



# How to Regulate Cannabis

## A Practical Guide

---

Executive summary

---

SECOND EDITION

## **Transform Drug Policy Foundation**

### **Getting drugs under control**

Transform Drug Policy Foundation is an international, charitable think tank with staff in the UK and Mexico. We are working to get drugs under control by advocating for strict regulation of all aspects of the drug trade. We aim to equip policy makers and reform advocates with the tools they need to fundamentally change our current approach to drugs and create a healthier, safer world.

Transform emerged in response to the increasingly apparent failings of current national and international drug policy. We draw attention to the fact that drug prohibition itself is the major cause of drug-related harm to individuals, communities and nations, and should be replaced by effective, just and humane government control and regulation. We provide evidence-based critiques of the war on drugs, new thinking on alternatives to the current enforcement-oriented regime of prohibition, and expertise on how to argue for reform. In addition to working with a broad range of media, civil society and professional groups globally, we advise national governments and multilateral organisations, and we hold ECOSOC special consultative status at the UN.

## **Our vision**

An end to the war on drugs and the establishment of an effective system of regulation that promotes health, peace and security, sustainable development and human rights

## **Our mission**

We will inspire countries to explore and establish the legal regulation of drugs



# Introduction

This is the second edition of our guide to regulating legal markets for the non-medical use of cannabis. It arrives at a significant moment in history. The legalisation and regulation of cannabis for non-medical (or ‘recreational’) use has moved from theory to reality. Multiple jurisdictions are not just debating models of legal cannabis regulation, they are developing or actually implementing them. These include Spain’s non-profit ‘*cannabis social clubs*’, commercial enterprises in the US and the Netherlands, and Uruguay’s more government-controlled model. Since the first edition of this guide was published, more US states have followed suit, Jamaica has legalised cannabis for industrial, medical and religious purposes, and Canada has become the first G7 country to legalise cannabis at a national level.

This book guides policy makers and reform advocates through the key practical challenges in developing and implementing effective systems of legal regulation. It explores what the aims of cannabis policy should be, and which models of legal regulation are most likely to deliver them.

---

## Aims and policy options

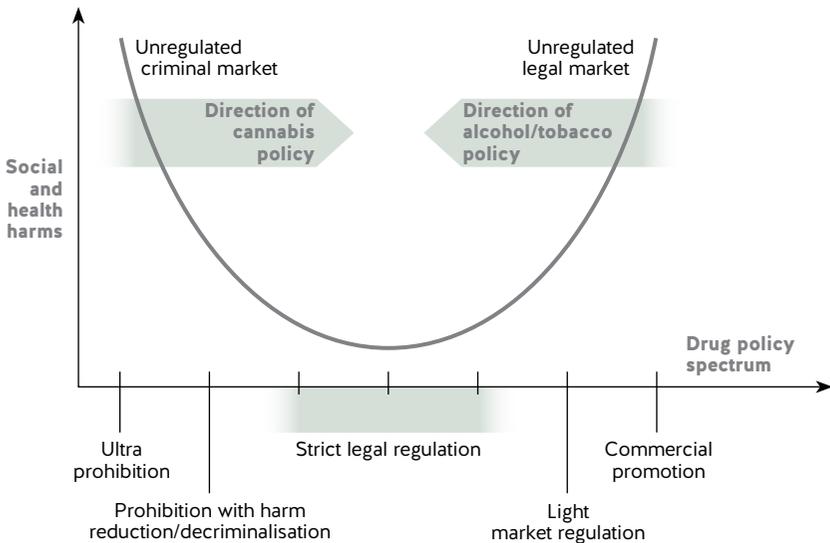
---

Rather than the vague ideological or political goals of prohibition, we have identified the following aims of an effective cannabis policy:

- Protecting and improving public health
- Reducing drug-related crime

- Improving security and development
- Protecting the young and vulnerable
- Protecting human rights
- Providing good value for money

The various policy options for regulating cannabis are part of a spectrum that includes prohibition (which may be either more or less harshly enforced), various regulatory models that involve differing levels of government intervention, and essentially unregulated free markets. The regulatory models which occupy the middle ground on the drug policy spectrum, between the extremes of absolute prohibition and unregulated free markets, are best placed to deliver the above aims.



The options at either end of the spectrum – which both entail unregulated markets controlled by either criminals or legal entrepreneurs – involve governments essentially forfeiting the ability to intervene in the cannabis trade and ensure these aims are met. By contrast, under systems of legal regulation, government intervention can take many forms.

This guide is organised in sections that explore each area of regulation and the potential regulatory tools at our disposal. This analysis is informed by evidence from related policy areas – in particular, alcohol, tobacco, pharmaceutical drugs, and existing models of medical and nonmedical cannabis regulation. There are then chapters discussing the key concerns and challenges around cannabis policy reform, and a table comparing existing models of non-medical cannabis regulation from around the world.

---

## Key themes

---

The key themes to emerge from this guide are:

- **Mitigating against the risks of over-commercialisation** – The history of alcohol and tobacco control is littered with examples of commercial interests trumping public health priorities. Regulators should learn from this experience and ensure that the legal cannabis trade is not susceptible to similar industry manipulation
- **Erring on the side of caution** – Cannabis regulation should be more, rather than less, restrictive, at least at the outset. Again, as experience with alcohol and tobacco demonstrates, attempts to ‘reverse-engineer’ well-established and culturally embedded regulatory frameworks in order to make them more restrictive at a later date are likely to be problematic due to industry resistance
- **Placing science back at the heart of the policy making process** – Rather than being dictated by ideological commitments or political concerns, cannabis policy should be built on evidence of what will minimise the potential harms and maximise the potential benefits associated with the use of the drug

# The practical detail of regulation

---

## a Production

---

- The regulation of production should have two main aims: Guaranteeing product safety and quality through appropriate testing, evaluation and oversight of production processes, and ensuring the security of production systems in order to prevent diversion to unregulated illicit markets
- Legal cannabis production can be conducted in many ways – on a smaller scale, via home growing or so-called ‘*cannabis social clubs*’, or on a larger scale, via private companies subject to varying levels of government oversight. Each model has its own challenges, but examples of most are already in operation, without any serious problems, in different places around the world

---

## b Price

---

- Price controls are an important and flexible tool for influencing the dynamics of a legal cannabis market, but should be employed cautiously, in order to reduce the risk of their having unpredictable or negative impacts on the nature of the market

- Price controls will have to balance often conflicting priorities – e.g. the desire to dissuade use (by keeping prices higher) vs. the desire to reduce the size of illicit markets (keeping prices lower)
- Careful evaluation will be critical in the development of pricing policy, with responses shaped by lessons learnt, changes in patterns of use, and local priorities

---

## **c Tax**

---

- There are a range of ways in which tax revenue can be generated within a legal cannabis market, but they must all function in a way that supports, rather than undermines, the wider policy aims explored above
- The total amount of revenue generated will depend on the tax model adopted, and the size of the taxable market. Potential variations in both over time makes predictions difficult
- A system based on taxation of both production and sales fl with THC content by weight being the taxable unit fl is a sensible starting point for discussion, but models will need to fit within the needs of local political environments and existing tax frameworks
- While ringfencing cannabis taxes for social programmes may be politically attractive, it may be problematic in practice

---

## **d Preparation and method of consumption**

---

- Given that cannabis comes in many different preparations and can be consumed in a variety of ways, regulatory models will need to be designed with local patterns of use in mind
- The risks of cannabis use are shaped by preparation, dosage, potency and method of consumption. Regulation can reduce these risks by: promoting the use of safer products, in particular those that are less potent; encouraging safer methods of consumption, especially those that

do not involve smoking, such as the use of vaporisers; and by providing safer environments in which to consume cannabis

---

## **e** Strength/potency

---

- The concept of cannabis potency is somewhat different to the equivalent concept for alcoholic drinks. This is because cannabis has more than one active ingredient and can be consumed in many different ways
- Potency-related risks can be reduced through testing and monitoring of products, clear and accurate labelling, responsible retailing, and education about strength and responsible use
- This combination of interventions is likely to be more effective and less problematic than attempts to enforce arbitrary potency limits

---

## **f** Packaging

---

- A primary aim of packaging should be to ensure it is child resistant, in order to minimise the risks of accidental ingestion
- Packaging should also be tamper-proof, display an appropriate level of product and safety information, preserve the freshness of the product, and not encourage use
- Regulation of cannabis product packaging should take into account lessons from alcohol and tobacco packaging, both of which have historically been designed to encourage or initiate use, in particular among young people
- Established packaging technology for food and pharmaceutical drugs can be easily and cheaply adapted to meet the needs of cannabis packaging

---

## **g** Vendors

---

- As gatekeepers of access to cannabis, it is important that vendors are subject to regulation that ensures the drug is made available in as safe and responsible a manner as possible
- Vendor licences should therefore be awarded or withdrawn on the basis of whether access controls (in particular age-access controls) are properly enforced, and whether sufficient safety information or other advice is provided to purchasers
- Commercial priorities may tend to undermine responsible retailing practice, so any licensing framework will need to be vigorously enforced if it is to be effective

---

## **h** Purchasers/users

---

- Possible controls on purchasers/users include: age-access controls, controls on bulk purchasing (i.e. sales rationing), and controls on when and where cannabis can be consumed
- Where to set the age-access threshold for cannabis will be determined by local needs and priorities, but 18 is a reasonable suggestion and is in keeping with age restrictions on alcohol and tobacco in many places. Wherever the age-access threshold is set, it will need to be strongly enforced in order to be effective, and should also be supported by evidence-based prevention and education interventions

---

## **i** Outlets

---

- Controls on outlets – in terms of their location, hours of opening, appearance and geographical density – should establish a level of availability that meets adult demand and reduces illicit-market supply, while at the same time preventing over-availability and subsequent potential increases in use

- The appearance of retail-only outlets should be functional rather than promotional, with pharmacies potentially providing a useful model. Controls on venues that permit on-site consumption – which must obviously offer a comfortable, welcoming environment – should focus on external signage and internal product displays

---

## **j** Marketing

---

- Experiences with alcohol and tobacco show how marketing can be used to initiate and promote consumption and encourage risky using behaviours, but also clearly demonstrate that strict controls can effectively mitigate against such effects
- A comprehensive ban on all marketing activity (as outlined in the World Health Organization’s Framework Convention on Tobacco Control) should be enforced by default. Partial marketing bans are likely to be far less effective, given that tobacco companies, when subject to such bans, have maintained their level of promotional spending, simply diverting more money to those marketing activities that are still permitted

# Key challenges

---

## **a** Cannabis-impaired driving

---

- The increased risks associated with driving while impaired by cannabis – to the driver, passengers and other road users – mean it should be an offence in all jurisdictions, one that is subject to a hierarchy of punitive legal sanctions for offenders
- Nevertheless, enforcement is problematic since determining an unacceptable level of cannabis-induced impairment is more difficult than with alcohol. This is because blood levels of THC, the key active

ingredient in cannabis, do not correlate with impairment as closely as blood alcohol levels do

- Given this problem, we recommend a policy centred around effect-based standards. This means a field sobriety test that has been validated for cannabis, followed by a blood test, should be used to provide evidence of recent consumption. The blood THC threshold beyond which prosecutors can reasonably assume a driver has recently used cannabis should be determined by the best currently available evidence. At present, the scientific literature suggests approximately 7-10 nanograms of THC per millilitre of blood would be a reasonable point at which to set this threshold
- The combined use of alcohol and cannabis presents a far greater safety risk and should be addressed through the use of lower thresholds limits for both
- Zero tolerance or per se blood THC limits, which automatically trigger the application of sanctions, should be avoided as they risk leading to prosecutions of drivers who are not impaired. This is because THC and cannabis metabolites can be detected long after any impairing effect has passed

---

## **b The interaction of regulatory systems for medical and non-medical uses of cannabis**

---

- It is important to make a clear distinction between the political and regulatory challenges relating to medical and non-medical cannabis products, so that the parallel and overlapping research and policy development processes support rather than hinder each other
- The two issues have often been conflated, and while this has arguably been useful in political terms, this approach carries risks. Unless there is a specific reason to explore the cross-over, we suggest separating the issues as far as possible

---

## c Synthetic cannabinoids

---

- Synthetic cannabinoids that mimic the effects of cannabis form a key part of the growing market for novel psychoactive substances (NPS – sometimes called ‘*legal highs*’)
- Relatively little is known about the growing number of synthetic cannabinoids and the unregulated products that contain them, but they are often highly potent and thought to be more risky than ‘*natural*’ cannabis.
- No novel psychoactive substances should be made legally available without an appropriate level of safety testing and regulation. Until this happens, a default ban on their sale should be established. The New Zealand system for regulating NPS provides a useful example of how such a system could function
- The synthetic cannabinoid market is fuelled by cannabis prohibition, and will largely disappear when it ends as most users report a preference for ‘*real*’ cannabis over synthetic alternatives

---

## d Cannabis tourism

---

- The potential for legally available cannabis to lead to increases in destination tourism or cross-border transit between legal and prohibitionist jurisdictions is a real, albeit widely overstated, problem
- The experience of the Netherlands suggests cannabis-related tourism is little different to any other form of tourism, and brings economic benefits with few problems
- Localised cross-border transit is more of a problem, but one that needs to be managed pragmatically rather than with heavy-handed and likely counterproductive border enforcement
- The obvious long-term solution is legally regulated markets on both sides of a border

---

## e Cannabis and the UN conventions

---

- The outdated, inflexible and counterproductive global drug control system – in the form of the three UN drug conventions and related UN agencies – is more than 50 years old and is long overdue reform to make it *‘fit for purpose’*
- In its current form, regulated cannabis markets for non-medical use are forbidden, but the desire of growing numbers of states to explore such markets is now forcing the debate
- Mechanisms for reforming the UN drug treaties – such as modification, amendment, or replacement – are already in place, but can be vetoed by prohibitionist member states
- Unilateral action, or action co-ordinated between groups of like-minded reform states, is likely to be needed to force the issue of wider structural reforms – and options do exist for states to withdraw from one or more treaties, to withdraw and re-accede with reservations on specific articles, or to breach any treaties while exploring multilateral options
- Unilateral domestic reforms, or reforms between groups of states are encouraged, but should run in parallel with multilateral dialogue and reform processes; demonstrating a clear desire to resolve emerging challenges. States should avoid sidestepping or denial of treaty non-compliance by offering implausible legal justifications, instead acknowledging temporary *‘principled non-compliance’* and providing reasoning for doing so, rooted in wider UN Charter commitments
- This is essentially uncharted territory: all of these options present complex legal and diplomatic challenges and come with significant (if diminishing) political costs. However, despite diplomatic and institutional inertia, it is clear that the failings of cannabis prohibition are now tipping the balance in favour of reform at both state and multilateral level

# Cannabis regulation around

	Prohibition	Uruguay	California*	Washington
General model	Absolute ban on production, supply and possession of cannabis for non-medical use ( <i>de jure</i> illegal)	Government-controlled model ( <i>de jure</i> legal)	Regulated private companies are licensed to produce and supply cannabis ( <i>de jure</i> legal)	Regulated private companies are licensed to produce and supply cannabis ( <i>de jure</i> legal)
Production	<ul style="list-style-type: none"> <li>No production controls – solely law enforcement efforts to eradicate or intercept illicit production</li> <li>Cannabis is sourced from the illicit market, where it is produced with no regulatory oversight</li> </ul>	<ul style="list-style-type: none"> <li>A handful of private companies are contracted by the government to produce cannabis</li> <li>Production is monitored by the government-run Institute for the Regulation and Control of Cannabis (IRCCA), which is also responsible for granting production licences</li> <li>Production takes place on state land, which is overseen by both private security personnel paid for by the licensed producers, as well as state security services (military or police)</li> </ul>	<ul style="list-style-type: none"> <li>Bureau of Marijuana Control within the Department of Consumer Affairs responsible for licensing/regulation of transportation, distribution and sale</li> <li>The Dept. of Food and Agriculture license/oversee cultivation</li> <li>Dept. of Public Health license/oversee manufacturing and testing</li> <li>Large-scale licenses banned until Jan. 1, 2023 to prevent monopolies developing</li> <li>Selling without a license punishable by up to six months in jail, a fine up to \$500, or both</li> </ul>	<ul style="list-style-type: none"> <li>Production licences are granted by the State Liquor Control Board to individuals or companies that pass background checks and meet specified security and quality control criteria</li> <li>Producers must submit samples of cannabis for regular safety and potency testing by an independent laboratory</li> <li>Producers may hold no more than 3 production and/or processor licences</li> <li>The state-wide area dedicated to cannabis production must not exceed 2 million sq ft</li> </ul>
Preparation	<ul style="list-style-type: none"> <li>No restrictions on the varieties of cannabis or cannabis products available</li> <li>The content of products is unregulated, unknown and highly variable. Adulterants are common in resin and have also been observed in herbal cannabis</li> </ul>	<ul style="list-style-type: none"> <li>5 varieties of cannabis are licensed for production and supply</li> </ul>	<ul style="list-style-type: none"> <li>No restrictions on the range of cannabis strains or cannabis-infused products that are legally available</li> <li>Edible products to have standardised dosage with 10mg maximum THC per serving</li> <li>* Precise details of California's regulatory model are still to be decided at time of going to print</li> </ul>	<ul style="list-style-type: none"> <li>No restrictions on the range of cannabis strains or cannabis-infused products that are legally available</li> </ul>

# the world

Colorado	The Netherlands	Spain	Transform recommendations
<p>Regulated private companies are licensed to produce and supply cannabis (<i>de jure</i> legal)</p>	<p>Cannabis 'coffee shop' system (<i>de facto</i> legal)</p>	<p>Not-for-profit cannabis social clubs (<i>de facto</i> legal)</p>	<p>Borland regulated market model + legal provision for home growing and regulated cannabis social clubs (<i>de jure</i> legal)</p>
<ul style="list-style-type: none"> <li>• Production licences are granted by the state's Marijuana Enforcement Division to individuals or companies that pass background checks and meet specified security and quality control criteria</li> <li>• For the first year of the new regulatory system, producers and sellers of cannabis must be part of the same company</li> <li>• Producers must submit samples of cannabis for regular safety and potency testing by an independent laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• No formal controls as production remains illegal</li> <li>• Cannabis is still sourced from the illicit market with no regulatory oversight. Some is produced domestically, some is still imported from traditional producer regions</li> </ul>	<ul style="list-style-type: none"> <li>• No licence required and no formal regulatory oversight</li> <li>• Club workers or volunteers oversee production under an informal code of conduct</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial producers licensed by government agency that acts as sole buyer and supplies licensed vendors</li> <li>• Commercial producers can compete for the government tender</li> <li>• Government agency also specifies nature and potency of products and oversees monitoring of quality controls</li> </ul>
<ul style="list-style-type: none"> <li>• No restrictions on the range of cannabis strains or cannabis-infused products that are legally available</li> </ul>	<ul style="list-style-type: none"> <li>• A range of cannabis products are legally available through the coffee shops</li> </ul>	<ul style="list-style-type: none"> <li>• Mostly herbal cannabis, although edibles, tinctures and other preparations are often available</li> </ul>	<ul style="list-style-type: none"> <li>• A range of quality- and potency-controlled products made available, with details determined by government regulatory body</li> <li>• Product range initially an approximate mirror of pre-reform illicit market</li> <li>• Changes to market range introduced incrementally – and carefully monitored</li> <li>• Controls on available preparations aim to encourage safer using behaviours</li> <li>• Wider range of products available via home grow or cannabis social clubs</li> </ul>

	Prohibition	Uruguay	California	Washington
Potency	<ul style="list-style-type: none"> <li>No THC/potency limits and no information provided to user about the strength of what they are purchasing – except informally via illicit vendors</li> </ul>	<ul style="list-style-type: none"> <li>The government only licenses the production and supply of cannabis with a predetermined THC and CBD content</li> </ul>	<ul style="list-style-type: none"> <li>No THC/ potency limits, but packaging must indicate THC levels/content</li> </ul>	<ul style="list-style-type: none"> <li>No THC/potency limits, but packaging must indicate THC levels/content</li> </ul>
Price	<ul style="list-style-type: none"> <li>Price determined by the interaction of criminal supply and user demand in an unregulated market</li> </ul>	<ul style="list-style-type: none"> <li>The price of cannabis is between 20 and 22 Uruguayan pesos per gram. This price takes into account a government tax, which will be used to fund the IRCCA, as well as a national campaign to educate the public about the consequences of cannabis use</li> </ul>	<ul style="list-style-type: none"> <li>Retail price is determined by the market and taxes</li> </ul>	<ul style="list-style-type: none"> <li>Retail price is essentially determined by the market and taxes</li> </ul>
Age access threshold	<ul style="list-style-type: none"> <li>No age access controls: illicit dealers do not enforce age restrictions</li> </ul>	18	21	21
Purchaser restrictions	<ul style="list-style-type: none"> <li>Anyone can purchase cannabis and no sales limits are set</li> </ul>	<ul style="list-style-type: none"> <li>Cannabis sales are restricted to residents of Uruguay</li> <li>They can purchase no more than 40 grams per month (maximum 10 grams per week), with the volume of sales to individual users monitored via an anonymised central government database</li> <li>Purchasers must present a medical prescription or be registered in the database in order to access cannabis</li> </ul>	<ul style="list-style-type: none"> <li>Up to 1 ounce of marijuana and quarter ounce of concentrated marijuana would be legal to possess.</li> <li>Possession on the grounds of a school, day care center, or youth center while children are present would remain illegal</li> <li>Consumption only in private homes or licensed venues</li> </ul>	<ul style="list-style-type: none"> <li>Both residents and non-residents of Washington may purchase up to 1 ounce of cannabis per transaction</li> </ul>

	<b>Colorado</b>	<b>The Netherlands</b>	<b>Spain</b>	<b>Transform recommendations</b>
	<ul style="list-style-type: none"> <li>No THC/potency limits, but packaging must indicate THC levels/content</li> </ul>	<ul style="list-style-type: none"> <li>No limits on the potency of products sold</li> <li>Informal testing and labelling of cannabis products – in particular for THC content – takes place</li> <li>The Dutch government has proposed a ban on cannabis products with a THC level of over 15%, but this has yet to be implemented</li> </ul>	<ul style="list-style-type: none"> <li>Strains of varying strength cultivated</li> <li>No formal mandatory potency testing</li> </ul>	<ul style="list-style-type: none"> <li>Range of products with various potencies available</li> <li>Decisions on potency of retail products made by government agency (see above)</li> <li>Safer THC:CBD ratios</li> <li>More specialist demand for non-retail products met via home growing or cannabis social clubs</li> </ul>
	<ul style="list-style-type: none"> <li>Retail price is essentially determined by the market and taxes</li> </ul>	<ul style="list-style-type: none"> <li>No price controls in place, although prices remain relatively high because of higher staff, tax, venue etc costs than illegal vendors, and pricing in risk of arrest faced by producers and traffickers</li> </ul>	<ul style="list-style-type: none"> <li>Users pay membership fees proportionate to their consumption, which are then reinvested back into the management of the clubs</li> </ul>	<ul style="list-style-type: none"> <li>Price parameters determined by government agency, using price as tool to achieve stated policy aims</li> <li>Initially maintaining price at or near illicit market levels</li> <li>Higher prices on more risky products to encourage safer using behaviours</li> <li>Changes in price incremental and based on careful impact monitoring</li> </ul>
21	18	18	18	<ul style="list-style-type: none"> <li>18 appropriate in most places but decision will need to be shaped by local cultural and political environment</li> </ul>
	<ul style="list-style-type: none"> <li>Residents of Colorado can purchase up to 1 ounce of cannabis per transaction; non-residents are restricted to a quarter of an ounce per transaction</li> </ul>	<ul style="list-style-type: none"> <li>Coffee shops may not sell more than 5 grams per person per day</li> <li>Some border municipalities enforce residents-only access for the coffee shops</li> </ul>	<ul style="list-style-type: none"> <li>In most clubs, membership can be awarded only upon invitation by an existing member, or if someone has a medical need for cannabis</li> <li>Members' allowances of cannabis are typically limited to 2 or 3 grams per day</li> </ul>	<ul style="list-style-type: none"> <li>Limits on individual transactions to minimise bulk buying and potential re-sales</li> <li>Residents-only or membership access schemes may be appropriate under certain local circumstances</li> </ul>

	Prohibition	Uruguay	California	Washington
<b>Vendor</b>	<ul style="list-style-type: none"> <li>• Illicit dealers have no duty of care to their customers and may not even be aware of the contents of the cannabis they are selling</li> </ul>	<ul style="list-style-type: none"> <li>• Qualified pharmacists must hold cannabis commerce licences – which are awarded by the Ministry of Public Health – in order to legally sell the drug</li> </ul>	<ul style="list-style-type: none"> <li>• Penalties for breaches of licensing conditions, such as sales to minors</li> <li>• No formal training of vendors is required</li> </ul>	<ul style="list-style-type: none"> <li>• Penalties for breaches of licensing conditions, such as sales to minors</li> <li>• No formal training of vendors is required</li> </ul>
<b>Outlet</b>	<ul style="list-style-type: none"> <li>• Illicit dealers can sell wherever they deem fit</li> </ul>	<ul style="list-style-type: none"> <li>• Private producers sell the cannabis to the government, which then distributes the drug via licensed pharmacies to registered users</li> <li>• Pharmacies are allowed to sell cannabis alongside other, medical drugs</li> </ul>	<ul style="list-style-type: none"> <li>• Stores cannot be located within 600 feet of schools and other areas where children congregate</li> <li>• Outlets cannot sell goods other than cannabis and cannabis products</li> <li>• Local government can ban outlets in their areas completely, or require additional licenses</li> </ul>	<ul style="list-style-type: none"> <li>• Outlets cannot sell goods other than cannabis and cannabis products</li> <li>• Minors are forbidden from entering stores</li> <li>• Stores cannot be set up within 1,000 ft of schools or other areas where children are likely to gather</li> <li>• Retailers may own no more than 3 outlets and each one must be in a different county</li> </ul>
<b>Tax</b>	<ul style="list-style-type: none"> <li>• All revenue flows, untaxed, direct to illicit dealers and criminal organisations</li> </ul>	<ul style="list-style-type: none"> <li>• Tax revenue is used to fund the IRCCA, as well as a national campaign to educate the public about the consequences of cannabis use</li> </ul>	<ul style="list-style-type: none"> <li>• State excise tax 15% on retail sales. State cultivation taxes per dry weight ounce of \$9.25 for marijuana flowers, and \$2.75 for leaves</li> <li>• Local government can also levy additional taxes</li> </ul>	<ul style="list-style-type: none"> <li>• Cannabis is subject to a 25% excise tax at three stages in the supply chain – when it is sold by the grower to the processor, when it is sold by the processor to the retailer, and when it is sold by the retailer to the consumer. On top of this, cannabis is taxed at the standard state sales tax rate of 8.75%</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>• No marketing controls, although illicit vendors do not have access to conventional marketing channels</li> </ul>	<ul style="list-style-type: none"> <li>• All forms of cannabis advertising, promotion or sponsorship are prohibited</li> </ul>	<ul style="list-style-type: none"> <li>• Mandatory packaging and labeling requirements on all products</li> <li>• Ban on marketing directly to minors, including products designed to appeal to kids, or could easily be confused with candy</li> <li>• Advertising banned within 1000 feet of where children congregate, and only displayed where around 72% + of the audience is 21 or over</li> </ul>	<ul style="list-style-type: none"> <li>• Advertisements of any kind cannot be displayed within 1,000 ft of schools and are not allowed on publicly owned property or transport</li> <li>• Advertising is forbidden from promoting over-consumption</li> <li>• Storefront window displays of cannabis products are also banned</li> </ul>

Colorado	The Netherlands	Spain	Transform recommendations
<ul style="list-style-type: none"> <li>• Penalties for breaches of licensing conditions, such as sales to minors</li> <li>• Vendors can be awarded a 'responsible vendor designation' upon completion of a training programme approved by the state licensing authority</li> </ul>	<ul style="list-style-type: none"> <li>• Penalties for breaches of licensing conditions, such as sales to minors</li> <li>• No formal training of vendors is required</li> </ul>	<ul style="list-style-type: none"> <li>• No formal training of vendors is required, although clubs usually employ staff or volunteers with a substantial knowledge of cannabis and its cultivation</li> </ul>	<ul style="list-style-type: none"> <li>• Vendors are required to adhere to licensing conditions and are subject to penalties for licence violations, such as fines or loss of licence</li> <li>• Mandatory training requirements for retail vendors, with additional training for vendors in sale and consumption venues</li> </ul>
<ul style="list-style-type: none"> <li>• Outlets cannot sell goods other than cannabis and cannabis products</li> <li>• Minors are forbidden from entering stores</li> <li>• For the first year of the new regulatory system, outlets were required to produce at least 70% of what they sold</li> </ul>	<ul style="list-style-type: none"> <li>• Local governments have the power to decide whether to accept coffee shops in their area</li> <li>• Coffee shops are not permitted within a 250m radius of schools</li> <li>• Coffee shops are not allowed to sell alcohol, and are only permitted to hold 500g of cannabis on the premises at any time</li> </ul>	<ul style="list-style-type: none"> <li>• No restrictions on where clubs can be established</li> <li>• Cannabis is distributed on-site, by club workers, and limited amounts can be taken away for consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Controls on location and hours of opening, determined in line with county or municipal government and local community input</li> <li>• Cannabis-only sales – no alcohol or other drugs. Food and drink sales allowed for retail and consumption venues</li> </ul>
<ul style="list-style-type: none"> <li>• 15% excise tax on wholesale price and a 10% retail sales tax</li> <li>• \$40 million of the revenue generated by the excise tax goes to school construction each year, with revenue from the sales tax being used to fund the new regulatory system</li> </ul>	<ul style="list-style-type: none"> <li>• Coffee shops do not pay VAT, but do pay various income, corporation and sales taxes</li> <li>• In 2008, Dutch coffee shops paid €400m on sales of over €2bn</li> </ul>	<ul style="list-style-type: none"> <li>• CSCs pay rent tax, employees' social security fees, corporate income tax, and in some cases VAT on products sold</li> </ul>	<ul style="list-style-type: none"> <li>• Tax models built into price controls (see above)</li> <li>• Tax rates locally determined</li> <li>• Proportion of tax could be earmarked for otherwise non-funded social /community spending</li> </ul>
<ul style="list-style-type: none"> <li>• Marketing campaigns that have a "high likelihood of reaching minors" are banned</li> <li>• Storefront window displays of cannabis products are also banned</li> </ul>	<ul style="list-style-type: none"> <li>• Coffee shops are not permitted to advertise</li> <li>• External signage is forbidden from making explicit references to cannabis, however signs displaying the words 'coffee shop', as well as Rastafari imagery and palm leaves, make them easily identifiable</li> <li>• Product menus are generally kept below the counter so as to avoid any promotional effect</li> </ul>	<ul style="list-style-type: none"> <li>• No advertising of products or clubs themselves is permitted</li> </ul>	<ul style="list-style-type: none"> <li>• Default ban on all forms of marketing and promotions, modelled on WHO Framework Convention on Tobacco Control guidelines</li> </ul>

	Prohibition	Uruguay	California	Washington
<b>Driving</b>	<ul style="list-style-type: none"> <li>• Driving under the influence of cannabis is illegal in all jurisdictions</li> </ul>	<ul style="list-style-type: none"> <li>• Final <i>per se</i> THC limits have not been confirmed at time of going to print. Blood tests or potentially other forms of testing will be used to establish THC levels</li> </ul>	<ul style="list-style-type: none"> <li>• Driving while impaired is illegal with no quantitative threshold, meaning prosecution relies heavily on the observation of the arresting officer and the testimony of expert witnesses</li> <li>• Motorists barred from having an open container of marijuana/products</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Per se</i> whole blood THC limit of 5ng/ml is enforced, making anyone caught driving over this limit automatically guilty of driving under the influence of cannabis</li> </ul>
<b>Home growing</b>	<ul style="list-style-type: none"> <li>• Home growing is illegal – although in some jurisdictions it is tolerated as part of decriminalisation approach</li> </ul>	<ul style="list-style-type: none"> <li>• Home cultivation of up to six plants is allowed, and the resulting product should not exceed 480 grams per year</li> <li>• Alternatively, residents can pool their allowances via cannabis clubs. The clubs are permitted to grow up to 99 cannabis plants each and must consist of no more than 45 registered members. The clubs' yields must be recorded, with any excess reported and turned over to the IRCCA</li> </ul>	<ul style="list-style-type: none"> <li>• Residents permitted to grow up to 6 plants for personal use within a private home, as long as the area is locked and not visible from a public place</li> </ul>	<ul style="list-style-type: none"> <li>• Home growing is prohibited</li> </ul>

Colorado	The Netherlands	Spain	Transform recommendations
<ul style="list-style-type: none"> <li>If a driver exceeds a limit of 5ng/ml THC in whole blood, this gives rise to a “<i>permissible inference</i>” that they were driving under the influence of cannabis. The limit therefore acts essentially as a guideline, encouraging juries to prosecute drivers found to have exceeded it, rather than acting as an automatic trigger for a penalty</li> </ul>	<ul style="list-style-type: none"> <li>Impairment-based testing, with sanctions including suspension of licence (for up to 5 years), fines, and imprisonment (variable depending on whether bodily injury caused or reckless driving involved). Proposed <i>per se</i> thresholds for different drugs have yet to be established</li> </ul>	<ul style="list-style-type: none"> <li>Impairment-based testing, with a range of criminal and administrative sanctions potentially applicable</li> </ul>	<ul style="list-style-type: none"> <li>Clear message that cannabis-impaired driving is risky and illegal</li> <li>Effect-based standard for prosecutions centred around field sobriety testing</li> <li>Blood tests used to prove recent use once probable cause has been established</li> <li>Thresholds for blood THC levels subject to review in light of emerging evidence</li> </ul>
<ul style="list-style-type: none"> <li>Residents are permitted to grow up to 6 plants for personal use</li> </ul>	<ul style="list-style-type: none"> <li>Cultivation of up to 5 cannabis plants is considered a “<i>low priority for prosecution</i>”</li> </ul>	<ul style="list-style-type: none"> <li>Cultivation of up to 2 cannabis plants is permitted</li> </ul>	<ul style="list-style-type: none"> <li>Home growing allowed for adults within certain parameters</li> <li>Key aim is to protect minors and prevent for-profit secondary sales</li> <li>Provision for licensed cannabis social clubs to operate under formal regulation. Controls similar to existing informal guidelines for Spanish cannabis social clubs</li> </ul>

“With this new guide, Transform continues to be at the cutting edge of drug policy reform. This work sets ideology aside, focusing instead on the essential practical task of developing a workable regulatory framework for cannabis as an alternative to the failed prohibition model.”

Representative **Roger Goodman**, Washington State Legislature  
Chair, House Public Safety Committee (responsible for cannabis regulation)

## How to Regulate Cannabis: A Practical Guide SECOND EDITION

This is the second edition of our guide to regulating legal markets for the non-medical use of cannabis. It is for policy makers, drug policy reform advocates and affected communities all over the world, who are witnessing the question change from, *‘Should we maintain cannabis prohibition?’* to *‘How will legal regulation work in practice?’*

Just a few years ago, this book would have been largely theoretical. Now, however, the cannabis regulation debate has moved decisively into the political mainstream, and multiple cities, states and countries are considering, developing or implementing a range of regulated market models for the non-medical use of cannabis. So this book draws on evidence not only from decades of experience regulating alcohol, tobacco, and medicines, but also from Spain’s non-profit *‘cannabis social clubs’*, commercial cannabis enterprises in the US and the Netherlands, and Uruguay’s government-controlled system of cannabis regulation - which are just some of the proliferating models for regulating non-medical cannabis use around the world.

This book will help guide all those interested in cannabis policy through the key practical challenges to developing and implementing an effective regulation approach aimed at achieving the safer, healthier world we all wish to see.

“The traditional approach hasn’t worked. Someone has to be the first [to legally regulate non-medical cannabis].”

**TRANSFORM**  
Getting drugs under control

**José Mujica**, President of Uruguay, 2013

“This guide is essential reading for policy makers around the globe who know that cannabis prohibition has failed. In comprehensive detail, it explores pragmatic, evidence-based approaches to regulating the world’s most widely used illicit drug.”

Professor **David Nutt**  
Chair of the Independent Scientific Committee on Drugs