannabis market generated significant tax revenue and employment. Online and retail store sales amounted to $908 million across Canada between October 2018 and September 2019.[75] In the first five and a half months following legalisation, Canadian governments earned $186 million from excise taxes and general taxes on goods and services directly related to the sale of cannabis. Tax revenue is expected to rise as additional cannabis retail outlets obtain licenses and begin operating.[76]

United States

The US has the largest legal cannabis market in the world. As of 2018, the US cannabis market was valued at $11.3b, $7.2b of which was accounted for by medical cannabis use.[77] Taxation of the cannabis industry generates significant revenue for governments. For example, by May 2020 Colorado, with 5.8 million people,[78] had collected $1.31b in tax revenue since retail sales of cannabis began in February 2014.[79] In 2019 alone there was $1.75 billion in cannabis industry sales, with tax revenue reaching $302.5 million.[80]

With four states legalising recreational cannabis in November 2020,[81] and Virginia legislators voting in February 2021 for legalisation,[82] cannabis has now been legalised for recreational use in 16 American states, including California, with 12% of the country's population.[83] Each state has adopted slightly different models and restrictions, with a fully commercial model (similar to alcohol-style regulations) implemented in Colorado and Washington State.[84]

Evidence from Colorado shows that the impacts of reform have been largely positive:[85]

> There has been no obvious spike in young people's cannabis use, road fatalities, or crime, and there have been a number of positives, including a dramatic drop in the number of people being criminalised for cannabis offences; a substantial contraction in the illicit trade, as the majority of supply is now regulated by the government; and a significant increase in tax revenue, which is now being spent on social programmes. Consistent public support for legalisation also suggests Coloradans perceive the reforms to have been a success. Where challenges have emerged, for example around cannabis edibles, the flexibility of the regulations has allowed for modification to address them.

International evidence on the impact of cannabis reforms has shown that liberalising cannabis use does not change consumption patterns in young people.[86] Cannabis use among young people under 21 appears to have fallen: a meta-analysis of data from US states in which cannabis had been legalised found that young people were 8% less likely to try cannabis after legalisation than before, and 9% less likely to use cannabis frequently. Legalisation may have made it more difficult for teenagers to obtain cannabis as drug dealers are replaced by licensed dispensaries that require proof of age.[87]

Evidence from the US also supports the view that law enforcement resources could be allocated more efficiently. In both Colorado and Washington, crime clearance rates for violent and property crimes have risen in the wake of legalisation, while allowing police to focus more attention on more serious offending.[88]

The Australian Capital Territory

The ACT Government passed the *Drugs of Dependence (Personal Cannabis Use) Amendment Act 2019* (ACT) on 25 September 2019.[89] These amendments to the *Drugs of Dependence Act 1989* (ACT) came into effect on 31 January 2020 and legalised the personal cultivation, possession and use of cannabis in small quantities. Larger-scale production, as well as any form of supply or sale of cannabis, remains illegal.

Since the ACT laws came into effect, police data reportedly show no meaningful increase in drug arrests or drug-driving charges. In fact, simple cannabis offences have dropped by 90% in the 12 months since the law changed, from 56 to just five.[90] Twelve young people have been directed into drug support programs – about the same number as in previous years. The number of drug tests detecting THC is also about the same as previously.[91] Further, data from the Ecstasy and Related Drugs Reporting System report for the ACT found that cannabis usage rates have remained steady, and ACT Health data show that there has been no increase in hospital presentations since the laws passed.[92]

It has also been suggested that following legalisation more people have accessed treatment for cannabis use and associated mental health issues due to reduced stigma associated with cannabis.[93]

New directions: A Victorian model of strict legal regulation

> Evidence-based regulation is the rational policy response to managing any potentially harmful commercial activity present in society, and is the norm in almost every other such policy arena.[94]

Discussions on appropriate models for cannabis regulation often refer to alcohol as a similarly 'social' drug. However, a key lesson from the history of alcohol regulation is the need to prioritise public health considerations when developing a model of regulation for cannabis.[95]

There is a strong case for a conservative regulatory approach that seeks to limit adverse impacts of a new legal market; a strict regulatory framework is necessary to minimise the potential health burden attributable to cannabis use.

Such an approach would align well with contemporary Australian attitudes to cannabis use. Results from the 2019 *National Drug Strategy Household Survey* show increasing public support for non-punitive, harm minimisation measures designed to reduce problems associated with illicit drug use.

Less than one-quarter (22.1%) of respondents in 2019 felt that cannabis should be a criminal offence. Four in ten people (41.1%) supported legalisation of cannabis, steadily increasing in each survey from 21.2% in 2007 – support for legalisation overtook opposition (37.3%) for the first time in 2019, indicating growing community acceptance of cannabis.[96]

Principles and goals of an alternative model

Given the harms associated with the current approach to cannabis, any alternative should adopt the following principles that are designed to counter current harms:

- Policy addressing cannabis use in Victoria should be based on sound evidence.
- Cannabis use should be treated as a public health issue, in the same way as alcohol and tobacco are treated.
- The focus should therefore be on protecting public health by minimising potential risks and harms.
- Active prevention, education and treatment are a key aspect of any model, with a particular focus on preventing or delaying cannabis use among young people.
- Baseline data and ongoing surveillance and research activities are needed to monitor and evaluate the impact of reform.

Penington Institute is concerned about the harm caused to our communities by illicit drug use, including cannabis. We believe that the best way to minimise harms associated with cannabis is to develop **a strictly regulated cannabis market that adopts a public health approach and that prioritises prevention, education and treatment**.

To this end, Penington Institute recommends that strict legal regulation of cannabis, adopting the following goals, can best protect public health and safety:

1. Create healthier communities with a better understanding of, and response to, cannabis use	• Invest money raised from licensing fees into prevention and education, with a focus on young people • Invest money raised from licensing fees into harm reduction and treatment programs for cannabis and other more dangerous drugs
2. Minimise harm caused by cannabis use	• Limit access for young people by enforcing purchase age limits

	• Control quality by guaranteeing THC and CBD content and requiring quality standards for licensed sellers • Limit the amount that can legally be purchased and possessed • Prohibit advertising and require health warnings on packaging • Make it easier to seek help for problematic use by eliminating stigma • Make it easier to provide prevention and education programs
3. Create safer communities with less drug-related crime	• Reduce profits for the black market and organised crime • Reduce access to dealers who may push more harmful drugs • Enable police efforts to focus on serious and violent crime
4. Minimise harm caused by cannabis prohibition	• Reduce arrests and convictions for cannabis use and possession • Reduce people's contact with the criminal justice system, especially among those currently most affected by law enforcement and over-represented in the system • Reduce the long-term harms caused by criminal convictions

Prioritising public health and safety

Strict legal regulation offers a range of levers with which to control supply, quality and access to cannabis. The central issue in the design of a legal and regulatory framework for cannabis is to identify those system features which will best facilitate public health and safety and reduce the risks of health and social harms associated with use.

Given that the majority of harms related to cannabis use occur in select high-risk users (for example, youth) or in conjunction with high-risk use practices (such as frequent use; highly potent products), a model of strict legal regulation should include a comprehensive suite of actions aimed at those who are at highest risk for harms. These actions may include:[97]

- **Implementing a public health and education strategy, which would include:**
    - **Health education and prevention campaigns:** Before legal cannabis becomes available, education campaigns should be developed that aim to inform the general community, particularly young people and their families, of the potential risks associated with cannabis use. These campaigns should reduce the number of people who choose to use cannabis, delay initiation among those who do choose to consume cannabis, and reduce the frequent use of cannabis.
    - **Investing in prevention, harm reduction and treatment:** To minimise harms of cannabis use among specific high-risk groups, such as young people with a history of early and frequent use and adult heavy users, a public health strategy is required that provides targeted harm reduction information and support such as mental health services and treatment programs. Such approaches should address the underlying risk factors and determinants of problematic cannabis use, such as mental illness and social marginalisation. Treatment should be available early and include a range of options such as online or telephone assistance, support groups and individual counselling, as well as more intensive forms of support such as residential treatment. Education for health professionals including GPs should also be available.
    - **Investing revenue raised through regulation:** Revenue gained from cannabis regulation can be used to fund a prevention, education and treatment strategy.[98] For example, funds raised through licensing fees may be channelled into public education

campaigns in the same way that speeding and drink-driving fines have funded public education campaigns.[99]

- **Setting a minimum age** for legal purchase. Health protection – especially for children and youth – demands that cannabis purchase and possession be subject to age restrictions. With the legal age for purchasing alcohol in Victoria set at 18, this may be an appropriate limit. While there is no clear scientific evidence to identify a 'safe' age for consumption, setting the age limit too high risks preserving the illicit market and further criminalising youth.
- **Imposing restrictions on advertising/promotion** to minimise the profile and attractiveness of products, especially any subtle marketing to youth, such as the use of flavours and other products that may appeal to young people. Mandatory health warning messages and plain packaging could accompany these restrictions.
- **Using pricing to discourage the use of cannabis** and provide the government with revenues to offset related costs (such as for treatment and regulatory oversight). Economists have found that when the price of cannabis decreases, the prevalence of its use increases. While cannabis prices are typically described in terms of grams, what largely matters is the price per unit of intoxication or THC. License fees and regulations can be used to discourage consumption, but must be balanced against the need to minimise the attractiveness of the black market and dissuade illegal production and trafficking.
- **Imposing restrictions on THC content** in cannabis products and requiring labelling of THC levels on all products. As products with higher levels of THC are more dangerous, the level of THC should be regulated, similar to regulated ingredients in food, alcoholic beverages or other legal substances. Maximum THC limits could be set and higher-potency products either prohibited or tightly controlled via pricing policies that make such products more expensive than those with lower potency. A requirement for cannabis products to contain at least some portion of CBD would assist in minimising adverse effects of heavy use. In addition, products should not be permitted to contain nicotine or alcohol.
- **Imposing restrictions on the type of products** containing cannabis, particularly edibles, combined with limits on dosing, potency and additives. Allowing edible products offers an opportunity to address other health risks, including the possibility of shifting consumers away from smoked cannabis and any associated lung-related harms. To protect the most vulnerable, however, any products that are appealing to children, such as candies and other sweets, should be prohibited. Should edibles be allowed for sale, they should conform to the strictest packaging and labelling requirements applicable to any edible product.
- **Regulating commercial producers** and ensuring that the small number of legal producers are licensed by a central government licensing authority, tightly regulated and subject to quality controls, such as constraints around the use of pesticides. This aligns with the existing approach to medicinal cannabis, whereby a limited number of licensed growers are involved in the scheme. Home-grown cannabis for personal use could follow the cannabis club model in Spain but needs to be tightly regulated to prevent criminal infiltration.
- **Regulating distribution** so that sales of cannabis are restricted only to those people who have been licensed by the central government licensing authority, in a similar vein to current liquor licensing processes. Operating hours for cannabis sales should also be controlled, and locations should be managed to ensure appropriate distancing from schools, alcohol outlets and other cannabis outlets. People under the age of 18 should not be allowed to enter, and restrictions would be placed on street-level advertising signage. To strengthen public health messaging, licensed outlets should be required to display health information and advice around moderation, including details on how to access support for drug-related problems.

- **Limiting access to cannabis** via limits on the amount than an individual may purchase and possess will help dampen demand and minimise opportunities for resale of legally purchased cannabis in an illegal way, such as to children. Alcohol, tobacco and vaping products should not be available at the same outlet.
- **Limiting opportunities for consumption** to the private sphere, with public consumption prohibited. This aligns with the spread of smoke-free zones throughout Victoria but includes the added element of seeking to avoid attracting attention to the use of cannabis among those who do not consume.
- **Enforce the boundaries of the scheme,** with large-scale trafficking of cannabis, or production or distribution outside of the regulated scheme, continuing to be illegal. Cannabis-impaired driving should also continue to be unlawful, but new testing regimes need to be developed that measure actual impairment, rather than the amount of THC in the blood, which has little to do with one's ability to control a vehicle.
- **Ensuring monitoring and surveillance** by an independent statutory authority as the model is implemented and over time to ensure that it operates as intended. There should be mechanisms in place for incorporating new information into these regimes, especially if negative developments are discovered. One option would be to create an independent commission that would be charged with handling these decisions. As it is impossible to predict accurately the impact of cannabis legalisation in any given jurisdiction, sunset provisions should be considered to allow government to change course without getting locked into a particular regime.

Summary

At the international level there is increasing awareness that drug controls have failed to achieve their goals of reducing the availability of drugs and the extent and impacts of drug-related harms.[100] In Australia, public opinion supports a more rational approach to drug policy. It is now time for an evidence-based approach that requires a regulated model of cannabis use.

Evidence supports a shift away from prohibition of cannabis for the following reasons:

1. The current approach to cannabis use in Victoria is not working. Enforcement-based approaches that focus on criminalisation cost around $1.7 billion each year and have proven ineffective at reducing the availability of cannabis and levels of cannabis use in Australia. The ABS estimated that $7.1 billion was spent on illicit drugs in Australia in 2010, more than half of which (3.8 billion) was spent on cannabis. The margins made by cannabis distributors in 2010 were estimated at $3.7 billion.[101] Enforcement of cannabis laws diverts valuable police and other criminal justice system resources away from more serious and harmful crimes such as family violence and sexual offending. The resulting black market in cannabis allows organised crime groups to thrive, providing significant funding for illicit operations around far more dangerous drugs. Criminalisation exacerbates minority over-representation in the criminal justice system, removes any possibility of product quality control and means limited opportunities exist for education about prevention and harm reduction.
2. There is a changing view in the community with regard to cannabis; current policy does not reflect contemporary community attitudes.
3. Cannabis has a low harm profile compared with other licit and illicit drugs, and the harms of cannabis use are better managed through other mechanisms (social, health and community services).
4. Experiences from other countries have demonstrated that legalisation and regulation of cannabis is an effective way to improve community health and safety compared with a

criminal justice response. Many of the health, mental health and social harms associated with cannabis use are related to its illegal nature; careful and evidence-based strict legal regulation of cannabis would significantly reduce these harms.

Recommendations

Regulation of a product for which there is established demand offers a greater degree of control than prohibition. Criminalisation ensures that markets remain unregulated, lack quality control, and funnel profits to criminal enterprises.[102] Regulation, on the other hand, offers a range of levers with which to control supply, quality and access, as well as offering an opportunity for significant revenue-raising.

On the basis of this evidence, Penington Institute makes the following recommendations to the Inquiry:

1. That the Victorian Government develops a regulated cannabis market that adopts a public health approach and that prioritises prevention, education and treatment.
2. That the cannabis regulation model adopts the following principles designed to counter current harms:
    a. Policy addressing cannabis use in Victoria is based on sound evidence.
    b. Cannabis use is treated as a public health issue, in the same way as alcohol and tobacco are treated.
    c. The focus of the approach is on protecting public health by minimising potential risks and harms.
    d. Active prevention, education and treatment are key, with a particular focus on preventing or delaying cannabis use among young people.
    e. Baseline data and ongoing surveillance and research activities are used to monitor and evaluate the impact of reform.

[1] Legal and Social Issues Committee (2019). *Terms of Reference*. Parliament of Victoria.
[2] Anex (2013). Profits dwarf drug responses. *Anex Bulletin*, 11(6). See further: http://www.anex.org.au/wp-content/uploads/2013/07/Anex-bulletin-vol11-ed-6.pdf; ABS (2013). *Information paper: The non-observed economy and Australia's GDP, 2012*. Catalogue No. 5204.0.55.008.
[3] Task Force on Marijuana Legalization and Regulation (2016). *Toward the legalization, regulation and restriction of access to marijuana: Discussion paper*. Government of Canada, p. 10.
[4] Article 11 §2: United Nations Office on Drugs and Crime (2008). *2008 World drug report*. Vienna: UNODC, p. 194.
[5] United Nations Office on Drugs and Crime (2020). *World drug report 2020*. Vienna: UNODC.
[6] The 2019 *National Drug Strategy Household Survey* showed that 36.5% of Australians (7.6 million people) over the age of 14 years had used cannabis at least once in their lifetime and 11.6% (2.4 million) in the last 12 months. Of these recent users, half (50.1%) had used cannabis only a few times during the year, 12.8% used cannabis about once per month and the remaining third (37.1%) used once a week or more. This means that almost 900,000 Australians were regular users of cannabis in 2019 – around 3% of the country's population. Although the average age of Australians who used cannabis in the last year has increased, from 28.9 years in 2001 to 34.9 years of age in 2019, young people make up a significant proportion of people who use cannabis. In Victoria, 11.5% of people aged 14 years and older in 2019 had used cannabis in the previous 12 months. The highest prevalence of recent use in 2019 was seen among people aged 18-24 (27.8%); prevalence steadily decreased among older cohorts. Among youth aged 14-17, 9.3% reported using cannabis in the previous year.
[7] AIHW data show that, among Australian adolescents (aged 14 to 19) who have used cannabis in the past year, just over half (52.7%) have used it every few months or less during the year. One-quarter (25.9%) reported using cannabis once a week or more. See further: Australian Institute of Health and Welfare (2020). *National Drug Strategy Household Survey 2019: Detailed findings*. Canberra: AIHW, Table 4.21. Data on Australian secondary school students show that 15% had used cannabis in the past year, with around one-third using it only once or twice and a further third using it at least once a month. See further: Guerin, N. and White, V. (2018). *ASSAD 2017 statistics and trends: Australian secondary school students' use of tobacco, alcohol, over-the-counter drugs, and illicit substances*. Melbourne: Cancer Council Victoria, p. 29.
[8] The influence of the 'reefer madness' message that began in the United States in the 1930s continues to this day. See, for example, the 'stoner sloth' advertising campaign in NSW: Stockwell, S. (2015). 'Stoner sloth: Idiocy or genius?' *ABC Triple J Hack*, 21 December 2015. https://www.abc.net.au/triplej/programs/hack/stoner-sloth-ad-disaster/7045194.
[9] Hall, W., Stjepanović, D., Caulkins, J., Lynskey, M., Leung, J., Campbell, G. and Degenhardt, L. (2019). Public health implications of legalising the production and sale of cannabis for medicinal and recreational use. *The Lancet*, 394(10208): 1580-1590.
[10] The US National Academies of Sciences, Engineering, and Medicine convened a committee of 16 experts across different specialisations to conduct a comprehensive review of the literature regarding the health effects of cannabis and/or its constituents. See further: National Academies of Sciences, Engineering, and Medicine (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. Washington, DC: The National Academies Press, p. 7.
[11] Australian Institute of Health and Welfare (2020). *National Drug Strategy Household Survey 2019: Detailed findings*. Canberra: AIHW.
[12] Caulkins, J., Kilmer, B., Kleiman, M., MacCoun, R., Midgette, G., Oglesby, P., Liccardo Pacula, R. and Reuter, P. (2015). *Considering marijuana legalization: Insights for Vermont and other jurisdictions*. Santa Monica: RAND Corporation.
[13] Penington, D. (2015). Medical cannabis: Time for clear thinking. *Medical Journal of Australia*, 202(2): 74-76.
[14] Hall, W. (2009). The adverse health effects of cannabis use: What are they, and what are their implications for policy? *International Journal of Drug Policy*, 20: 458-466, p. 459.
[15] Hall, W. (2009). The adverse health effects of cannabis use: What are they, and what are their implications for policy? *International Journal of Drug Policy*, 20: 458-466, p. 458. See also: Penington Institute (2020). *Australia's annual overdose report 2020*. Melbourne: Penington Institute. Further analysis of the deaths reported in the *Overdose Report* found that, from 2014 to 2018, there were only 11 deaths where cannabinoids appeared on

their own as the cause of death; every one of these was due to synthetic cannabinoids rather than natural cannabis. Synthetic cannabinoids are far more toxic and dangerous than naturally-occurring cannabis, primarily due to far higher levels of THC. They can cause unintentional death as they can affect multiple organ systems.

[16] Penington, D. (2015). Medical cannabis: Time for clear thinking. *Medical Journal of Australia*, 202(2): 74-76.

[17] Penington, D. (2015). *Submission to the Inquiry into the Regulator of Medicinal Cannabis Bill 2014*.

[18] Heavy and long-time cannabis users are also at a greater risk of respiratory infections and pneumonia. See : National Academies of Sciences, Engineering, and Medicine (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. Washington, DC: The National Academies Press, p. 7.

[19] Australian Institute of Health and Welfare (2019). *Australian Burden of Disease Study: Impact and causes of illness and death in Australia, 2015*. Canberra: AIHW, p. 62.

[20] National Academies of Sciences, Engineering, and Medicine (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. Washington, DC: The National Academies Press, pp. 19-20.

[21] Di Forti, M., Marconi, A. and Carra, E. (2015) Proportion of patients in South London with first episode psychosis attributable to use of high potency cannabis: A case controlled study. *Lancet Psychiatry*, 2: 233-8.

[22] Penington, D. (2015). *Submission to the Inquiry into the Regulator of Medicinal Cannabis Bill 2014*.

[23] Although a link has been found between high-potency cannabis and psychosis, this relationship is not consistent for all types of cannabis. When the cannabis has a CBD content similar to or greater than its THC content, research has found no association between cannabis and the onset of psychosis: 'CBD has been shown to antagonise the cognitive impairment and psychotogenic effects associated with THC'. See further: Penington, D. (2015). Where do we stand on using cannabis for medical purposes in Australia and how should drugs be regulated in the community. *Health Systems and Policy Research*, 2(1): 12-15.

[24] National Institute on Drug Abuse (2020). *Marijuana research report*. Maryland: US Department of Health and Human Services, p. 16.

[25] Australian Institute of Health and Welfare (2018). *Impact of alcohol and illicit drug use on the burden of disease and injury in Australia: Australian Burden of Disease Study, 2011*. Canberra: AIHW, p. 84.

[26] Hall, W. (2009). The adverse health effects of cannabis use: What are they, and what are their implications for policy? *International Journal of Drug Policy*, 20: 458-466, p. 458.

[27] The research involved people inhaling vaporised cannabis containing different mixes of THC and CBD, then going for a one-hour drive on public highways both 40 minutes and four hours later. Cannabis containing mainly CBD did not impair driving while cannabis containing THC, or a THC/CBD mixture, caused mild impairment measured at 40 minutes later but not after four hours. See further: Arkell TR, Vinckenbosch F, Kevin RC, Theunissen EL, McGregor IS and Ramaekers JG. (2020). Effect of Cannabidiol and Δ9-Tetrahydrocannabinol on Driving Performance: A Randomized Clinical Trial. *JAMA*, 324(21): 2177–2186.

[28] Australian Institute of Health and Welfare (2018). *Impact of alcohol and illicit drug use on the burden of disease and injury in Australia: Australian Burden of Disease Study, 2011*. Canberra: AIHW, pp. 20, 84.

[29] Aydelotte, J.D., Brown, L.H., Luftman, K.M., Mardock, A.L., Teixeira, P.G.R., Coopwood, B. and Brown, C.V.R. (2017). Crash fatality rates after recreational marijuana legalization in Washington and Colorado. *American Journal of Public Health*, 107: 1329–1331.

[30] National Institute on Drug Abuse (2020). *Marijuana research report*. Maryland: US Department of Health and Human Services, p. 9.

[31] A recent review of studies that examine neuroimaging effects in both adolescent and adult cannabis users concluded that, while there is some evidence of compromised frontoparietal structure and function in adolescent cannabis use – primarily in relation to inhibitory control, reward and memory – it remains unclear whether the observed effects are causally attributable to the young age of onset of cannabis use or to factors that are simply related to cannabis use, such as depressive symptoms. The review suggested that more methodologically robust studies are needed in this area. See further: Chye, Y., Christensen, E. and Yücel, M. (2020). Cannabis use in adolescence: A review of neuroimaging findings. *Journal of Dual Diagnosis*, 16(1): 83-105.

[32] National Academies of Sciences, Engineering, and Medicine (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. Washington, DC: The National Academies Press, pp. 17-20.

[33] Leece, P. and Paul, N. (2019). *Is cannabis a "gateway drug"?* Toronto: Ontario Agency for Health Protection and Promotion (Public Health Ontario).

[34] Sentencing Advisory Council (2020). *SACStat Magistrates' Court data: Possess cannabis*. Available at: https://www.sentencingcouncil.vic.gov.au/sacstat/magistrates_court/9719_73_1.7.html.
[35] Productivity Commission (2020). *Report on government services 2020*. Table 8A.18.
[36] For example, 1,242 people received a prison term of less than three months. The number of people in this category was multiplied by the mid-point duration for the category – 6 weeks, or 42 days – for a total of 52,164 prisoner days. At almost $320 per day, this one group cost the taxpayer almost $17 million over the three years.
[37] Cost-benefit analyses showed $850 million in net benefits from decriminalising the use and possession of cannabis, but $1.2 billion in net benefits from legalising and regulating lower-harm drugs such as cannabis and MDMA. Analyses also showed that legalisation would remove $4 billion from illegal markets, significantly curtailing criminal activity. See further: Queensland Productivity Commission (2019). *Imprisonment and recidivism: Summary report.* Brisbane: Queensland Productivity Commission.
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[39] Penington Institute (2020). *Australia's annual overdose report 2020*. Melbourne: Penington Institute; custom data request from Australian Bureau of Statistics.
[40] Global Commission on Drug Policy (2019). *Classification of psychoactive substances: When science was left behind*. Geneva: Global Commission on Drug Policy. Similar results have been found in Australia, with alcohol being ranked the most harmful substance, tobacco ranked fifth and cannabis 13th : Bonomo, Y. et al. (2019). The Australian drug harms ranking study. *Journal of Psychopharmacology*, 33(7): 759-768.
[41] Ms Louise Arbour, former UN High Commissioner for Human Rights and former justice of the Supreme Court of Canada: New Zealand Drug Foundation (2020). *The case for YES – A conversation with the Global Commission on Drug Policy*, webinar, 12 August 2020.
[42] Task Force on Marijuana Legalization and Regulation (2016). *Toward the legalization, regulation and restriction of access to marijuana: Discussion paper*. Government of Canada.
[43] See, for example: Silvester, J. (2015). Victoria police estimate 'hydro' a $1.5 billion drug industry. *The Age*, 27 February 2015. https://www.theage.com.au/national/victoria/victoria-police-estimate-hydro-a-15-billion-drug-industry-20150226-13pl0v.html.
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[45] Victoria Police (2017). *Submission to the Law Reform, Road and Community Safety Committee inquiry into drug law reform*.
[46] See further: Bucci, N. and Dredge, S. 'The green house next door', *ABC News*, 2 July 2018. https://www.abc.net.au/news/2018-07-02/inside-the-grow-houses-of-australias-illegal-cannabis-trade/9889304?nw=0.
[47] Victoria Police (2020). *Submission to the inquiry into the use of cannabis in Victoria*. Available at: https://www.parliament.vic.gov.au/lsic-lc/inquiries/article/4260.
[48] Australian Criminal Intelligence Commission (2020). *Illicit Drug Data Report 2018-19*. Canberra: ACIC, Table 35.
[49] The price of one gram of hydroponic cannabis head in Victoria for 2018-19 was $20 – slightly less than the national median. See further: Australian Criminal Intelligence Commission (2020). *Illicit Drug Data Report 2018-19*. Canberra: ACIC, Table 44.
[50] McDonald, D. (2011). *What are the likely costs and benefits of a change in Australia's current policy on illicit drugs?* Canberra: Australia 21. See also Victoria Police (2020). *Submission to the inquiry into the use of cannabis in Victoria*. Available at: https://www.parliament.vic.gov.au/lsic-lc/inquiries/article/4260.
[51] Simmons, A. 'Over-policing to blame' for Indigenous prison rates. *ABC News*, 25 June 2009. https://www.abc.net.au/news/2009-06-25/over-policing-to-blame-for-indigenous-prison-rates/1332486.
[52] Data compiled for *The Guardian Australia* news by the Bureau of Crime Statistics and Research. Available at: https://www.theguardian.com/australia-news/2020/jun/10/nsw-police-pursue-80-of-indigenous-people-caught-with-cannabis-through-courts.
[53] Victoria Police (2020). *Submission to the inquiry into the use of cannabis in Victoria*. Available at: https://www.parliament.vic.gov.au/lsic-lc/inquiries/article/4260.

[54] The Victoria Police submission states that 'In 2019, 40 per cent of cannabis use or possession offences co-occurred with another offence'. The remaining 60% must therefore have occurred alone. See further: Victoria Police (2020). *Submission to the inquiry into the use of cannabis in Victoria*, p. 9. Available at: https://www.parliament.vic.gov.au/lsic-lc/inquiries/article/4260.
[55] Global Commission on Drug Policy (2018). *Regulation: The responsible control of drugs*. Geneva, Switzerland: Global Commission on Drug Policy, p. 13.
[56] Global Commission on Drug Policy (2018). *Regulation: The responsible control of drugs*. Geneva, Switzerland: Global Commission on Drug Policy, p. 13.
[57] European Monitoring Centre for Drugs and Drug Addiction (2019). *Developments in the European cannabis market*. Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction, pp. 6, 8.
[58] National Institute on Drug Abuse (2020). *Marijuana research report*. Maryland: US Department of Health and Human Services, p. 10.
[59] Swift, W., Wong, A., Li, K.M., Arnold, J.C. and McGregor, I.S. (2013). Analysis of cannabis seizures in NSW, Australia: Cannabis potency and cannabinoid profile. *PLoS ONE*, 8(7): e70052.
[60] Hall, W. (2009). The adverse health effects of cannabis use: What are they, and what are their implications for policy? *International Journal of Drug Policy*, 20: 458-466, p. 458.
[61] European Monitoring Centre for Drugs and Drug Addiction (2019). *Developments in the European cannabis market*. Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction, p. 13.
[62] See, for example, the report of the Victorian Coroners Court into the death of Mr P, whose cause of death was determined to be 'coronary artery atherosclerosis and cardiomegaly in a man using synthetic cannabinoids'. Referring to synthetic cannabinoids, the coroner commented: 'There is so little definitive information about the effects of novel synthetic substances and there is no practicable way for a user to know precisely which illicit synthetic drugs are being consumed' (Court Reference: COR 2019 5437).
[63] Penington Institute (2020). *Australia's annual overdose report 2020*. Melbourne: Penington Institute.
[64] The medicinal value of CBD and the importance of ease of access to its benefits have been recognised in Australia by the Therapeutic Goods Administration, which recently down-scheduled low-dose CBD preparations to allow over-the-counter supply by a pharmacist, without a prescription. See: https://www.tga.gov.au/media-release/over-counter-access-low-dose-cannabidiol.
[65] Lenton, S., Frank, V.A., Barratt, M.J., Potter, G.R. and Decorte, T. (2018). Growing practices and the use of potentially harmful chemical additives among a sample of small-scale cannabis growers in three countries. *Drug and Alcohol Dependence*, 192(1): 250-256.
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[71] *Cannabis Act*, Parliament of Canada: https://laws-lois.justice.gc.ca/eng/acts/c-24.5/page-2.html#h-6.
[72] See further: https://www.justice.gc.ca/eng/cj-jp/cannabis/.
[73] Statistics Canada (2020). *Cannabis legalization: What has changed?*
[74] Canadian Centre on Substance Use and Addiction (2019). *Cannabis legalization: Year one observations*.
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[76] Statistics Canada (2019). *At a glance: Government revenues from the sale of cannabis, March 2019*.
[77] Grand View Research (2019). *U.S. cannabis market size, share & trends analysis report by cannabis type (medical, recreational), by product type (buds, oils, tincture), by medical application, (chronic pain, mental disorder, cancer), and segment forecasts, 2019 – 2025*. San Francisco: Grand View Research.
[78] United States Census Bureau (2019). *Quick Facts Colorado*. See: https://www.census.gov/quickfacts/CO.
[79] Colorado Department of Revenue (2020). *Marijuana tax data*. Available at: https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data?mod=article_inline.

[80] Rubino, Joe (2020). 'June was Colorado's biggest marijuana sales month ever. July was Likely bigger'. *The Denver Post*, 12 August 2020. https://www.denverpost.com/2020/08/12/june-2020-colorado-marijuana-sales-record/.

[81] Arizona, Montana, New Jersey and South Dakota all passed measures to legalise recreational cannabis. Mississippi and South Dakota also legalised medical cannabis. One commentator suggested that 'the strong win across party lines shows that our country is less divided on the "freedom to use drugs" than just about any other issue'. See further: Iaquinta, S. The real winner this election day – drugs: Several states approve marijuana for recreation, medical uses. *Marin Independent Journal*, 8 November 2020. Available at: https://www.marinij.com/2020/11/08/the-real-winner-this-election-day-drugs/.

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[89] See: https://www.legislation.act.gov.au/a/2019-34/.

[90] Interstate residents and ACT residents who are under age 18 can still be charged: Inman, M. 'What has changed in the year since cannabis possession was legalised in the ACT?', *ABC News*, 31 January 2021, https://www.abc.net.au/news/2021-01-31/what-has-changed-since-cannabis-was-legalised-in-the-act/13105636.

[91] There has yet to be any academic research into the impact of the ACT reforms. However, ABC Triple J Hack received these data from ACT police. See further: https://www.abc.net.au/triplej/programs/hack/act-legalised-cannabis-one-year-ago-heres-how-its-gone/12703982.

[92] ACT Health launched a public health campaign about the potential impacts of cannabis use, which may have helped minimise cannabis-related harms.

[93] Alcohol, Tobacco and Other Drug Association, ACT chief executive Devin Bowles quoted in Inman, M. 'What has changed in the year since cannabis possession was legalised in the ACT?', *ABC News*, 31 January 2021, https://www.abc.net.au/news/2021-01-31/what-has-changed-since-cannabis-was-legalised-in-the-act/13105636.

[94] Rolles, S. (2009). *A comparison of cost-effectiveness of prohibition and regulation of drugs*. Bristol, UK: Transform Drug Policy Foundation, p. 8.

[95] Law Reform, Road and Community Safety Committee (2018). *Inquiry into drug law reform*. Parliament of Victoria.

[96] Australian Institute of Health and Welfare (2020). *National Drug Strategy Household Survey 2019: Detailed findings*. Canberra: AIHW, Tables 9.15 and 9.26.

[97] Many of these ideas are drawn from the Canadian experience. See further: Task Force on Marijuana Legalization and Regulation (2016). *Toward the legalization, regulation and restriction of access to marijuana: Discussion paper*. Ottawa: Government of Canada; Task Force on Cannabis Legalization and Regulation (2016). *A framework for the legalization and regulation of cannabis in Canada: The final report of the Task Force on Cannabis Legalization and Regulation*. Ottawa: Government of Canada. See also: Kilmer, B. (2015). The 10 Ps of marijuana legalization. *Berkeley Review of Latin American Studies*, 22 June 2015.

[98] Section 90 of the *Constitution* has the effect of preventing states from imposing taxes on the sale or consumption of goods. While any fee that is substantially 'revenue-raising' in nature would be invalid under Section 90, *Ha* v *New South Wales* (the current authority on its scope) suggests that a licence fee that is imposed under a statute that sets up a *regulatory* framework – rather than a revenue-raising one – may still be valid. See

further: http://classic.austlii.edu.au/au/legis/cth/consol_act/coaca430/s90.html; see also: (1997) 189 CLR 465 (Brennan CJ, McHugh, Gummow and Kirby JJ), available at http://www6.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/HCA/1997/34.html.

[99] While the ring-fencing of funds is often described in the context of tax, there is no reason that such hypothecation cannot also be used in the context of licensing fees or other sources of revenue. The key in our proposed model of cannabis regulation is that the funds are allocated specifically, and only, to prevention and education activities.

[100] McDonald, D. (2011). *What are the likely costs and benefits of a change in Australia's current policy on illicit drugs?* Canberra: Australia 21, p. 2.

[101] Anex (2013). Profits dwarf drug responses. *Anex Bulletin*, 11(6). See further: http://www.anex.org.au/wp-content/uploads/2013/07/Anex-bulletin-vol11-ed-6.pdf; ABS (2013). *Information paper: The non-observed economy and Australia's GDP, 2012*. Catalogue No. 5204.0.55.008.

[102] Shanahan and Ritter (2014) Cost benefit analysis of two policy options for cannabis: Status quo and legalisation. *PLoS ONE*, 9(4): e95569.