

# New Zealand's 'Cannabis Legalisation and Regulation Bill': an evidence-based assessment and critique of essential regulatory components towards policy outcomes

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## ABSTRACT

New Zealand will hold a public referendum in 2020 on the possible replacement of current cannabis prohibition with legalisation of use and supply policy. Cannabis legalisation policies have been implemented—albeit with heterogeneous regulatory frameworks—in several (eg, North/South America) jurisdictions, with yet inconclusive evidence on main health and social outcomes. The New Zealand government has recently presented the final draft of its *Cannabis Legalisation and Regulation Bill*, including main regulatory parameters and provisions of the legalisation framework. As regulation elements are known to determine feasibility and outcomes of legalisation policy, we have undertaken a critical review and assessment of 10 of the Bill's main regulation components, based on evidence from and experiences with cannabis policy elsewhere as well as other substance policy areas. The reviewed components include: “*political promises; age of use/access; places of use; penalties for underage use; ‘home-growing’; retail distribution; licensed production; products available; new/remaining offenses; research and monitoring*”. New Zealand's cannabis legalisation plan is embedded within an overall public health-oriented framework. However, multiple essential regulatory provisions appear questionable for feasibility, consistency with public health principles or practice, or may lead to—possibly un-intended—adverse outcomes. These regulatory elements should be re-considered and adjusted, ideally before possible implementation of legalisation if supported by the referendum.

New Zealand features relatively high cannabis use rates in global comparison, while presently considering fundamental reform of its present, prohibition-based cannabis control approach towards legalisation of cannabis use and supply.<sup>1</sup> Legalisation and regulation of cannabis policies, albeit with differing regulatory frameworks, have been implemented in Uruguay, multiple US states and Canada since 2010; several other jurisdictions are

considering similar policy reforms.<sup>1,2</sup> The option for cannabis legalisation reform in New Zealand will be put to a public referendum in September 2020.<sup>3</sup> The public health, safety and social outcomes of cannabis legalisation initiatives elsewhere have been assessed as mixed and inconclusive to date.<sup>2,4</sup> While general criminalisation of (legal-age) users has been reduced, there have been cannabis use increases in select age groups and higher-risk use patterns; some public

health outcomes (eg, hospitalisations or impaired driving) have increased, but not necessarily beyond pre-legalisation trends.<sup>2,4</sup> North American jurisdictions have seen rather intensive commercialisation of legal cannabis production and supply, yet with illicit cannabis markets competitively resilient and active. Recently, the New Zealand government presented the summary content of its *'Cannabis Legalisation and Control Bill'*, laying out key parameters and details of its legalisation plan.<sup>5</sup> While the Bill offers an overall valuable legislative framework, we offer a brief science-based review and critical assessment of 10 of the Bill's essential regulatory provisions, based on evidence from cannabis and other substance control areas, specifically how these stack and can be expected to perform towards the proposed legalisation policy's principal objectives.

### Political promises

The Bill declares the proposed legalisation's objective or "purpose is to reduce cannabis-related harm to individuals, families/whanau and communities". More concretely, it states that legalisation "would do this by [...] eliminating the illegal supply of cannabis [...] restricting young people's access to cannabis ... [and] ... limiting the public visibility of cannabis".<sup>5</sup> These are inflated and unrealistic political promises for policy impacts, that are unlikely to be achievable as stated. For example, experiences with legalisation elsewhere has shown that, while reduced, illegal cannabis markets and supply remain active and resilient after the implementation of legalisation.<sup>6,7</sup> Similarly, cannabis use among adolescents/under-age youth, at best, has remained stable and there is no reason to assume why young people's access to cannabis should be expected to decrease in the context of—overall increased—availability of both legal and illegal markets/supply.<sup>6,8,9</sup> Legalisation, including legal production, distribution and use is also likely to increase, rather than decrease cannabis 'public visibility', and overall societal 'normalisation' as a consumption commodity.

### Age of use/access

The government has defined a legal age of 20 years or older for legal cannabis use and purchase. The reasoning behind, and especially any scientific basis for this age cut-off are unclear. Cannabis use is highly prevalent (~25%) among adolescents/youth

(ie, ages 15–25), so this age limit will exclude a substantial proportion of young users from legalisation's surmised benefits. While select risks for cannabis-related adverse health (eg, cognitive, brain, health, dependency) outcomes are age-related and -stratified, the principally health science-guided parameters for possible 'age cut-offs' would be after ages 15–17 years (ie, puberty period) or mid-20s (in more precautionary views, eg, for brain development) or senior age (eg, >65) in extra-precautionary considerations.<sup>10–12</sup> No tangible evidence specifically for 20 years as a science-founded age cut-off for cannabis use towards clear-cut prevention of health harms exists. Furthermore, the age limit is inconsistent with age limits for other legal drug use in New Zealand, where specifically for alcohol use—an arguably more hazardous substance, especially for young people—no minimum consumption age exists, and the purchase age for tobacco products is 18 years.<sup>13</sup> Thus, the proposed age limit for cannabis is not scientifically supported but appears rather arbitrary, nor is it consistent or policy-coherent in regards to other, widely used legal substances. Here political considerations appear to have trumped science, with questionable compromising for results.

### Places of use

Provisions stipulate that cannabis may be consumed only within private homes or "licensed premises". This restriction, also when considering cannabis use as a typically 'social' activity, is both contestable for general feasibility, as well as likely to lead to adverse consequences. Most cannabis use occurs by inhalation, eg, smoking or vaping, that is, use modes involving possible adverse health outcomes (eg, second-hand smoke, toxin exposure) for others.<sup>14–16</sup> As most people share their domestic lives with others (eg, partners, children), limiting cannabis use to private homes, by design, will bring substantial health risk to other parties; it also contravenes longstanding efforts to direct away tobacco smoking from homes.<sup>17</sup> The restriction is further inconsistent with use regulations for tobacco and alcohol which, to varying (limited) degrees, can be used in public spaces in New Zealand.<sup>13</sup> Provisions for cannabis use in 'licensed premises', realistically, will likely only bring limited relief. These 'licensed premises' will not allow for smoking/vaping, and so will be restricted

mostly to ‘ingested’ cannabis consumption—a rather uncommon use mode. Furthermore, the designated consumption premises may provide conventional food or drink, but not alcohol or tobacco products, which are commonly co-used with cannabis.<sup>18,19</sup> Thus, the use restrictions altogether will likely render the ‘licensed premises’ a rather exotic type of establishment for limited audiences, the availability and uptake—especially outside more affluent, urban areas—is likely thin (and consequently may push use further into private homes). These use-restrictions appear too categorical and over-reaching, unlikely to well-serve public health overall; they should be amended to include some sensible, limited options for cannabis use in public spaces.

### Under-age use penalties

The Bill provides that an under-age (<20 years) person found in possession of cannabis “would receive a health-based response: [...] an education session, social or health service [...] or pay a small fee or fine”, which however would “not lead to a conviction”. There is considerable uncertainty and ambiguity—and possible devil—in these details. First, cannabis use prevalence is highest (up to 25%) among ages 15–24, so the potential target population for such use violations and consequential sanctions is extensive.<sup>4,20</sup> Enforcement, inevitably, will need to be selective, and thus may reproduce long-standing arbitrary or discriminatory practices (eg, against Māori or other minorities).<sup>4,21–23</sup> While an ‘education session’ may serve health-informational purposes, a monetary ‘fee or fine’ is principally a form of punishment and not a genuine health intervention.<sup>24</sup> Discretion, and therefore arbitrary enforcement of these measures will likely occur. Moreover, fees/fines may be difficult to settle for many, especially for young/poor people, and so ‘fine defaulting’—as, for example, has occurred in Australian ‘ticketing’ schemes for cannabis—may indirectly entangle offenders in the justice system or related processes.<sup>25,26</sup> Finally, while a formal ‘criminal conviction’ for offenders may not arise, the enforcement of violations and consequential ‘health measures’ will likely entail some record-keeping in police or other administrative databases that identifies the individual involved, and so lead

to continued, potentially long-term identification or labelling.<sup>27,28</sup> However, these outcomes were exactly among the collateral, social harms of prohibition that legalisation was supposed to alleviate, and not extend, especially for youth as the vulnerable population of concern.<sup>23</sup>

### ‘Home-growing’

The cannabis bill—similar to provisions in other legalisation settings (eg, North/South America)—allows cannabis use-eligible adults (proposed as ages 20 and over) to ‘home-grow’ or self-produce two (maximum of four/household) cannabis plants at home while “out of sight”.<sup>29</sup> Notwithstanding the widespread, popular sentiment that ‘home-growing’ provisions are a ‘quasi-must-have’ element for cannabis legalisation and its use culture, they are a questionable provision, especially concerning their consistency with public health objectives and related protections.<sup>1,30</sup> While the legalisation plan imposes strict (eg, potency, access, price) restrictions on legal cannabis retail distribution, ‘home-growing’ creates a backdoor that directly undermines these protective safeguards. The restrictions for cannabis ‘home-growing’ are practically impossible for authorities to monitor or enforce (unless accepting inspections to regularly search private homes). Moreover, just like use itself, cannabis home-growing inside homes comes with risk for environmental hazards not only for the consumer, but other occupants (eg, family members) of the domestic environment.<sup>31,32</sup> Beyond, home-growing facilitates potential and easy access to cannabis products by others (eg, including minors), and so can easily enable cannabis diversion.<sup>33</sup> Overall, cannabis ‘home-growing’—especially inside residential homes—makes for a questionable and contradictory provision in a genuinely public health-oriented framework of cannabis legalisation, including other, correspondingly regulated supply parameters.

### Retail distribution

The Bill defines parameters of retail distribution and outlets for legal cannabis products. These facilities are proscribed to be ‘inconspicuous’, ie, free of overt cannabis advertising, to operate within limited hours, and to only offer cannabis products, ie, no other psychoactive substance products like alcohol or tobacco. There are several important variables of uncertainty. First, it is

unclear how density for legal cannabis retail outlets will be regulated or restricted. As alcohol policy science demonstrates, outlet density strongly influences product access, and subsequent levels of consumption and related harms (eg, hospitalisations, injuries).<sup>34,35</sup> Second, while the ‘cannabis-exclusive’ nature of retail distribution implies an effective protection against risky co-use with other psychoactive substances (eg, alcohol or tobacco) it is unsubstantiated that these protective effects will indeed materialise from such physical separation.<sup>18,19</sup> The other products, if desired for co-use, may be purchased elsewhere (eg, in liquor stores, supermarkets, etc.) based on ample, general availability.<sup>13</sup> A further possible downside of this separation of retail is that prevention-oriented regulations or information will focus on cannabis-only, rather than more comprehensively aim to address the (typically elevated) risks of common substance co-use, eg, for cognitive impairment, accident and reproduction risks, etc.<sup>10,36,37</sup> Finally, it deserves acknowledgement that, within the legalisation framework proposed, cannabis retail stores will operate as commercial business entities. In other words, and despite well-intended public health goals, their operational viability and economic success will naturally depend on and strive for increased volumes of customers and sales.

### Licensed producers

New Zealand’s legalisation plan renders cannabis production to a fully commercialised system, and thereby establishes a legal commercial cannabis industry (ie, akin to existing alcohol, tobacco or other consumption product industries). Alternatives for this commercial production and supply framework—eg, public monopoly or community trust systems—were available but not selected.<sup>38,39</sup> As studies of other consumption product industries document, commercialisation facilitates distinctly adverse interests and dynamics counter public health.<sup>40–42</sup> Commercial industries generally work towards expanded sale and profit; they seek to expand consumer populations (especially young people) and consumption; develop effective ways for marketing and promotion (while creatively bypassing restrictions); and contribute to elevated use-associated (eg, health) harms. For cannabis specifically, there is not only

the risk of creating a sizeable new psychoactive product industry featuring similar commerce-driven and public health-averse characteristics in New Zealand. Equally important, commercial cannabis industry entities will likely either quickly merge with, or follow the commercial business strategies of large-scale multi-national cannabis, or alcohol and tobacco corporations.<sup>40,43</sup> Such developments have already extensively occurred in other markets (eg, North America), and will render it challenging for New Zealand to control its cannabis industry landscape according to its domestic needs and interests. While it is laudable that the regulations for production include licensed ‘micro-cultivators’ for inclusion in the commercial cannabis production scheme, they set an overall maximum share limit of 20% of the production cap per individual license-holder. This generous allotment means that, in theory, a total of five—or an oligopoly—of large-scale (eg, multi-national) producer entities may control the legal cannabis market.

### Product availability

The Bill provides for a menu of different cannabis products to be legally available for public retail and consumption, however with explicit restrictions or bans on other products. With key details yet unclear, there will be restrictions at least for legal sales contexts on high-potency cannabis products, which is generally desirable, given that potency (ie, THC) levels are directly associated with various acute and long-term adverse outcomes (eg, cognitive impairment, mental health, dependence) from use.<sup>10,11,44</sup> However, besides mere THC-related potency, cannabis product composition, specifically in regards to CBD content levels, similarly matter for the attenuation of at least some adverse effects.<sup>10,45–47</sup> Overall, it needs to be assumed that many cannabis products the legal retail market—for example, for health protections—restricts or bans will remain on offer by illegal sources. Hence, these regulatory restrictions involve a cautious balancing act, yet do not mean more hazardous cannabis products will entirely disappear from availability. Banned products from cannabis retail furthermore include other legal substances, such as alcohol or tobacco, due to “harmful interactions” with cannabis. Co-use of alcohol



and/or tobacco with cannabis is indeed common and associated with a multitude of adverse health outcomes.<sup>10,36,37</sup> However, there is no ready evidence that limiting retail to cannabis products only will materially avoid, or reduce such risky co-use and adverse effects, also since these other, legal substance products can easily be accessed elsewhere. Furthermore, the separation of retail distribution systems may undermine ways for more integrated product regulation, education and prevention, especially at the point of retail.<sup>13,47</sup> It is also unclear why the legal market will privilege cannabis 'edibles' over cannabis-based beverages.

### New/remaining offenses

The Bill lists multiple remaining and new cannabis-related offenses under legalisation, including: public use, over-limit possession or home-growing, exposure or supply to under-age persons, unlicensed supply or production, and more. While legalisation can be expected to generally reduce the extent of general criminalisation among (legal age) cannabis users, a main supporting argument has promoted its potential to generally reduce the extent of enforcement and justice system resources and expenditures. However, it is unlikely that the extensive list of new and remaining offenses defined, combined with the likely levels of popular (non-) compliance, will lead to such substantial reductions. A further key question is whether the enforcement of provisioned cannabis offenses will extend the 'social skewing' or systemic biases in their administration experienced under previous (eg, prohibition-based) or even current legalisation approaches.<sup>44,48,49</sup> These practices have disproportionately targeted young males, mostly from socioeconomically marginalised groups (eg, Māori in New Zealand).<sup>23,50</sup> In other words, it is unclear whether the practical enforcement of core offenses under legalisation will substantially serve to improve social justice, or rather shift while extending previous discretion and systemic biases under new covers. Conversely, there are key areas where substantially increased, targeted law enforcement would be required to secure legalisation's essential public health and safety objectives. These, first, include comprehensive enforcement against cannabis-impaired

driving as a principal contributor to cannabis-related burden of disease (morbidity and mortality).<sup>51-53</sup> Cannabis-impaired driving is common among users yet widely underestimated for impairment and crash risk, while currently lacking effective general deterrence mechanics arising from broad-based enforcement.<sup>36,51,54</sup> Second, systematic enforcement will be needed against illegal cannabis production and distribution towards achieving a maximally possible shift towards legal cannabis product supply and use, and related benefits, among consumers. Illegal cannabis markets, including high-risk products, have remained rather active and resilient in other legalisation systems, and retained substantial market shares with competitive (ie, discounted) prices.<sup>6,55-58</sup>

### Research and monitoring

As ubiquitously stated, the evidence on impacts of cannabis legalisation remains "mixed and/or inconclusive" even after a decade of legalisation initiatives in multiple jurisdictions.<sup>2,4</sup> Final, conclusive assessments of impacts may never materialise, but also vary by specific policy settings and ecologies, in turn contributing to the evolving, multi-grained evidence-base on legalisation outcomes. The Bill envisages a comprehensive review of legalisation after five years, presumably for policy assessment and adjustment purposes. For these reasons, it is crucial that New Zealand's cannabis legalisation initiative will be embedded in a comprehensive research and monitoring strategy allowing for rigorous, scientific evaluation of primary policy outcomes. Exemplary principal indicators for this include: general and specific (eg, youth) population data on cannabis use and socio-behavioural characteristics; attitudes and knowledge; primary, population-level health outcomes (eg, mental health, dependence, injuries/traffic crashes); parameters of legal and illegal cannabis markets and related crime/enforcement; use and harm interactions with other (eg, alcohol, tobacco, prescription) drugs, among others.<sup>2,59,60</sup> Respective data require comprehensive population surveys, integrated health and justice data-systems, field (eg, special sub-population and market) studies, ideally longitudinally designed, with pre- and post-intervention (ie, legalisation)

measures, for optimised rigour and validity. However, very few of these data indicators, systems or infrastructures currently exist in New Zealand. In order for basic outcome monitoring and evaluation on legalisation policy reform to occur—especially towards meaningful future, evidence-based policy adjustments—extensive research resource investments and infrastructure development need to be undertaken imminently.

## Discussion

New Zealand may become the next jurisdiction to embrace legalisation of cannabis use and supply, with the aim to “reduce harm”, or increase cannabis-related public health and safety, on individual- and population-levels. As the evidence on outcomes remains inconclusive, legalisation remains a major ‘social experiment’, with firmer conclusions some or a long time away.<sup>2,4,61</sup> Notwithstanding those present empirical limitations, it has become evident that essential regulatory details, or their variation, within legalisation regimes distinctly influence intended—or unintended—outcomes of cannabis legalisation projects. This is not entirely surprising, also since legalisation is a relatively new policy model. Therefore, designing optimised cannabis legalisation frameworks crucially involves the identification of suitable regulatory

components and assembling them for implementation—within distinct policy settings—towards a comprehensively effective legalisation policy system or ‘mix’ for desired outcomes.<sup>62–64</sup> New Zealand’s ‘*Cannabis Legalisation and Regulation Bill*’, overall, presents a generally public health- and safety-oriented blueprint and foundation for legalisation, much resembling key parameters included in Canada’s framework as a ‘hybrid’ of open commercialisation and more restrictive regulations.<sup>1</sup> Based on our review of several elementary regulatory components of the Bill, key details appear to require further re-thinking and/or development, as they may be limited or questionable for feasibility, or may not support (or undermine) declared main policy objectives. A quintessential question is whether proposed legalisation framework will better serve the health and social welfare of—the numerous—youth/young adult (<20 years) cannabis users in New Zealand.<sup>23</sup> ‘Policy coherence’ with other legal substances forms an overarching challenge.<sup>13</sup> As some time and process remains for finetuning of key regulations towards the (possible) implementation of cannabis legalisation in New Zealand, and policy can always still be adjusted post-implementation, we trust that our perspectives and insights will help to meaningfully inform relevant discussions and considerations in these important directions.

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