

Personal Cultivation of Cannabis: A look at policy alternatives.



“As the nation’s largest and oldest consumer rights group, NORML's mission is to move public opinion sufficiently to legalize the responsible use of marijuana by adults, to serve as an advocate for consumers to assure they have access to high quality marijuana that is safe, convenient and affordable, and to allow local entrepreneurs to enter the marketplace free from undue government interference.”

**Authored by M. Bailey Hirschburg, WSLCB Cannabis Advisory Council member and
Washington NORML’s Legislative Associate, September 2017**

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INTRODUCTION/EXECUTIVE SUMMARY:

To assist policy makers and Washington's Liquor & Cannabis Board (LCB), this report will examine personal cultivation as it pertains to Washington state. First, offering a background of the topic and intentions of I-502's framers.

- Like most states with prohibition marijuana cultivation was outlawed in Washington, and very commonly grown. **Before legalization, Washington was a top marijuana producing state, with significant criminal involvement.**
- 0.5-0.9% of Washingtonians grew marijuana for themselves in 2014.
- **I-502's author and campaign director Alison Holcomb explains how home growing continues the overarching goal of no longer criminalizing cannabis.**

Then, an overview of how personal cultivation relates to the Cole memorandum and Washington's constitution; results of a consumer survey regarding home growing and an evaluation of proposed LCB options versus recent legislative ones.

- The Cole Memo has sensible guidelines, most outlined in I-502, but it has no legal standing and a clear reading says not to base laws on it. **The guidelines and memo are likely to change based on comments from DOJ leadership. Because home growing is allowed in every other legal state/ D.C., federal intervention in Washington based on this factor alone is nonsensical.**
- The Washington constitution says *"No person shall be disturbed in his private affairs, or his home invaded, without authority of law."* **Any policy should explain the compelling state interest in continuing use of the authority of law to violate homes over a small number of plants.**
- Washington cannabis consumers overwhelmingly favor legal home growing, are registered voters, and would continue to shop at licensed retailers if allowed to grow their own. Super majorities have already grown cannabis, would grow both indoors and outdoors, and have pets or non-edible plants in their homes already. A significant majority don't have children, and would prefer to buy seeds/clones from either a producer or retailer. A smaller majority would agree to have their grow licensed by the LCB, but that answer has declined significantly since release of the LCB's permitting options.
- **LCB options represent a choice between expensive, invasive, overly complicated permitting and regulation system for private behavior by an agency designed to regulate businesses, a marginally less expensive, equally invasive, localized system in which communities can "opt-out" of allowing a civil liberty at all, or continuing a failed and unpopular status quo prohibition of any personal cultivation.**
- WA NORML offers a Revised Option 2, with primary differences: No licensing, limit of 15 plants per household, seizure of only plants in excess of limit, allow producers to sell seeds/clones with limits & sales tracking, allow lab testing for individual's samples, establish that authorized, registered and licensed cooperative medical marijuana grows are separate from home grow limits and allow local jurisdictions to "opt-in/out" of allowing outdoor grows visible from public or federal properties.
- **Legislation already introduced sets up limited home grow policies succinctly and needing fewer changes.**

Next, how it has been implemented in other areas followed by a look at recent academic research into small scale cultivation.

- **A variety of limits exist on home growing in the U.S. and worldwide, some going back decades, most are a 4-8 plant limit per person.**
- Though research is limited, six published research papers on small-scale cultivation by individuals are summarized, showing personal cultivation prohibition can't be effectively enforced, comprehensive home grow policies are crucial, criminal/gang involvement in small-scale grows are rare, successful growing is difficult and costly, dealing is often not the motivation, it's less common in markets where

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cannabis is safely sold, and a competitive open market policy assists knowledge, quality, and competition in market development.

Finally, a critical discussion of impacts cultivation policy will have on law enforcement, youth, local and tribal regulations, the recreational cannabis industry, medical patients, and other impacts including environmental and energy consumption. Lastly a comparison of noncommercial private behavior licensing in Washington, including home brewing and others.

- Legalization has saved Washington significant enforcement costs. Small grows aren't as common as cannabis possession/use. **Some county prosecutors already consider grow size before pursuing prosecution.** The stricter the enforcement the more likelihood for racial and class disparities or potential for abuse. Larger and criminally aligned grows can be harder to track, but the public is better served than enforcement of personal grows. **We should formalize this informal police practice.**
- **Youth use of marijuana is serious, but fortunately has been declining nationwide and in Colorado.** Washington's youth use is stagnant or marginally lower than recent years. Cannabis can't be smoked off the plant. **The reality is that dangerous chemicals, plants, weapons, or animals are already allowed in homes; there's no reason to treat home grows as any less manageable by parents/guardians.**
- Updating local or tribal zoning/compacts to allow for outdoor growing is preferable. Only Colorado has required grows to be indoor, a more expensive and inefficient practice. Local government should consider existing zoning, environmental impact, and public sentiment on outdoor restrictions.
- **Colorado has enjoyed significant revenues from legal marijuana sales while legalizing home growing.** Massachusetts' hydroponics industry is expanding because home growing is legal ahead of retail stores. With ancillary industry and legal seed/clone sales there's little risk of diminished revenue.
- Many medical patients and caregivers would like a more flexible system for sourcing appropriately grown plants. But due to concerns with the rules, privacy, and rollout of the state's combining medical and recreation retailers in 2016 many personal growers in Washington are patients choosing not to register. **Given federal law enforcement has attempted to track medical patients as recently as this summer, cannabis advocates and consumers are justifiably concerned with any licensing/permitting system that maintains individual information.**
- Home growing has an impact in many areas including: public utilities use, environmental and health risks, home renovations and contracting, sample testing, and the cost of setting up a working grow.
- **Home brewing or tobacco cultivation is legal in Washington. Like previous experience with alcohol prohibition, bans on personal cultivation can damage consumer choice by feeding market homogenization.** Licensing/permitting for noncommercial private behavior by Washington's Dept. of Licensing is rare.

BACKGROUND:

"Humans have cultivated and consumed the flowering tops of the female cannabis plant since virtually the beginning of recorded history."⁽¹⁾ However since marijuana prohibition last century, state and federal law have in theory treated all cultivation as an active criminal market act. In this way, a zero-tolerance "just say no" in use policy led to a "not one plant" equivalency for cultivation.

In Washington, personal cultivation has led to multiple fines and felonies for any marijuana plant of any size, anywhere. "Cultivation for either personal use or distribution is a class C felony punishable by up to 5 years imprisonment and/or a fine up to \$10,000. An additional mandatory fine of \$1,000 applies to first offenses and \$2,000 to second or subsequent offenses." ⁽²⁾ The Washington State Patrol and federal Drug Enforcement Agency

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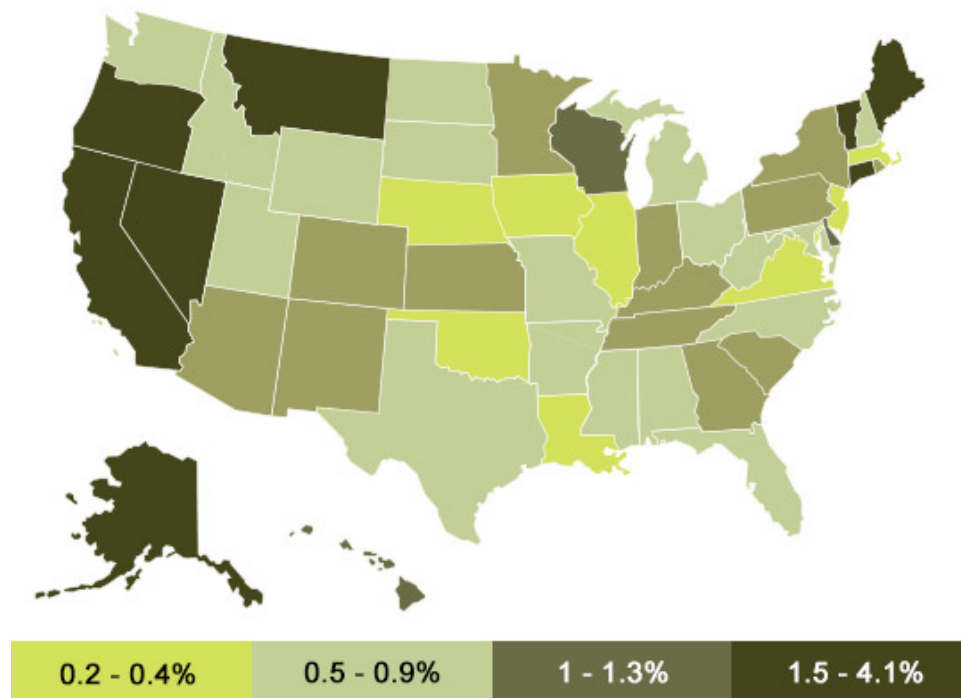
maintain a toll-free hotline to report any unlicensed marijuana cultivation, regardless of purpose or size (3).

In 2008, before legalization, federal High Intensity Drug Trafficking Area (HIDTA) task forces identified Washington state cannabis cultivation as “common,” designating us M7, meaning a top marijuana producing state (4). A similar finding from Colorado’s Rocky Mountain HIDTA noted that cannabis cultivation was widespread and indoor cultivation increasing (5). Both acknowledge common involvement from domestic and international drug traffickers. A 2010 HIDTA report to congress noted that cannabis was cultivated at indoor and outdoor grows throughout Washington, and the Colorado’s marijuana trafficking was well established with Mexican drug traffickers (6). With decades of effort and despite significant spending and commitment from state officials to eradication, local, state and federal have agents failed to

remove cannabis availability from any jurisdiction for any significant period. Today, most law enforcement focus is on illicit large grows, or cultivation on public land.

The first personal grow rights were in Washington’s 1998 medical marijuana law. This was a court defense for patients and caregivers. This complicated marijuana prosecutions, but had uneven impact on enforcement. Some jurisdictions established rules and oversight. Others areas

PERCENTAGE OF PEOPLE WHO GROW THEIR OWN MARIJUANA



 Source: National Survey on Drug Use and Health (SAMHSA.GOV)
ANITA RAHMAN / © LiveScience.com

remained zero tolerance. In 2014, research for LiveScience.com estimated between 0.5-0.9% of Washingtonians grow their own cannabis. Nationwide, they noted “In terms of how people get their hands on marijuana, national-level data show that 54.8 percent said they get it for free

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by sharing it with someone, 42.9 said they buy it, 1.3 percent trade something for it and 1 percent grow it themselves.” (7)

After hearings on this policy in this year, the legislature added a feasibility study by the Liquor and Cannabis Board (LCB) into a larger cannabis bill, SB 5131. The law directs a “study of regulatory options for the legalization of marijuana plant possession and cultivation” by the LCB, directing the use of guidelines from a 2013 Department of Justice memorandum outlining federal expectations of state-legal marijuana policies as a guide. Written by then-deputy Attorney General James Cole, this document is widely referred to as the “Cole Memo.”

INTENT OF I-502:

Initiative 502 failed to include home growing when it legalized, taxed, and regulated adult possession and commercial sales. This fact was contentious among people both for and against I-502. A cautious move in hindsight because no state had legalized at the time, the framers of I-502 focused on possession and use arrests, the most common cannabis offenses.

At the same time, I-502’s new approach was never intended to be a definitive conclusion to Washington cannabis law. Focusing enforcement resources on violent crime, interstate trafficking, or sales to minors was always the intent of I-502 supporters, and legal home growing follows this tradition. Alison Holcomb, lead author and campaign director for I-502 offers this explanation:

“The primary motivation for putting I-502 on the ballot was to end the criminalization of cannabis use, growing, and provision, and begin moving us in a new, public health-focused direction. Prohibiting adults from cultivating their own cannabis for personal use is inconsistent with that overarching goal.

When we began drafting I-502 in December 2010, California’s Proposition 19 had just failed at the ballot, and we were particularly sensitive to voter attitudes on policy details. Our polling indicated that Washington voters were significantly uncomfortable with home growing at that time.

We decided it was important to draft I-502 carefully and conservatively to address not only health and safety risks posed by an untested policy change but also the political risks inherent in asking voters to pass a state law in tension with federal law, and one that had never been adopted by any other jurisdiction in the world.

With every other legal state including home growing for personal use, the political risk of making this adjustment for Washington residents is minimal to nonexistent, and the policy upsides are significant. In addition to the benefits for patients who use cannabis for medical purposes, allowing adults to grow their own personal supply of cannabis would serve as a check on industry control of cannabis quality and price.

Most importantly, treating adults as criminals for growing cannabis for personal use in the privacy of their own homes is fundamentally inconsistent with the principles of liberty on which this country was founded.”

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WA NORML was also a supporter of I-502. This paper's author was the South Sound volunteer coordinator for the campaign. Lack of home growing was widely discussed as a drawback of I-502 at that time. But the priority was possession arrests, which were far more common. No I-502 volunteers explicitly opposed home growing, and there was no perceptible amount of I-502 voters that identified its lack of cultivation as a key reason for backing the initiative.

CONSTITUTIONAL CONCERNS & THE COLE MEMO:

When Washington legalized adult possession in 2012 through I-502, only the state of Alaska had any decriminalization of personal cultivation. Today, seven states have as well as the District of Columbia have legalized not just possession and use, but some form of cultivation. All are been treated as complying with the Cole Memo, meaning a compliant policy is not only feasible, but common.

Many of the Cole Memo's priorities are sensible and existed in the intent and language of Washington's legalization initiative before the memo was issued, including prohibiting access to minors, stringently regulating impaired driving, and studying legalization's social impacts. However, basing state law on this document over other arguments is untenable. It clearly reads: "This memorandum is not intended, does not, and may not be relied upon to create any rights, substantive or procedural, enforceable at law by any party in any matter civil or criminal." (8) The Washington State Senate Committee Services' published guide to legislators fails to directly address this statement in it's summary of the Cole Memo (9). Combined with the abnormal size of SB5131, this means some lawmakers may not have been clear on the risks inherent in basing a study about rights on a non-binding opinion of commercial markets.

Furthermore, the memo offers a relevant example of where state enforcement typically supersedes federal action. "the Department of Justice has not historically devoted resources to prosecuting individuals whose conduct is limited to possession of small amounts of marijuana for personal use on private property. Instead, the Department has left such lower-level or localized activity to state and local authorities and has stepped in to enforce the CSA only when the use, possession, cultivation, or distribution of marijuana has threatened to cause one of the harms identified above." (8)

The Cole Memo aside, a simple argument for allowing home growing is found in Washington's Constitution "No person shall be disturbed in his private affairs, or his home invaded, without authority of law." (10) Washington Supreme Court Associate Chief Justice Charles W. Johnson noted "The broad language in article I, section 7 will always require that official interferences with the private affairs of residents are governed by precise and predetermined legal principles. But by allowing for disturbances made with the authority of law, the framers also allowed future generations to play a role in shaping their privacy rights, provided the relevant constitutional limitations are respected." (11)

This right to privacy is woven into our civic fabric, and fairly extends to a plant adults can and do possess in homes across the state. The scent or appearance of marijuana is no longer a crime, and the state lacks a compelling interest in policing small gardens. The cultivation and use of cannabis doesn't damage or block another's rights. The state can only continue this practice with a clear explanation of why constitutional law allows this authority.

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The Cole Memo guidelines are largely sensible, and based on the priorities of I-502. Some sections discuss specific issues in depth, but most would not be impacted by legal home growing. As of September 2017, those guidelines are:

- 1. Preventing distribution to minors.** (Included in I-502, see “Impact on Youth”)
- 2. Preventing the revenue from going to criminal enterprises, gangs and cartels.** (Included in I-502, see “Intent of I-502”)
- 3. Preventing the diversion of marijuana from states where it is legal to other states. (Not addressed in I-502.** (Home growing poses minimal threat due to the costs in transporting and risks for arrest in distributing. Though law enforcement typically calculates seized marijuana value on final street price per individual sale, growers not distributing themselves often sell in less-profitable wholesale price. See “Academic Findings on Personal Cultivation”)
- 4. Preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity.** (Not addressed in I-502. Because the sight and smell of marijuana is no longer a crime, nor are cooperative or medical marijuana grows, this will be an issue of concern regardless of legalization of home grows. However, clear guidelines for police and the public assists in focusing investigatory resources on active threats to the guidelines. See “*Marijuana Legalization and Nosy Neighbor States*”)
- 5. Preventing violence and the use of firearms in the cultivation and distribution of marijuana.** (Not addressed in I-502. If all adults can grow cannabis in private it will reduce the likelihood of violent crime in/around marijuana licensees or currently illegal personal cultivation sites.)
- 6. Preventing drugged driving and other adverse public health consequences associated with marijuana use.** (Included in I-502 in the form of revenue directed to public education and research. Home grows offer a source of safe cannabis that doesn't require driving after purchase of a seed/plant clone. Rates of impaired driving have never been examined based on a consumer's sourcing of cannabis.)
- 7. Preventing the growing of marijuana on public lands and the environmental dangers posed by marijuana production on public lands.** (Included in I-502, Washington state continues to receive marijuana eradication funding from the DEA. By licensing production and processing Washington continues to focus on larger-scale, criminally organized public grows. Cultivating fewer than 20 plants on public lands is not common, but risk of arrest means those growing for themselves are motivated to do so away from their own property. See “Impact on Law Enforcement” & “Impact on Other Issues”)
- 8. Preventing marijuana possession or use on federal property.** (Included in I-502, as the initiative highlighted the difference between federal and state laws and created appropriate areas of possession and use it made the risk of possession or use on federal property less appealing. Home growing continues that trend.)

Finally, even with the best of intentions, legal challenges to a law based on a memorandum is potentially fatal to an entire law. It's unclear if the state could even show the memo as evidential in court.

HOME GROW CONSUMER SURVEY:

This voluntary sample survey was collected first in person at Seattle Hempfest August 18th-20th of this year. Then, online through [SurveyMonkey.com](https://www.surveymonkey.com) from September 15-27th. The questions were split between information about the respondent and their opinions on home grow policy. Regularly identified as a “home grow survey,” it likely attracted respondents already having an opinion about the issue.

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The survey remains active online and we will update results closer to the session. Targeted emails were sent to both a state listserv and NORML’s national action alerts, as well as posting on WA NORML’s Facebook and Twitter accounts encouraging survey participation.

We collected surveys from 257 people; 135 in person, and 123 submitted online through SurveyMonkey during the identified dates. We don't know if these responses are representative of all Washingtonians, but we believe they generally represent cannabis consumers in Washington.

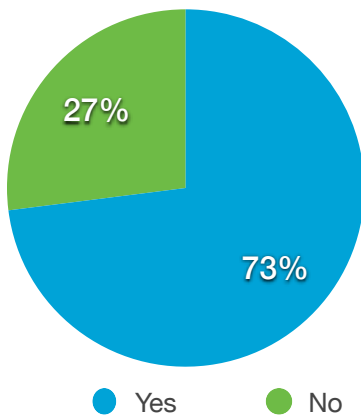
Survey Question	Response		
Do you support the right for adults to grow marijuana for personal use in the state of Washington?	Yes: 99%		No: 1%
Would you be willing to be licensed by the WSLCB for personal marijuana grow?*(See discussion on next page.)	Yes* 53% (online) 73% (in person)	No* 47% (online) 27% (in person)	
Do you have children?	Yes: 39%		No: 61%
Do you have pets?	Yes: 78%		No: 22%
Do you presently grow un edible house and/or garden plants?	Yes: 81%		No: 18%
Are you a registered voter in the state of Washington?	Yes: 94%		No: 6%
Have you ever successfully grown marijuana for personal use?	Yes: 67%		No: 32%
Would you shop at WSLCB licensed marijuana retail stores if given the legal opportunity to grow for yourself?	Yes: 90%		No: 9%
How would you grow?	Indoor 28%	Outdoor 12%	Both 60%
Where would you prefer to get your seeds or clones (i.e. starter plants)?	Retailer 42%	Processor 2%	Producer 57%

In person and online responses were nearly identical on most questions. Responses were combined and averaged, rounding off percentages so some may not be 100. Most deviation in a question’s response rates was +/- 3% with the exception of one question: “Would you be willing to be licensed by the WSLCB for personal marijuana grow?” Between in person and online, support dropped steeply. This difference is discussed on the next page.

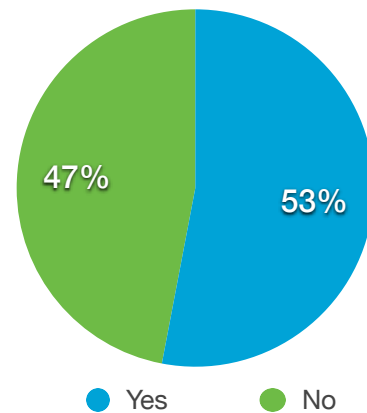
The in person surveys were slightly more likely to be registered voters, and less likely to have non edible plants. A couple in person surveys indicated they would buy seeds/immature cannabis clones from all types of licensees. Online respondents could only pick one type. With or without these responses, producers remained the majority choice, followed by retailers with processors or “any licensee” making up a small fraction of responses. Online, no question was skipped more than twice. In person, no question was skipped more than three times.

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“Willing to be licensed”
Responses before LCB
options



“Willing to be licensed”
Responses after LCB
options



***“Would you be willing to be licensed by the WSLCB for personal marijuana grow?”:** For this question, in person responses were collected prior to LCB options, so they reflect a general opinion on home grow licensing. Online responses were after release of LCB options, with online alerts for the survey including links to or text of them. This led to a significant decline in support, from 73% before to 53% after them, suggesting that as respondents knew more about LCB permits they were less likely to support the idea of licensing. This was the largest and most obvious disparity between in person and online responses. A majority may still be in favor, but the decline will be re-examined as more online surveys, and more details about any type of LCB permitting become public.

Even if a majority of Washington cannabis consumers do support a license grow, as a civil liberties-focused nonprofit, WA NORML is unable to advocate any enforcement on private property absent just cause or a valid warrant.

EVALUATING REGULATORY OPTIONS PROPOSED BY LCB/LEGISLATURE:

What cultivation policy is best for our state? On Sept. 13th, the LCB released a request for stakeholder input on three draft options for personal cultivation along with specific questions on a “Stakeholder Outreach Questionnaire.” Those questions were:

- 1. Which of the above options best protects the state under the Cole Memo from intervention by the federal government?***
- 2. What resource impacts (work hours, costs, etc.), positive or negative, do you foresee for the regulatory options listed above?***
- 3. What are the challenges or benefits (or both) associated with each of the regulatory options listed above?***
- 4. Please provide any additional feedback you believe would be helpful to consider as part of this study.***

This paper itself broadly addresses question #4. “Constitutional Concerns & The Cole Memo” addressed Question #1 specifically. What follows are the three LCB options with answers to stakeholder questions #2 and #3, a revised Option 2, and evaluation of recent legislative bills on the issue.

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1. Strictly Regulated

- Allow recreational home grows under a strict state regulatory framework that requires a permit and tracking of plants throughout the state, with enforcement jurisdiction shared between the WSLCB and local authorities.
- Absent a permit, growing marijuana for any purpose is illegal.
- Require tracking of all plants in the traceability system to help prevent diversion.
- Limit of no more than 4 plants per household.
- Include a statutory provision that allows law enforcement to seize and destroy all plants possessed by a person if the person has more plants than the law allows.
- Include a statutory provision to allow recreational growers to acquire plants from licensed producers so long as the person possesses a valid permit.
- Include requirements for security, preventing youth access, preventing diversion, etc.
- Include the same restrictions that apply to medical marijuana patients on processing marijuana in recreational home grows (no extraction with combustible materials. See WAC 314-55-430).

2. What resource impacts (work hours, costs, etc.), positive or negative, do you foresee for the regulatory options listed above? This will be the most expensive and time consuming option. It expects the greatest involvement from the state. Not only will permitting require a database being built and maintained, potential residency inspection, violation investigatory apparatus, permitting appeals and revocation, licensee (re)training and rules process for all of these actions. These expenses will have to be shared between LCB & local authorities. Plus, by not differentiating between medical and recreational grow limits the option invites future confusion on the part of enforcement officers or the public.

3. What are the challenges or benefits (or both) associated with each of the regulatory options listed above? The benefit is stricter tracking weighed against enforcing traceability, potentially bringing prosecution against people with a few untagged plants. The challenges are in fair enforcement, securing another source of citizen information, legal challenges against a commercial regulator doing residential policing or civil suits on biased, aggressive, or improper enforcement over a few plants. This option also makes recreational growing more regulated than authorized or registered medical growing, unusual given that recreational grows are not for sick people.

2. State Framework, Local Authority

- Allow recreational home grows under a regulatory framework based on statewide standards set in statute, but authorized, controlled, and enforced by local jurisdictions (counties, cities).
- Include statutory requirements for security, preventing youth access, preventing diversion, etc. (Cole Memo).
- Require a permit to possess plants. Absent a permit, growing marijuana for any purpose is illegal.
- Limit of no more than 4 plants per household.
- Include a statutory provision to allow recreational growers to acquire plants from licensed producers so long as the person possesses a valid permit.
- Include a statutory provision that allows law enforcement to seize and destroy all plants possessed by a person if the person has more plants than the law allows.
- Include the same restrictions that apply to medical marijuana patients on processing marijuana in recreational home grows (no extraction with combustible materials. See WAC 314-55-430).
- The Legislature may choose to allow local jurisdictions to “opt-in” for or “opt-out” of allowing recreational home grows, similar to the approach the Legislature took with marijuana licenses and registered medical marijuana patient cooperative grows.

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2. What resource impacts (work hours, costs, etc.), positive or negative, do you foresee for the regulatory options listed above? By losing individual plant tracking and deferring to local authorities while giving them a clear “opt in/out” option the state shifts some costs (except for permitting) from option 1 somewhat or largely over to local authorities.

3. What are the challenges or benefits (or both) associated with each of the regulatory options listed above? This gives local governments too much control over residents’ private affairs. Similar to the challenges to option 1: fair enforcement, securing citizen information, legal challenges against a commercial regulator doing residential policing or civil suits on biased, aggressive, or improper enforcement. Like Option 1, this regulates recreational grows more strictly than medical grows. This option is also susceptible to claims that it unjustly limits civil liberties by allowing jurisdictions to opt in or out of honoring them.

3. Prohibit Recreational Home Grows

- Do not allow recreational home grows. Maintain current status.
- A regulated market is in place and widely available throughout the state.
- Home grows for medical purposes, including cooperatives, are currently allowed under state law.
- Allowing recreational home grows may provide a cover for the illicit market. This has been seen in other states that permit home grows for both medical and recreational purposes.
- Recreational home grows may contribute to diversion, youth access, etc., primary considerations under the guidelines set in the Cole Memo.

2. What resource impacts (work hours, costs, etc.), positive or negative, do you foresee for the regulatory options listed above? As one might expect, this has the slightest immediate impact to staff and budget. LCB has taken over greater amounts of cannabis cultivation enforcement from local law enforcement and due to recent expansion of their authority this trend is likely to continue with them taking over general drug enforcement from other agencies.

3. What are the challenges or benefits (or both) associated with each of the regulatory options listed above? The benefits are its familiarity for government agencies and its close compliance with current federal law. Its risks include a further erosion of respect of the law and police by a public that recognizes this is as bad policy. Civil liberty and social justice groups may campaign for initiative changes without legislative action. Some spending wasted on investigations too insignificant to prosecute. Continues an uneven enforcement of medical cannabis grows.

Revised Option 2. Civil Liberties Option, with State Framework & Local Authority

- Allow recreational home grows with restrictions based on statewide standards set in statute, but controlled and enforced by local jurisdictions (counties, cities).
- Limit of no more than 15 plants per household.
- Maintain existing statutory requirements and penalties for public use, youth access, unlicensed sales, preventing diversion, etc.
- Include a statutory provision to allow recreational growers to acquire plants from licensed producers, and allowing accredited testing laboratories to contract with adults over 21 directly to have recreational home grow samples tested.
- Include a statutory provision that allows law enforcement to seize and destroy any plants possessed by a person beyond established limits.
- Include the same restrictions that apply to medical marijuana patients on processing marijuana in recreational home grows (no extraction with combustible materials. See WAC 314-55-430). Clearly establish that authorized and registered medical marijuana patient grows and registered cooperative medical marijuana grows are separate from any recreational home grow limits.
- The Legislature may choose to allow local jurisdictions to “opt-in” for or “opt-out” of allowing outdoor home grows plainly visible from public or federal properties.

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2. What resource impacts (work hours, costs, etc.), positive or negative, do you foresee for the regulatory options listed above? Significantly less costs than any LCB option. Minor retraining for producers or retailers selling seeds/clones. Updated rules for law enforcement, traceability system requirements, and regular zoning issues for local jurisdictions. Eventual savings or revenue from seed/clone sales, ancillary products/services, and increasing effectiveness of eradication efforts.

3. What are the challenges or benefits (or both) associated with each of the regulatory options listed above? Increased tracking of sales and distribution to estimate home grow markets. Distinguishing between medical and recreational gardens. Outdoor zoning may impact property values based on preferred outdoor growing options. More testing of home grown samples, and judicious use of enforcement by not expecting a single extra plant to warrant removal of a person's entire garden. This regulates recreational growing on a similar scale to medical growing.

Earlier this year, HB1212 envisioned a simple structure of 6 plants per adult, or 12 per multi-adult residences (12). While lower than WA NORML's revised option, the bill's plant limit would put Washington in the mainstream of cultivation policies nationwide, while the limits on amounts of harvested marijuana a person can possess makes it one of the stricter cultivation policies. Changes to allow seed/clone sale, distinguish from medical cultivation limits, and allowing an "opt in/out" provision to keep outdoor grows out of public view or away from federal property.

Existing legislation offers a way to efficiently enact changes while providing appropriate scrutiny to the details. There is serious cause to be concerned if a commercial regulatory agency, even with good intent, becomes a central framer of individual rights. Like cannabis prohibition, it will be much easier set a precedent for industry regulation of private lives than to remove it.

PERSONAL CULTIVATION IN OTHER JURISDICTIONS:

The following is a summary of recreational cultivation limits in other states, the District of Columbia, and other nations. These limits may be different from a jurisdiction's medical cannabis cultivation limits.

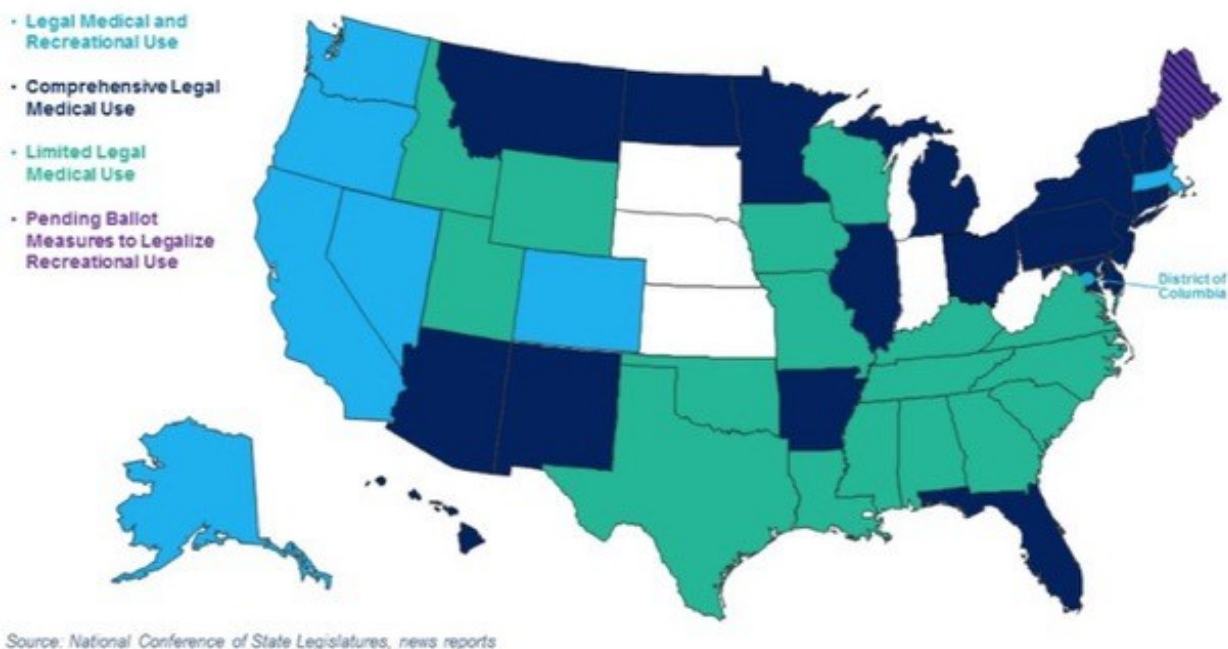
Previously, LCB staff had described concerns from counterparts in Colorado over allowing home growing. Because Colorado had allowed medical gardens of up to 99 plants until earlier this year, it's unclear if state officials were distinguishing between small recreational gardens and larger medical ones. State/D.C. summaries compiled from <http://norml.org/legal/legalization>

- **Alaska - Six plants, Three Flowering, 12 per household - Legal since 2015** - Fifty-two percent of Alaska voters approved Ballot Measure 2. Under the measure, the adult possession of up to one ounce of cannabis as well as the cultivation of up to six-plants for personal consumption will be legal and untaxed. Since 1975, Alaskans have enjoyed personal privacy protections allowing for the possession and cultivation of small quantities of cannabis. The initiative became law in late February 2015.
- **California - Six plants - Legal since 2016** - Fifty-six percent of California voters approved Proposition 64, The Adult Use Marijuana Act, which permits adults to legally grow (up to six plants, including all of the harvest from those plants) and to possess personal use quantities of cannabis (up to one ounce of flower and/or up to eight grams of concentrates; medical cannabis patients are not subject to these limits.) The measure prohibits localities from taking

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actions to infringe upon adults' ability to possess and cultivate cannabis for non-commercial purposes. The revised marijuana penalties took effect on November 9, 2016.

STATE MARIJUANA LAWS (AS OF NOVEMBER 9, 2016)



- **Colorado - Six plants, Three Flowering - Legal since 2012** - Fifty-five percent of Colorado voters approved Amendment 64, which legalized the adult personal use of cannabis. Private possession of up to one ounce is no penalty. Private cultivation of up to six marijuana plants, with no more than three being mature is no penalty. Transfer of one ounce or less for no remuneration is no penalty. The law took effect on December 10, 2012.
- **Washington D.C. - Six plants - Legal since 2014** - In Washington, DC, 69 percent of District voters approved Initiative 71, which removes criminal and civil penalties regarding the adult possession of up to two ounces of cannabis and/or the cultivation of up to six plants. Adults who engage in not-for-profit transactions of small quantities of cannabis or who possess marijuana-related paraphernalia are also no longer be subject to penalty under this act.
- **Maine - Six mature plants, 12 immature - Legal since 2017** - Slightly over fifty percent of Maine voters approved Question 1, the Marijuana Legalization Act, which permits adults to legally grow (up to six plants, including all of the harvest from those plants, and/or up to 12 immature plants) and to possess personal use quantities of cannabis (up to two and one-half ounces of herbal cannabis). The law imposes a 10 percent tax on commercial marijuana sales. The law took effect on January 7, 2017.
- **Massachusetts - Six plants - Legal since 2016** - Fifty-four percent of Massachusetts voters approved Question 4 which permits adults to legally grow (up to six plants, including all of

PERSONAL CULTIVATION OF CANNABIS

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the harvest from those plants) and to possess personal use quantities of cannabis (up to one ounce and/or up to 5 grams of concentrate; in addition, adults may legally possess up to ten ounces of marijuana flower in their home). The law took effect on December 15, 2016.

- **Nevada - Six plants - Legal since 2017** - Fifty-five percent of Nevada voters approved Question 2 permits adults to legally grow (up to six plants, including all of the harvest from those plants) and to possess personal use quantities of cannabis (up to one ounce of flower and/or up to 3.5 grams of concentrates; home cultivation is not permitted if one's residence is within 25 miles of an operating marijuana retailer.) The law took effect on January 1, 2017.
- **Oregon - Four plants - Legal since 2014** - Fifty-six percent of voters approved Measure 91. Under the Oregon proposal, adults who engage in the non-commercial cultivation of limited amounts of cannabis for personal use (up to four marijuana plants and eight ounces of usable marijuana at a given time) will not be subject to taxation or commercial regulations. The legalization measure took effect on July 1, 2015.
- **Nation of Uruguay - Six Plants - Legal since 2014** - Cultivators are allowed to grow up to 6 crops at their homes each year and shall not surpass 480 grams (17 oz). Registered smoking clubs will be allowed to grow 99 plants annually (13).
- **Nation of the Netherlands - Five Plants - Tolerance policy since 1972** - Considered a 'soft drug' under Dutch law, the government tolerates small quantities for personal possession, and has a specific guideline not prosecute 5 plants or less. "It is against the law to grow marijuana and cannabis plants. In cases where no more than 5 plants are grown for personal consumption, the police will generally only seize the plants. If more than 5 plants are found, the police may prosecute." (14)

While some states are implementing home grow policies from ballot measures, others are beginning to act through their legislatures. Vermont passed a legalization law which included limited personal cultivation earlier this year before being vetoed by their governor.

Recently the National Conference of State Legislatures (NCSL) passed a resolution endorsing, in part, the removal of cannabis from the Controlled Substances Act to allow states to set their own cannabis policies. The resolution was supported by a majority of participating legislators in 75% of the states represented at the conference's August meeting (15).

It's in the national interest for Congress to act, but we didn't make it to this point by waiting on federal action. We've broken ground on legalization, but other states have broken it on home growing. A recent review of Cole Memo priorities by the Dept. of Justice Task Force on Crime Reduction and Public Safety recommended no major changes (16). However, Deputy Attorney General Rod Rosenstein recently acknowledged the DOJ is still considering changes (17). To date, no government official anywhere has been targeted for federal prosecution for enacting home growing policies in accordance with their job.

ACADEMIC FINDINGS ON PERSONAL CULTIVATION:

Due to restrictions on domestic marijuana research and the stigma of marijuana cultivation in most places until very recently, data on cultivation tends to come from law enforcement reporting and anonymous surveys. However, beyond other states ongoing experience with personal cultivation, there is some academic research on the subject.

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Below are journal citations with abbreviated abstracts and conclusions, along with key findings. They range from cannabis policies which are entirely prohibited to largely legal, and while not all justice systems are identical to our state, they offer context and real-world experience for cultivation behavior. While this is not a comprehensive review of all personal cultivation research it is more recent studies reflecting liberalized and restrictive policy frames.

(i.) Tom Decorte, “*The case for small-scale domestic cannabis cultivation,*” *International Journal of Drug Policy*, Elsevier B.V., 2010.

Abridged Abstract

Until now, the focus of most empirical work has been on large-scale, commercially oriented and professionally organized segments of the cannabis industry, often based on police data and on the perspective of law enforcement agencies.

This paper offers a review of recent Dutch-language research that focuses on cannabis cultivation.

The paper presents the main findings of Dutch and Belgian empirical work on the factors that stimulated the import substitution process on the cannabis market, aspects related to quality and potency issues, typologies of cannabis growers, and (unintended) effects of pursued policies. The author also makes a case for greater toleration of small-scale cannabis cultivation, to secure the least worst of cannabis markets.

Notable Findings

- Today the shift to (inter)regional production, trade and domestic cultivation has become an irreversible international trend.
- Law enforcement pressure, especially large-scale eradication programs, may also have contributed to the trend from outdoor towards indoor cultivation.
- Several authors have constructed typologies of cannabis cultivators, but the majority of empirical studies on cannabis cultivation relate to large-scale, commercially oriented growers, and are often based on police data. [...] Others have acknowledged the existence of ‘ideologically oriented’ dealers and growers, but they either argued these ‘trading charities’ and ‘mutual societies’ died out in the 1980s as they were replaced by more criminally orientated drug dealers, or they claimed their market significance is minor in terms of the total amount of cannabis produced.
- Empirical studies that focus on small-scale cultivators (‘for personal use’, the ‘hobbyists’) are rare. In a recent ethnographic study of domestic cannabis production in the UK, Potter argues that whether or not alternative, ideological dealing outfits did disappear completely, they are back now, at least in relation to the home-grown cannabis market.
- The feasibility of growing cannabis under artificial lights had already become clear in the United States, where experiments with indoor cultivation were inspired by harsher cannabis policies during the late seventies. But during the eighties The Netherlands presented itself as an ideal ‘incubation country’ for further developing both the genetics and the production techniques.
- Maalsté has recently published 18 interviews with large-scale cultivators and other entrepreneurs in the commercial cannabis sector. These commercially oriented growers testify about the increasingly criminal character of the cannabis trade (threats, possession of weapons, rip-offs and snitching) and associate these recent trends with the intensified repressive approach. Old-school, ‘idealistic’ cultivators and small-scale growers do not want to run the risk of being caught and stop cultivating. New, more commercially oriented players who calculate the penalty in as a professional hazard filled the gap in the market.
- Spapens et al. studied 19 closed police files to describe and analyze the criminal networks behind marihuana cultivation. Korf and his team analyzed police registration practices in several regions of The Netherlands. Both studies suggest that the cultivation of cannabis does not appear to have been

pushed back. [...] Law enforcement pressure does not seem to have a significant effect on the commercially oriented growers, generally because thorough investigations of the organizations behind large-scale cannabis cultivation are extremely time-consuming and costly. The crime investigation policy in relation to the cannabis market in The Netherlands is described as a hit-and-run practice, busting a maximum number of sites with maximum efficiency, but not weighing the potential impact on organized crime. Wouters describes the actual police practice as increasingly bureaucratized and commercialized (engaging commercial firms in dismantling operations).

- Police statistics show that in Belgium the number of plantations that have been dismantled by the authorities has increased sharply in recent years, although it must be noted that as few as two or three plants constitute a 'plantation' according to the law. Reports on cannabis plantations in the Belgian media have multiplied spectacularly since 2001.
- Fed by statements from police experts and politicians, the media have been painting a picture of exponentially expanding cannabis cultivation that is increasingly 'professional' and in the hands of organized criminal groups. Criminal control over cannabis cultivation is often portrayed in the Belgian media in terms of the increasing use of pesticides, artificially high THC levels, the installation of booby traps to protect plantations, and the use of cannabis as currency among criminals.
- [In] the absence of independent empirical studies on cannabis cultivation, it is difficult to assess the validity of this representation of the factors and trends that shape the local cannabis markets in Belgium.
- The focus on large-scale growers and on police data in the media may lead to false perceptions of the prevalence of different types of growers and growing operations, and an underestimation of small-scale, independent or 'ideological' cultivation.
- If any indoor growing operation that uses sophisticated and efficient cultivation techniques (such as artificial lighting, or the use of nutrients), or to the use of technical equipment is labelled as professionalization, a large number of small-scale growers appear to become more 'professional' during their growing career, even if they are not explicitly profit-oriented. Elementary knowledge of cultivation techniques is not (or no longer?) the monopoly of a small group of cannabis connoisseurs and large-scale cannabis producers. The minimum know-how to grow cannabis is now easily available through the internet, word-of-mouth among friends, specialized magazines and manuals, and grow shops.
- Another noteworthy characteristic of small-scale cannabis growers is their preoccupation with the strength and the quality of the cannabis they grow in comparison with the cannabis they buy elsewhere. Most of the cultivators we recruited through the web survey claimed their own cannabis was milder than the marijuana bought elsewhere (e.g. in Dutch coffee shops). Surely, the hypothesis that there is a difference in THC-content between cannabis grown locally by commercially oriented, large-scale producers and cannabis grown locally by small-scale, more idealistic cultivators, needs to be tested scientifically. [The] idea that home growers perceive their marijuana to be milder may have important consequences, both for their personal patterns of consumption, and for policy strategies.
- Our findings suggest that many small-scale domestic cultivators grow cannabis because they are not satisfied with the cannabis products sold by Dutch coffee shops: too 'strong' and 'chemically boosted'. These users want a 'milder', 'healthier' and 'more organic' product.
- Not only is this desire for 'organic weed' an important motive to start growing, some growers try to refine their cultivation techniques for the same reason. Although they are not looking for monetary gain, many home growers start using 'professional' equipment, both to enhance their yield and to improve the quality of their marijuana. When growers give each other advice and tips, they often emphasize 'organic' growing strategies to keep their cannabis free from mould, bacteria, heavy metals and insecticides.

Abridged Implications for Research and Policy

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- What part of cannabis markets is served by small-scale and/or amateur producers, and what part through large(r) organized/criminal networks? What do we really know about the historical evolution in numbers and activities of these different types of cultivators? For example: to what extent has the number of non-commercially oriented cultivators increased or decreased, and what explanations can be found for these trends? Some studies seem to suggest the market significance of small-scale, independent or ‘ideological’ cultivation should not be underestimated, but this market segment is still under researched.
- [Both] legal framework and applied law enforcement strategies differ considerably between countries, and have their own (un)intended effects on cannabis markets, etc. From a policy perspective, questions such as ‘How do different types of growers react to current drug policy strategies?’ and ‘What effects does our drug policy have on the strength and/or quality of the cannabis produced locally by different cultivator types?’ are extremely relevant, but they remain largely unanswered.
- The hypothesis that there is a difference in THC-content and quality between cannabis grown locally by commercially oriented producers and cannabis grown locally by more idealistic cultivators, needs to be tested scientifically. Nowadays the Dutch coffee shops and other distributors are also selling some varieties of cannabis as ‘organic weed’ (‘bioweed’). Whether the ‘organic weed’ in the Dutch coffee shops really is any more ‘organic’ (read: ‘healthy’) than other varieties, needs to be tested. [..] And even if no differences in final products between different types of cultivators are found, the perceptions and ideas of users and growers on quality and potency of the cannabis they use or grow may have important consequences for their personal patterns of consumption, and are worth studying more in depth.
- In The Netherlands, the argument that cannabis cultivation had become a case of organized crime inspired the government to instigate a tough policy. However, this highly repressive strategy, including the use of advanced investigation techniques and dismantling of large numbers of cultivation sites, failed to generate the desired effect of significant supply reduction. On the contrary, more recent studies in The Netherlands seem to suggest this policy produced significant side effects on the market. In The Netherlands, rather than being driven back, cannabis cultivation has undergone a significant transition. The Dutch strategy seems to have had different effects on small-scale domestic cultivators and on large-scale growers and their organizations.
- It can be expected that in Belgium too, cannabis cultivation will be driven back to some extent (and pop up in different places), but it might also lead to a ‘tougher’ cannabis market, with more criminal organization and more criminality. Moreover, the strength and the quality of locally grown cannabis will remain uncontrollable. It is our assumption, that a more repressive approach is bound to lead to a new series of innovations in production, cultivation techniques and market organization.
- At first sight, allowing small-scale domestic cannabis cultivation while combating large-scale cultivation, seems an attractive option. Such a strategy would aim at nudging the whole cannabis market towards its least unacceptable form, rather than wanting to eradicate it completely. Cannabis markets have the least unacceptable consequences if criminal entrepreneurs do not crowd them. By making room for small-scale ‘amateur cultivation’ in the local marijuana supply, a drug policy can lead to a structure of the sector that offers only few possibilities for ‘organized crime’. Several Australian states have decriminalized cultivation for personal use, and imposed administrative penalties. At the time of writing, the effects of these decriminalization experiments on the cannabis market structure are not documented.
- In view of the large demand for cannabis (rooting out cannabis use is not a realistic goal), the ineradicable nature of the plant and the whole cannabis sector (both legal and illegal businesses), a regulation of the market is the best possible solution in our view. A decriminalization policy has but a limited durability, as the Dutch have been finding out. The regulation of points of sale, and production and supply, is in our opinion the best strategy to expel the criminal elements from the sector, as well as to improve the quality of the product.

(ii.) Craig Boylstein and Scott R. Maggard, “*Small-Scale Marijuana Growing: Deviant Careers as Serious Leisure,*” *Humboldt Journal of Social Relations*, Is. 35, Humboldt State University, 2013.

Abridged Abstract

It may be that large scale marijuana growers who have been arrested may differ in their reasons for growing, their style of growing and distributing and in how they view marijuana growing as an activity from different types of growers; namely small-scale, indoor hydroponic growers who grow primarily for personal use and enjoyment. Our study analyzes one social network of marijuana growers in central and northern Florida. Through intensive field observations and qualitative interviews with 8 people involved in this closed social network of marijuana growers, we discovered that the growers all followed a similar pattern of initial trial and error, learning new techniques from one another to improve their product, to finally maintaining techniques that enabled them to maximize taste, potency and yield. All of the growers in our sample were white middle class men (6) and women (2) with at least a college degree who had already or planned to enter white collar occupations (e.g., a teacher or business owner). Although profitable, the growers greatly downplayed the importance of making money as a reason for growing, describing the endeavor as a passionate activity they performed for enjoyment, to save their own money, and for the high regard they have of plants in general.

Notable Findings

- [Much] of what is known about illicit marijuana distribution relies on street-level, or large-scale dealers. The specific area where sociological research on marijuana cultivation and distribution is weakest is the deviant careers of marijuana growers who cultivate and distribute marijuana without ever being detected by law enforcement.
- For example, in one study of marijuana distribution on college campuses, virtually all of the sellers (some of whom also cultivated marijuana indoors) in their sample began distributing marijuana in college and then “matured out” of their deviant careers after graduation, choosing instead to focus on conventional work and family relationships and avoiding law-breaking activity altogether.
- Indoor marijuana cultivation may resemble the career of a serious leisure activity in which there is a beginning stage (interest in cultivation takes root); development stage (pursuit of the activity becomes routine and systematic); establishment stage (becoming experts in the activity but still resisting “going commercial”); and a maintenance stage (where one’s cultivation career is in “full bloom,” enjoying the activity to its utmost). Like other serious leisure activities, there may be a strong, continuous desire to upgrade horticultural equipment. Decline may also set in where cultivation seems less fulfilling than it once was, perhaps losing some of its excitement, offering diminishing returns.
- All participants were white, self-reported as middle class, ranging in age from their mid-twenties to their early thirties. Their educational level ranged from college graduate to possessing a post-graduate degree. All but one of the growers was either in school and/or had a legal, mainstream occupation outside of their growing activities. Most growers lived in detached homes they either rented or owned.
- It is important to note, however, that our particular network of hydroponic growers, while likely similar to many indoor growers throughout the world is certainly not representative of all indoor hydroponic growers. What our results represent is one example of a closed social network of hydroponic growers located in a specific part of the U.S. where marijuana growing and use remains 100% illegal.
- Although they experienced limited success in their initial attempts (a plant that yielded some marijuana, but not as high quality as they had hoped for), rather than giving up and continuing to purchase their marijuana on the black market, they decided to continue growing, trying to improve upon their initial attempts.
- Seeing growing marijuana as fun rather than a way to make money enables growers to express their passion and love for the plant as well as the socially acceptable interests in horticulture.

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- While they are able to grow much more than they can use personally, they do not self-identify as drug dealers the way marijuana dealers in previous research do. Cultivation, for them, is a serious leisure activity, organized within a social network of cultivators and friends, where their activities are seen as contributing to the betterment of their community.
- Much like other serious leisure activities, these marijuana growers, while earning money from their activity, did not rely on the money generated from growing to survive. In this way, they are not professional drug dealers, but rather amateur horticulturalists.
- The other growers relish their amateur status, emphasizing that they are “doers” who take pride in their active approach to marijuana cultivation. Marijuana cultivation is an activity in which the growers within this social network interweave skills, knowledge and talent.
- All of the people in our sample expressed disdain towards federal drug policy, often stating that prohibition is a complete failure on multiple levels. First, it is seen as a waste of taxpayer money and second it is seen as the prime example of government overextending itself into what should be private affairs of citizens. Most of those interviewed expressed that they still felt a closer bond with friends who were against marijuana prohibition and particularly among those who continue to smoke well into adulthood. There remains an intimate bond among the growers to this day that they do not share with anyone else.

Abridged Discussion

- We have presented this style of indoor marijuana growing as a specific type of deviant career, namely as a serious leisure activity. Within serious leisure activities a particular ethos develops that is used to convey the spirit of the community. This growing ethos is manifested in the shared attitudes, practices, values, beliefs, and goals that are expressed in the organized social world of marijuana horticulture. Within the growing community, there is a strong sense of cooperation where one grower will teach another grower specific methods for increasing production and growers will watch each other’s plants if one grower takes a vacation or must be gone for several days. At the same time there is a healthy competition regarding who makes the “best” marijuana (best tasting; most potent). [...] The sharing, cooperation and healthy competition all culminate into a strong sense of pride and satisfaction one has in growing high-grade marijuana. This pride is only shared among the growers themselves, with other users seen as peripheral to the inner circle of friends and associates who actually produce the products. In this way, the growing ethos helps establish growers as unique, useful doers within their community. Growing thus becomes a source of positive self-esteem and identity reinforcement.
- The pull of normality, or aging out of their deviant career due to normative contingencies centered on work and family is also consistent with previous deviant career research. What is fairly unique is that the deviance conducted by our growers is not just neutralized through providing accounts for their unconventional behavior but it is a source of pride and serves as a symbol of political and social justice.
- People consume all sorts of things that lack any proven benefit, not just alcohol and tobacco, but spices such as pepper, hot sauce, and oregano. Most Americans consume these products daily simply as a matter of personal taste. With that in mind, those who champion decriminalization of marijuana should not be forced to prove the benefits of it, but rather prohibitionists should be forced to prove its dangers. Even then, there are many legal activities rife with danger, such as kayaking through rapids, mountain climbing and flying small aircraft.
- What we discovered is that decline in their growing activities was not a product of age but rather a byproduct of increased tensions between the joy they felt in growing marijuana and the risks involved if they were caught. With increased commitment to conventional family and work structures, the risks that once seemed worthwhile no longer do. If our participants lived in areas where their activities were sanctioned by law, it seems fairly certain many of them would reenter their career as marijuana growers.
- One weakness of our study is a lack of a comparison group of growers who may grow primarily for profit in states where they are sanctioned to grow. These growers may have different orientations to

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marijuana growing. That is, rather than a serious leisure activity, professionals may orient to growing rather differently, or they may share many similar thoughts and experiences. Growers in a state where medical marijuana is 100% illegal, like our sample, may have different perspectives and experiences compared to growers in states where growing for medical purposes is permitted.

(iii.) Vendula Belackova, et al., “Should I Buy or Should I Grow?” *How drug policy institutions and drug market transaction costs shape the decision to self-supply with cannabis in the Netherlands and the Czech Republic,* International Journal of Drug Policy, Elsevier B.V., 2014.

Abridged Abstract

Methods: A comparative analysis was conducted using secondary qualitative and quantitative data in four areas that were identified as relevant to the decision to cultivate cannabis: (i) the rules of the game – cannabis cultivation policy; (ii) “playing the game” – implementation of cannabis cultivation policy, (iii) informal institutions – cannabis cultivation culture, and (iv) the transaction costs of the cannabis market – availability, quality, and relative cannabis prices adjusted by purchasing power parity.

Results: Although the two policies are similar, their implementation differs substantially. In the Czech Republic, law enforcement has focused almost exclusively on large-scale cultivation. This has resulted in a competitive small-scale cultivation market, built upon a history of cannabis self-supply, which is pushing cannabis prices down. In the Netherlands, the costs of establishing one’s own self-supply have historically outweighed the costs associated with buying in coffee shops. Additionally, law enforcement has recently pushed small-scale growers away from the market, and a large-scale cannabis supply, partly controlled by organized criminal groups, has been established that is driving prices up.

Notable Findings

- In the Czech Republic, about 9% of the last-year cannabis users recruited within a representative population sample claimed to have cultivated the cannabis they used the last time, and so did 14% of the Czech cannabis users that participated in an EU online survey focusing on drug markets. [...] Dutch respondents buy their cannabis at twice the rate of their Czech counterparts, 75% as opposed to 37%. Only 2% of the Dutch respondents using cannabis claimed to have grown their own – which was the lowest figure for all the survey participating countries.
- Previous studies described people’s motivations for cultivating their own cannabis as the desire to compensate for the lack of a quality product on the market, distrust of non-organic production techniques, or the unavailability of particular strains and the desired potency, the low availability of cannabis in general, and discomfort with “supporting” criminal organizations. These motives can be understood as avoidance of the transaction costs of the illegal market. At the same time, the reasons for cultivating one’s own cannabis include more general trends, such as the “do-it-yourself” (DIY) phenomenon – individuals brewing beer or crafting furniture or devices for a variety of motivations, including lack of product quality and availability.
- In 2012, the Dutch police recorded nearly 38,000 “incidents” concerning (alleged) drug offenses. About 30% of those “incident records” were related to cannabis cultivation, indicating that over 10,000 cannabis-related offenses were recorded in that year. The “incident records” can equally refer to cannabis plantations raided or to other types of incidents, such as a phone call from a local resident about a strange (hemp) smell. The number of registered drug crimes gradually decreased after 2006, when they were 14% lower than in 2005. Both the number of recorded Schedule II crimes (“soft drugs” or cannabis) and Schedule I crimes (“hard drugs,” such as heroin, cocaine, amphetamines, or other synthetic drugs) decreased between 2005 and 2011, by 4% and 23% respectively.
- An even larger percentage of the respondents in the same 2012 survey dis-agreed with “criminalizing cannabis cultivation for personal use”, 73%, up from 43% in 2002.

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- A substantial segment of current Czech cannabis users refer to their cultivation efforts as a hobby and the product is often distributed for free with pride. Another segment of Czech cannabis users – typically, those from rural areas – continue to prefer out-door varieties because of their “natural character,” and, in contrast to cannabis produced indoors, outdoor varieties are commonly smoked without tobacco.
- In the 1990s, there seemed to be a clear distinction between cultivators that were involved in so-called export weed and cultivators that supplied Dutch coffee shops. The cultivation of export weed was controlled by organized crime groups. The domestic production and supply to the coffee shops was dominated by smaller-scale individual and independent growing operations, each often producing less than 10 kilograms per year.
- The cannabis growers interviewed by Maalsté and Panhuysen also testified about the increasingly criminal character of the cannabis trade (threats of violence, weapon possession, rip-offs, and snitching) and linked these to increasingly repressive police tactics and the increasing dominance of commercial and criminal entrepreneurs in the cannabis sphere.
- In contrast, earlier generations of “idealistic” and small-scale cultivators were less prone to taking risks when the chances of being caught increased. Thus, cannabis cultivation quickly lost its attraction for small-time home growers for whom these activities were not their primary source of income and who wished to avoid a criminal record or eviction from their home.
- The severity of the punishment for small-scale cannabis cultivation of up to five plants is comparable for the two countries but, when the five plants limit is exceeded, the Dutch laws appear to have more serious consequences. The Czech regulations only consider the scale of the cannabis plantation when deciding whether it is exempt from criminal proceedings or not. The Dutch prosecution guidelines have recently introduced a rather arbitrary qualitative indicator of “professionalism” (the technology used in cultivation) that discourages small-scale cultivation for personal use, as many of these technologies – ventilation, heating, artificial light, irrigation, or disease control are used by just about all indoor cannabis growers – amateurs and professionals alike.
- Our findings clearly show that the Dutch law enforcement practice has deterred small-scale home cultivators in particular (increased their risk/costs, while the cost of “commercial” cannabis in coffee shops was relatively low), leaving the market to competitors with less of a commitment to conventional society and with more resources to avoid detection. Thus, while home cultivation in the Netherlands declined, criminal organizations rapidly took over the market, and since 2008, non-professional plantations have only seldom been found. There is no doubt that the situation with the dominance of organized criminal groups is less desirable for the public than the one with small-scale growers, supplying mostly themselves and, possibly, the coffee shops
- While there was rather broad support for the coffee shops in general, the increasing association of cannabis cultivation and wholesaling with organized crime resulted in increasing financial investments in policing these two essential components of any supply chain. However, Dutch drug policy scholars contend that the government’s stricter approach after 2000 triggered the scale-up and criminalization of the cannabis supply side. This development represents a very impressive example of numerous unintended consequences of restrictive drug policies in a country where few from the outside would expect it.
- Quite the reverse, the Czech police continue to dismantle growing sites run by organized crime, as well as to prosecute any known operation of cannabis sales. Nonetheless, the implementation of the policy on cultivation is substantially more liberal than in the Netherlands, resulting in a vibrant self-supply cannabis cultivation culture that extends into a “friends providing to friends” system that is large enough to compete with (internationally operating) criminal entrepreneurs.
- Easy access to afford-able cannabis in a safe and regulated environment (coffee shops) and relatively high risks when growing one or two plants above the norm have significantly reduced the incentive to grow your own. “Why bother?” would be the answer of most Dutch cannabis users.

Abridged Conclusions

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- [The] Dutch should design/implement measures that stimulate and regulate home growing in an orderly fashion; in other words, we believe that it is in the best interest of the Netherlands (and in accordance with its tradition of protecting public health and public order) to abandon the current measures that aim to suppress such growing and – most probably unintended, but effectively– “clean” the market for organized criminal groups, with all the negative consequences such cartels bring along with them;
- [The] Czechs should further maintain and deepen their policy supporting small-scale growing and avoid police excesses such as increased policing despite of liberalized legislation;
- [Any] country that is willing to implement pragmatic cannabis policies that minimize the harms to public health and safety shall keep in mind the importance of policies targeting cannabis cultivation; tolerance to small-scale cannabis cultivation has a potential to reduce the role of organized crime in the country and reduce the size of commercial market in its scope as well as size; the individual decisions to self-supply with cannabis, however, are dependent on the cultural context as well as past policy approaches, and on the transaction costs of the commercial market;
- Probably the most important lesson they have to take to heart is that legal reform of the cannabis situation should be comprehensive, regulating sales to consumers, wholesale supply, and cultivation so that the results of novel cannabis policies are accountable against clearly stated aims and goals.

(iv.) Gary R. Potter, et al., “Global patterns of domestic cannabis cultivation: Sample characteristics and patterns of growing across eleven countries,” International Journal of Drug Policy, Elsevier B.V., 2014.

Abridged Abstract

Methods: This paper utilizes data from the online web survey of predominantly ‘small-scale’ cannabis cultivators in eleven countries conducted by the Global Cannabis Cultivation Research Consortium (GCCRC). Here we focus primarily on descriptive statistics to highlight key similarities and differences across the different national samples.

Results: Overall there was a great deal of similarity across countries in terms of: demographic characteristics; experiences with growing cannabis; methods and scale of growing operations; reasons for growing; use of cannabis and other drugs; participation in cannabis and other drug markets, and; contacts with the criminal justice system. In particular, we can recognize that a clear majority of those small-scale cannabis cultivators who responded to our survey are primarily motivated for reasons other than making money from cannabis supply and have minimal involvement in drug dealing or other criminal activities.

Notable Findings

- With ‘traditional’ producer countries in the developing world continuing to cultivate, the UN confirms cannabis production to be a truly global phenomenon with 172 countries and territories reporting cultivation in the 2008 World Drug Report (a year where particular attention was given to the phenomenon of cannabis cultivation);
- Overall, respondents were far more likely to report some form of employment: those reporting various forms of non-employment (aside from being students) were small minorities in all countries.
- In general, growers responding to our survey were quite inexperienced with roughly two-thirds (64%) of the whole sample reporting growing 5 crops or fewer. Only three countries (the UK, Australia and Denmark) had a majority of respondents who reported having grown six crops or more – and these were three of the four countries (the Netherlands being the other) where the median age of respondents was in the 30s instead of the mid-20s.

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- In total, 67% of respondents ‘succeeded first time’ and 83% had at most only one failed attempt before their first successful crop (ranging from 70% in the US to 90% in Denmark and 92% in Austria);
- The number of mature plants grown per crop varied across the countries although in all countries the majority of respondents stuck to relatively low numbers of plants. [...] In some countries it seems likely that growers were influenced by official or semi-official policies of tolerance to small-scale cultivation.
- It is not necessarily the case that those who grow more plants get higher yields per crop, nor that those utilizing a larger growing area necessarily produce more cannabis: this supports observations in previous research that some growers simply prefer to grow a number of small plants while others prefer to grow a smaller number of larger plants.
- Overall, the top five reasons for growing cannabis were, in order, ‘It provides me with cannabis for personal use’ (84%), ‘I get pleasure from growing cannabis’ (83%), ‘It’s cheaper than buying cannabis’ (75%), ‘To avoid contact with the illegal circuit (e.g. street dealers, criminals)’ (72%), ‘The cannabis I grow is healthier than the cannabis I buy’ (68%).
- Curiosity was more important in North America than elsewhere, and more important in the UK than elsewhere in Europe.
- In all countries except the Netherlands over half of all respondents reported giving away some of the cannabis they produced. Although the precise reasons for the variation in responses here is unclear, the overall picture supports the idea of cannabis use – and even cannabis growing – as a social experience and are involved in what is often termed in the literature as ‘social supply’, a key element of non-commercial cannabis cultivation noted by both Potter and Hough et al. in the UK context and also observed in studies of growers in Finland and Denmark, for example.
- About three-quarters of respondents overall (ranging from 62% in Finland to 87% in Belgium and 95% in Canada – although the Canadian sample for this question was small) reported that they had never been convicted of a criminal offense, and minor violations aside, only very small proportions of respondents reported involvement in any criminal activity (other than drug-related) in the last 12 months (this peaked in Finland where 5% reported involvement in property crimes and 2% in violent crimes). The picture here is of a largely law-abiding sample, aside from participation in cannabis cultivation and other drug-related crimes.
- [Growers] responding to our survey were predominantly male and younger adults, our findings suggest some involvement in cultivation across both genders and all age groups. Most of our respondents had jobs (or were students) and a majority had shared living arrangements. Likewise, the majority of our respondents were largely law-abiding (aside, of course, from their cannabis cultivation and other drug-related activities): these are people who live more-or-less normal lives rather than some deviant or anti-social sub-group.
- Although a key reason for growing cannabis was to supply their own consumption, they also reported getting cannabis from sources other than their own cultivation: personal cultivation does not usually satisfy an individual’s consumption requirements (although this may be as much through users’ desires to consume a variety of cannabis products as any inability to produce as much as they consume). Although many did use other drugs, the majority did not, and very few suggested what might be seen as particularly problematic patterns of drug use (e.g. use of heroin, or extreme poly-drug use).
- Generally they had not grown cannabis that often, although significant numbers reported high levels of experience. Mostly they found cannabis cultivation easy (in that they reported success after one or two attempts):
- Regardless of preferred cultivation methods, most of our respondents operate on a small scale preferring low numbers of plants and small areas given over to cultivation, although this did vary between countries (and may in part be due to growers’ recognition of national or local policy around some lenience towards growing a certain number of plants, as well as individual preferences).

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- One of our most important findings is that most of the small-scale growers in our sample are motivated more by practical and ideological concerns than a desire to make money. Taken together, these and other features of the data support the repeated observation in the literature that cannabis cultivation is often a rational choice for some cannabis users who wish to minimize the harm associated with buying cannabis (cost, criminal involvement associated with buying cannabis, uncertainty or undesirability of quality of cannabis available on the black-market), which also being an aesthetic and/or 'ideological' choice.
- A key point to take here is that while a majority of our cannabis growers are involved in the supply of cannabis, they are not generally drug dealers. Instead, a vast majority of the respondents give away some part of their product for free, by sharing, swapping and gift giving.

Abridged Conclusions

- Significantly, there should be no assumption that most small-scale cannabis growers are criminally or socially deviant: instead, most tend to come from more-or-less normal socio-economic backgrounds with minimal involvement in drug dealing (as opposed to social supply) or other types of crime.
- Equally, it should not be assumed that involvement in cannabis cultivation comes about from a desire to make money (although saving money may be an important factor). Having said this, the observation that involvement in cultivation may lead a small minority of individuals to drift into dealing, albeit usually on a small scale, is important.

(v.) Jon Gettman and Michael Kennedy, “Let it grow—the open market solution to marijuana control.” Harm Reduction Journal, 11:32, BioMed Central Ltd., 2014.

Abridged Abstract

[We] argue that the primary goal of legalization should be the elimination of the illicit trade in marijuana and that maximizing market participation through open markets and personal cultivation is the best approach to achieving this goal. This argument is based on the assertion that regulatory models based on a tightly controlled government market will fail because they replicate the fatal flaws of the prohibition model. This commentary argues that an examination of the reasons for prohibition's failure—to wit, the inability of government to control the production of marijuana—completely undercuts the basic premise of a tightly controlled market, which depends on the ability of the government to control production. The public interest would be better served by an effective regulatory framework which recognizes and takes advantage of competitive market forces. This analysis argues that reducing teenage access to marijuana requires the elimination of an overcapitalized illicit market. Further, it asserts that this goal and maximization of tax revenue from a legal marijuana market are mutually exclusive objectives.

Notable Findings

- Outright legalization of the use and commercial trade in marijuana has joined decriminalization, prosecutorial discretion, conditional discharge, and medical marijuana exemptions in the catalogue of state tactics to opt out of the federal criminalization of marijuana sales and possession and the classification of marijuana as a drug similar to heroin in terms of individual and social harm.
- The problem is the issue of control, as in drug control, and the reality of current policy is that there is no control. That is why states have been and will continue to opt out of the rigid federal prohibition. Some academics and policy officials are now advocating new approaches based on a desire to institute tight controls, conveniently overlooking that this is the exact approach that created the current mess.
- Criticism of marijuana prohibition is widespread, and there is broad consensus among critics that it has failed and why it has failed. Critiques are often based on the persistence of wide and unchanged access to marijuana (especially to teenagers), prohibition's failure to provide medical access, racial disparities in marijuana possession arrests, and the costs of arrests to both individuals and society. A

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considerable amount of discussion has addressed the clash between state-level reforms, such as medical marijuana laws, and the ongoing federal prohibition in the United States. This discussion often focuses on a) ways to reconcile state reforms with federal prohibition and b) the benefits of policy innovation at the state level.

- The focus has shifted to the objectives, dynamics, potential features, and other critical issues concerning regulatory frameworks for a legal marijuana market. Examples of this discussion are found in articles by Caulkins et al. and Room, along with additional commentary by other authors, in the journal *Addiction* and a panel discussion between Mark Klieman, Alison Holcomb, Sue Rusche, and Jonathan Rauch sponsored by the New American Foundation.
- An initial approach rests on the premise that strict controls on marijuana are justified by public health concerns. Cohen and McGowan provide a straightforward synopsis of popular thinking on this subject. They assert that the goals of marijuana legalization should be controlling consumption, eliminating the black market, and generating state revenues. The best way to achieve these objectives, they and others theorize, is through government monopoly. The rationale is that "keeping marijuana out of the private marketplace allows states more control in their vital role of limiting use by minors." Cohen and McGowan support their theory by evoking the spectre of "Big Cannabis" which, like "Big Tobacco," will advertise and market marijuana to increase consumption and stimulate teen use.
- Caulkins et al. concede there are many arguments for allowing home cultivation, including diverting market share from commercialized interests, sharing and gift giving, and fostering nonprofit cooperative efforts. If market forces can avert a price collapse, an important share of the market could be seized by personal cultivation.
- [In] 1981, the DEA estimated that 1,200 metric tons of marijuana was produced in the United States. In 1982, they seized 1,653 metric tons. "Therefore, the program shows that in 1982, 38% more domestic marijuana was eradicated than was previously believed to exist." Second, in 2002, the National Survey on Drug Use and Health (NSDUH) revised its data collection procedures and increased their estimate of annual marijuana users from 21.1 million (as reported in the 2001 survey results) to 25.7 million. Third, after reporting from 1998 to 2000 that domestic marijuana production was 3,500 metric tons, the Office of National Drug Control Strategy reported in February 2003 that US production was actually more than 10,000 metric tons. This is a recurring issue. A 2013 RAND study estimated that the amount of marijuana consumed in the State of Washington (120 to 175 metric tons) was considerably greater than the earlier estimate of the Washington Office of Financial Management (85 metric tons) due to underreporting in prior survey data.
- Also, the Drug Enforcement Administration seized 3,347 indoor marijuana grow operations in 1993 (with 290,452 plants), 2,678 in 2003 (with 223,183 plants), 3,713 in 2007 (with 434,728 plants), and 2,596 grow rooms in 2012 (with 302,377 plants). These data indicate strong, persistent, and consistent levels of market participation in terms of production and sales. The NSDUH also provides data on the number of personal-use marijuana cultivators, which has increased dramatically from 206,335 in 2003 to 477,028 in 2012, an increase of 131%.
- Marijuana's prospective legalization should be viewed simultaneously as a remedy to the failures of prohibition and as a means to achieve important public policy objectives. Ethan Nadelmann, Executive Director of the Drug Policy Alliance, instructively notes that "Any model for legally regulating cannabis production and distribution must be compared not just with an ideal scenario but with the realities of contemporary cannabis prohibition".
- With respect to public policy, the purpose of regulation should be to enhance protective factors and mitigate risk factors. These objectives should take precedence over other potential objectives, specifically maximizing tax revenue.
- While it may seem counterintuitive, the ubiquitous nature of marijuana production can be a benefit rather than a threat to achieving public policy objectives. The concern with commercialization would be better expressed as concern with the activity of an oligopolistic market rather than a competitive

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one. Indeed, the current market in tobacco is an oligopoly, and generic products are viewed as an industry killer. Home cultivation of marijuana should likewise be viewed as an oligopoly killer, consistent with the observations of Caulkins et al. and Reuter.

- Consideration of consumer interests should be a key component of any discussion about regulatory objectives. There are three important considerations. First, given the failure of the compulsory prohibition, voluntary compliance will be required for regulations to be successful. Second, consumers have two major and self-evident complaints about prohibition. They resent being subject to arrest and other sanctions. And, like any consumers, they do not like high prices.
- Government regulation typically has its greatest impact on ease of entry into a market and by its impact on supply, since regulation impacts price. In a regulated marijuana market, given the widespread availability of production technology, consumers are also potential suppliers. This dual role gives them considerable influence over market activity, influence comparable in importance to that of regulatory provisions and the rivalry of competitors.
- The influence of marijuana consumers will be an important determinant in the success or failure of any regulatory framework for marijuana. Porter explains that consumers, or buyers of products, act naturally in their own interests to force down prices and bargain for quality or services.
- Limiting market access and maintaining artificially high prices will enhance the power of buyers; they will seek other sources and/or grow marijuana for themselves and others.
- There is a simplifying assumption apparent here and one that often gets lost in academic review and/or policy analysis. This is the Jeffersonian proposition that people affected by government action should have a voice and a role in its formulation. In other words, the creation of regulations for the legalization of marijuana require input from and support of the producers and consumers it will regulate to ensure the voluntary compliance required to make new policies successful.
- The current regulatory model for marijuana is prohibition, in which criminal law prohibits manufacture, distribution, and possession of marijuana, and the resulting illegal market is regulated solely through the tool of risk assessment. Anyone willing to bear the risk of criminal prosecution may enter and participate in the market. The illegality of the market acts as price support. This is often explained in terms of a risk premium. However, it can also be understood as the result of an absence of consumer protections; sellers are free to overcharge consumers, who have no recourse. In other words, price fixing is also a characteristic of the black market. The result is that competition is great and prices are high.
- The second type of model under consideration provides for legalization of marijuana and will be referred to here as the interventionist model. This model has two forms: A government monopoly (such as with alcohol sales in 18 states) and a market with access determined by limited government licenses (such as the current legal market for marijuana in Washington state). It can be characterized in terms of limited market access, high prices, low levels of competition among merchants, and high levels of tax revenue. [...] In either form, the result is that competition will be low and prices will remain high.
- The third model, as proposed here, also provides for legalization but instead is based on an open, competitive market solution. In this model, aside from some perfunctory regulatory requirements, market entry is unrestricted and there will be a large number of producers; essentially, anyone or any firm that is able to enter the market and willing to bear the risks may participate. This includes, most importantly, individuals who wish to grow marijuana for their personal use and/or small-scale transfers to their friends and associates. This level of competition will result in substantially lower prices than the prices that exist in the current market or would exist under the interventionist model. The result is that competition will be high and prices will be low.
- In the interventionist model, the government, in effect, nationalizes the illegal market. The objective is to keep prices high but to lower the number of vendors and reallocate the transfer of wealth from criminal actors to the government and its licensees. The rationale for this model is threefold. First, the price of marijuana must be kept high in order to discourage consumption. Second, commercialization

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of marijuana must be prohibited in order to prevent commercial inducements to the number of consumers or the amount of consumption. Third, this market structure will maximize government tax revenue.

- The primary objective of the competitive model is more modest. The open market model seeks to destroy the illegal market through the process of creative destruction. This is a widely recognized economic doctrine introduced by Schumpeter in which new combinations of goods and services divert capital from existing markets to new market, and thus, the creation of new markets destroys the old ones. In this context, an open competitive market for marijuana's production and distribution will a) reduce and eliminate participation in the illicit market and b) provide a counterweight to monopolistic or oligopolistic commercial excess.
- The interventionist model seeks to influence the market through the use of three tools: central planning, tax policy, and consumer protection regulations.
- The competitive open market model seeks to influence the market through the use of competitive forces and, like the interventionist model, consumer protection regulations. Incorporating existing producers into the market through open access and personal cultivation not only co-opts participation in the illegal market but also enhances competition.
- The new regulated market must incorporate rather than replace production from the current market. Many current producers fear a corporate takeover of marijuana production that would force them out of the business. But if the objective of a regulated market is to eliminate or reduce the scope of the illegal market, there needs to be a place in the new market for old producers; otherwise they may continue production and undermine the regulated market in much the same way as they undermine prohibition.
- Small-scale production and trade in marijuana are not significant threats to tax revenue for two reasons. First, there will not be substantial profits to be realized from such activity because of relatively low prices. Second, most consumers will be attracted to the commercial market anyway. There will not be a high volume of untaxed commerce. Furthermore, the lack of a significant profit potential will mitigate against sales to minors and against sales by minors to their peers (see below). A large number of competitors will marginalize any benefits from marketing to minors, since there is no guarantee or certainty that such efforts will have significant impact on the marketer's own profits. [...] Finally, consumers will benefit from significant consumer savings compared to the prior prohibition framework, enhancing their voluntary participation and political support for this approach.
- The interventionist model suffers from the same constraints as prohibition. The inability to enforce production controls is why prohibition has failed and legalization is being considered. Legal market success will rely on voluntary compliance by current consumers and producers; this will not result by imposing a framework on the public. The government's ability to design, operate, and supervise a multi-billion dollar market is questionable on practical and philosophical grounds. On a practical basis, government regulation routinely faces the risks of regulatory capture and revenue addiction, making regulators and politicians not only promoters but targets for corruption as well. This will be a problem for any regulatory scheme. The stricter the controls, the more likely corruption, incompetency, or both will result.
- The interventionist model is, in effect, a proposal that bureaucratic nonspecialists service a market of resentful consumers and successfully compete with an up and running, unregulated, and profitable illicit market.
- Competition will be limited in this model because the rationing of licenses guarantees strong market shares for licensees. There will not be as great of an incentive to compete in terms of price, quality, and service in order to make a profit. This lack of responsiveness to consumers, along with high prices, will result in continued (and presumably) illicit home and small-scale production.
- Ethan Nadelmann, executive director of the Drug Policy Alliance, told Rolling Stone that "the people who may come to dominate this [new] industry are not necessarily the people who are a part of the movement". Mark Klieman told the Washington Post that the public interest and the goals of the

legalization movement are similar; it is the goals of the commercialization model that clash with the public interest.

Abridged Conclusions

- Betsy Woodruff from the National Review put it succinctly: "A big part of the problem is that the federal government has a law that it can't enforce". Any new regulatory regime for marijuana must pass the enforcement test. Continued prohibition of personal cultivation is unenforceable. This is not the only problem with using public policy to prop up the price of marijuana, regardless of rationale or objective.
- The benefits of legalization with respect for public safety are summarized well by Roffman: "I believe that prohibition's track record in protecting public health and public safety has been seriously deficient. Moreover, inequities in prohibition's implementation make evident it has been fundamentally flawed in terms of social justice. When the evaluation data begin to become available over the coming years, among the outcomes I hope to see, in contrast with what we have witnessed prior to legalization, are: fewer young people initiating marijuana use prior to age 21, fewer students struggling with school performance as a consequence of marijuana use, a smaller percentage of users becoming marijuana dependent, more of those who become dependent receiving effective treatment, fewer traffic accidents in which marijuana smoking is a contributing factor, and more accurate knowledge held by the public concerning marijuana's effects on health and behavior".
- Tax revenue should not be a primary objective of marijuana's legalization. It should, along with economic development, be viewed as a subsidiary benefit.
- Most marijuana users, the majority of the subculture associated with marijuana use, are resistant to a corporate oligopoly taking over control of marijuana production and distribution in the United States. It is time to enlist this community in the pursuit of the public interest. To this end, it is recommended that the ongoing discussion over an appropriate regulatory framework be expanded to include the issue of corporate social responsibility and the extent to which this can be augmented by many of the shared values of the existing subculture of marijuana users.

(vi.) Alex Kreit, "Marijuana Legalization and Nosy Neighbor States", Vol 58, Is 3, Boston College Law Rev. 1059, 2017.

Abstract

As more states proceed with marijuana legalization laws, questions have arisen about how to accommodate those states that wish to retain prohibition. For instance, in 2014, Oklahoma and Nebraska unsuccessfully sued Colorado based on the spillover effects that Colorado's marijuana legalization law had on its neighboring states. This article asserts that there are several reasons why state marijuana legalization laws are unlikely to have a large effect on neighboring states. First, marijuana is not a previously unobtainable good being introduced into the stream of commerce, as it is already available through the black market inexpensively. Second, legalization laws have a number of restrictions that make it very difficult for sellers to profit from exporting legally produced marijuana across state lines. Prohibition states may have reason to worry, however, that illegal marijuana growers will be better able to hide their operations in legalization states that allow residents to grow small amounts of marijuana for personal use, which in turn may increase illegal marijuana exports to neighboring prohibition states. Prohibition states can minimize this risk of increased marijuana flow by lobbying the federal government to establish rules that protect their interests.

Notable Findings

- After Californians approved the first modern medical marijuana legalization ballot measure in 1996, the federal government did all that it could to stop the law in its tracks. Drug Enforcement Administration (DEA) agents conducted armed raids of medical marijuana collectives and federal prosecutors sent some of the operators to prison with lengthy mandatory minimum sentences. The Department of

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Justice (DOJ) successfully litigated two medical marijuana cases all the way to the Supreme Court. In *United States v. Oakland Cannabis Buyers' Cooperative* in 2001, the Court held that federal anti-marijuana laws do not recognize a medical necessity defense. In *Gonzales v. Raich* in 2005, the Court held it was within the commerce power for Congress to criminalize intrastate possession and cultivation of small amounts of marijuana.⁵ Federal officials even threatened to yank the DEA prescribing license of any doctor that recommended medical marijuana, though the Ninth Circuit blocked that plan on free speech grounds.

- Throughout the 2000s, more and more states passed medical marijuana laws and marijuana stores started opening faster than the federal government could shut them down.⁷ By the time Colorado and Washington passed the first laws legalizing marijuana for all adult use in 2012, it was clear to most observers that the federal government was fighting a losing battle.⁸ It had the legal authority and resources to be a thorn in the side of the states, but it did not have the manpower to prevent states from implementing medical and recreational legalization laws.
- In late 2014, Oklahoma and Nebraska sued Colorado in the United States Supreme Court, invoking the Court's original jurisdiction over lawsuits between states. In their lawsuit, Nebraska and Oklahoma described the impact of Colorado's marijuana legalization law in dire terms, claiming it was a "direct assault on the health and welfare of Plaintiff States' citizenry." Oklahoma and Nebraska claimed that they had experienced "a significant influx of Colorado-sourced marijuana" following legalization and asked the Court to strike Colorado's law down under the Supremacy Clause. The Supreme Court declined to hear the case but its publicity has helped shine a light on an issue that has gone under-examined: the horizontal federalism implications of marijuana legalization.
- This article argues that as currently constituted, state marijuana legalization laws are unlikely to have anything more than a negligible effect on neighboring states. There are two main reasons for this. First, marijuana is already relatively inexpensive and easy to find in prohibition states. This is not a case of a previously unobtainable good being introduced into the stream of commerce. With the exception of people who live near the state border, most marijuana consumers in Nebraska will continue to get their marijuana where they always have: from the Nebraska black market. Second, state marijuana legalization laws all share a number of features that make it difficult for people to profit from exporting the product across state lines. Because of exacting regulatory oversight measures like seed-to-sale tracking, there is a very low risk that wholesale quantities of legally produced marijuana will leak into the black market.
- At the retail level, states strictly limit the amount of marijuana a person can buy to one ounce, with the exception of Maine where the limit is 2.5 ounces. [...] Given these retail limits, it would be very difficult for sellers to compete with black market prices by buying retail amounts of marijuana an ounce at a time in Denver and transporting it to Omaha. This is not to say the impact of current state legalization laws on marijuana use in neighboring states is zero. But there is little reason to believe it is or will be "substantial."
- According to Nebraska and Oklahoma's complaint, their police officers had seen "a significant influx of Colorado-sourced marijuana." The complaint did not provide a basis for this allegation or any data about seizures of Colorado-sourced marijuana. The closest the complaint got to spelling out the nature of the threat that Colorado marijuana posed was its allegation that Nebraska and Oklahoma police "encountere[d] marijuana on a regular basis as part of day-to-day duties," including during "routine stops of individuals who possess marijuana purchased in Colorado which, at the time of purchase, complied with [Colorado law]."
- Removing state penalties for marijuana possession and sale may make it harder to enforce prohibition, but only because the federal government can no longer rely on state resources to help it with the task. And refusing to help the federal government accomplish its goals cannot constitute an obstacle for preemption purposes because the anti-commandeering principle makes it unconstitutional for the federal government to conscript states into enforcing federal law.
- [Even] though the figures in the Rocky Mountain HIDTA report are contained in a chapter titled "Diversion of Colorado Marijuana," the report does not distinguish between Colorado marijuana that

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was legally grown but diverted and marijuana that was illegally grown. This is a critical flaw that renders HIDTA's findings effectively worthless. State legalization laws, including Colorado's, do not make it legal for any resident to grow an unlimited amount of marijuana without oversight; only state licensees who abide by detailed regulations designed to prevent diversion and ensure product safety can legally grow more than a personal use amount of the plant. Marijuana that was legally grown in Colorado but diverted can be properly attributed to Colorado's legalization law. Marijuana that was illegally grown in Colorado and shipped elsewhere cannot because it was against Colorado's legalization law to grow it. Yet, in the report, all of it is classified as "Colorado marijuana." The phrase seems designed to mislead readers into concluding that the 4.5 tons of Colorado marijuana interdicted between 2013 and 2015 was legally produced under Colorado's legalization law, then diverted, and then seized en route to other states. In reality, however, it seems likely almost all of the Colorado marijuana described in the Rocky Mountain HIDTA report was illegally grown, and so not a product of Colorado's legalization law.

- The report's anecdotal accounts suggest most of the Colorado marijuana interdicted by other states was as illegal to grow in Colorado as it would have been to grow in Nebraska or Oklahoma. None of the sixteen examples contained in a section of the report titled "A Few Examples of Interdiction," for example, claim that the interdicted marijuana was legally produced in Colorado. The report's silence on this point speaks volumes—if any of the seizures had involved marijuana that the police thought was legally grown in Colorado, surely that fact would have been noted. Also telling, in the report's examples in a separate section on investigations into Colorado marijuana, the only one to claim diversion of legally produced marijuana is of dubious quality.
- If Colorado's legalization law is not responsible for this phenomenon, then what is? Two possible explanations that have nothing to do with Colorado's law present themselves. First, after Colorado legalized marijuana, some police officers in neighboring states have been profiling cars with Colorado license plates in order to hunt for marijuana. Kansas police officers have gone so far as to argue (unsuccessfully) before the Tenth Circuit Court of Appeals that a driver's "status as a resident of Colorado" gave them cause to search his car "because Colorado is 'known to be home to medical marijuana dispensaries.'"
- Second, the increase in reported seizures of "Colorado marijuana" might reflect an increase in the reporting of seizures rather than an increase in actual seizures. The HIDTA report states that its data is derived from "interdiction seizures [that] are reported on a voluntary basis." It is possible that law enforcement groups have been taking greater care to report a higher percentage of their seizures of Colorado-sourced marijuana after legalization, perhaps in part because of encouragement from the Rocky Mountain HIDTA itself. In the first Rocky Mountain HIDTA report on marijuana legalization in Colorado in 2013, the group openly acknowledged that it had "contacted some law enforcement entities and requested voluntary reporting on those instances in which Colorado marijuana was seized in their jurisdiction."
- In fairness to the claim that state legalization laws impact neighbors, there have been credible reports of people taking personal use amounts of marijuana across state lines. It is not at all surprising that some of the tourists who visit a legalization state and buy marijuana there might take leftovers back home with them. Unlike the diversion of large quantities of marijuana for distribution, however, tourists returning to their state with small amounts of marijuana have an insignificant impact on marijuana use rates and black market prices.
- In sum, states that make marijuana legal are not introducing a previously unobtainable good into the stream of commerce, or even one that is especially hard to get. They are attempting to replace a vast existing illegal black market in their states with a legal market.
- Of course, black market operators face the threat of arrest and prosecution that also makes it hard for them to enforce contractual agreements, achieve the benefits of large-scale manufacturing processes, and so on. Over time, this should allow the legal market to undercut the black market even with heavy regulation and high taxes. For now at least, legally sold marijuana is priced similarly to the black

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market stuff. Until that changes, smuggling it into other states for sale would be a money loser, not a moneymaker.

- In comparison to letting businesses openly manufacture and sell marijuana, letting people grow small amounts of marijuana in their homes can seem like an insignificant component of state legalization laws. It would be tough to make a living out of growing six marijuana plants for export to other states, or even for sale locally. Growing marijuana “is much more difficult than most people understand,” not to mention resource intensive; “[t]he investment—in hydroponics, proper lighting, and humidity controls—can be substantial.” It would seem, then, that home marijuana cultivation would be left mostly to hobbyists, much like home-brewing by beer enthusiasts.
- There is little evidence that small marijuana homegrows that comply with state law have become a problem in the states that permit them. There is, however, reason to “worry that homegrowers may grow more marijuana than they are allowed and present an opportunity to divert product to illegal markets in Colorado or markets across state lines.”
- The apparent rise in illegal marijuana cultivation in states like Colorado begs the question: why should allowing people to grow small amounts of marijuana legally make it any easier to grow, say, sixty plants illegally? Growing marijuana in large amounts is still illegal after all. If anything, it might seem that legalizing the cultivation of small amounts would make life tougher for large-scale illegal growers. By freeing up resources that the police might have spent on arresting people for growing a plant or two, the police could put more time into investigating large-scale illegal growers.
- The reason legalizing small homegrows can help illegal growers “hide in plain sight” has a lot to do with search and seizure law. Once it is legal to grow six marijuana plants, information that someone is growing marijuana in a home will not be enough for the police to get a warrant to search the house. This is because evidence that someone is growing marijuana no longer gives the police probable cause to believe a crime has been committed. Instead, to get a warrant, the police will need some evidence of an illegal marijuana grow—a reason to think that the grower is cultivating more than six plants.
- Even if homegrow legalization has led to an increase in illegal production for export, the impact on black market prices is likely to be relatively small. It may be easier for illegal marijuana growers to evade detection in Colorado than in Nebraska and Oklahoma. They still risk arrest, however, and that risk is priced into the product before they send it out for distribution. Black market prices might still decline but not by nearly as much as they would if there were widespread diversion of legally produced marijuana.
- Illegal marijuana growing operations in legalization states show that the horizontal federalism implications of state marijuana legalization are not nearly as straightforward as Nebraska and Oklahoma would have it. The narrative that Colorado’s legalization law has flooded neighboring states with legally produced marijuana simply does not hold up. There is no evidence that wholesale quantities of legally produced marijuana have been smuggled into prohibition states on a widespread basis. And, given the economic dynamics and the regulations in place in legalization states, there is little reason to believe legal marijuana smuggling will become a significant problem anytime soon. To be sure, Nebraska and Oklahoma might still be justified in blaming Colorado’s legalization law for a rise in illegally produced Colorado marijuana coming across the border.
- If legally produced marijuana were being diverted from a legalization state, it might have an incentive to look the other way in order to collect the additional tax revenues. By contrast, illegal marijuana grow operations harm the states where the cultivation takes place—by causing property or environmental damage, for example—without providing much in the way of benefits.
- Importantly, for purposes of interstate relations, any increase in illegal marijuana grows in Colorado is as much a creature of other states’ prohibition laws and their inability to stifle demand for marijuana by their residents as it is of Colorado’s homegrow provision. If marijuana were legal nationwide or if prohibition states were able to effectively stifle demand for marijuana, the market for illegally produced marijuana would quickly disappear. The only reason it is lucrative for people to use Colorado homes to

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illegally grow large amounts of marijuana for transport and sale across the nation is that other states have not yet legalized production themselves.

Abridged Conclusions

- States with marijuana legalization laws have begun to worry some of their neighbors. This article argues that, as currently constituted, these fears are largely misplaced. As constructed, marijuana legalization laws make it unlikely that legally produced marijuana will be diverted to other states for sale.
- States that permit homegrowing may have, unintentionally, made it easier for illegal marijuana growers to hide in plain sight, thereby reducing the price of marijuana on the black market. Moreover, if legalization laws were not as strict as they are today, smuggling of legally produced marijuana into prohibition states could one day become widespread. Prohibition states that hope to prevent against this, however, are not well served by trying to turn back time. Barring a dramatic reversal in public opinion or a long-shot preemption ruling from the Supreme Court, state marijuana legalization laws are not going away.

IMPACT ON LAW ENFORCEMENT:

Police have discretion in enforcing the small gardens as a felony offense. While most agencies say that small gardens for adults are a low enforcement priority, they haven't supported efforts to formalize this policy. However, like legal possession, clear guides for police and the public about how small gardens are permitted saves state resources and encourages respect for law. Time and money saved from legalization was researched by the Drug Policy Alliance, "Before the passage of I-502, a single arrest and prosecution for the possession of marijuana cost the state an estimated \$1,000 to \$2,000 in police, prosecutor, defense attorney, and court expenses.viii In fact, the state spent over \$200 million on marijuana enforcement between 2000 and 2010.ix It is reasonable to infer that the state is now saving millions of dollars by no longer arresting and prosecuting low-level marijuana offenses." (18)

In King County, prosecutors have a clearly outlined diversion program for gardens of fewer than 12 plants (19). However, other jurisdictions have varied in the priority for enforcement and prosecution, with little distinction between small and larger grows. What seems like a small grow in one county might be considered a large one in another. A uniform policy helps police and the public know when a garden becomes a problem.

While marijuana legalization has a significant impact on arrests in Washington, with one comparison of arrest rates before and after legalization showing a 90% drop, racial disparities in enforcement remain (20). Researcher Mike Males observed "The forces that contribute to racial disparities under prohibition are clearly still in place after legalization." Cannabis arrest statistics for California in 2016 showed "Before and after legalization, nonwhite people were still arrested for marijuana-related crime at a rate greater than that for whites despite similar rates of use, with the disproportionate policing falling most heavily on black people. (21)

Washington's Association of Sheriffs and Police Chiefs (WASPC) annual report on crime in Washington combines all drug cultivation/manufacturing violations into one of two categories, drug violations and drug equipment violations. In 2016, marijuana arrests comprised about 15% of total drug arrests. Cultivation/manufacturing offenses make up 0.8% of all drug offenses. In drug equipment violations, cultivation/manufacturing makes up

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0.1% of arrests (22). A breakdown of cultivation/manufacturing offenses by drug isn't available, but one can conclude that cannabis cultivation alone is not a rampant offense in the state.

In reality no justice system is above abuse. Veteran Seattle Police officer Alex Chapackdee is on trial for trafficking hundreds of pounds of cannabis and boxes of cash across the United States (23). Two Kern County Sheriff deputies who had been part of cannabis eradication teams in California were just sentenced in federal court to probation and community service for selling confiscated pot from their department's evidence locker (24). These officers are not representative of all law enforcement, but they show that no system of controlling marijuana cultivation will be free from abuse.

The potential for abuse or diversion from marijuana eradication continues to exist, and racially disparate enforcement remains common. The solution should come from respecting rights and maintaining laws against diversion or reckless behaviors. Law enforcement knows these are tougher cases, but both they and the public will find them more worthwhile to close.

IMPACT ON YOUTH:

Cannabis is not harmless, just less harmful. I-502 included both age limits on possession and use, and money for prevention and education. The safety of minors is routinely cited as justification to prohibit cannabis gardens. However, parents are trusted to secure toxic plants, hazardous chemicals, flammable materials, animals, weapons, alcohol and other drugs in their home. Given that marijuana plants must be trimmed and cured before ingestion, one can't reasonably determine plants to be an immediate risk of youth access nor that parents are less able to secure and deter access by minors than these other materials.

In fact, a parent could garden Deadly Nightshade, Angel's Trumpet, or any number of toxic plants, as well as cactuses or thorny bushes. If that parent was negligent and allowed these plants (or chemicals accessible for their cultivation) to injure a child in their custody the state would be within it's rights to act to safeguard the child. There's no reason to believe similar investigations into endangerment or abuse couldn't be as successful in policing of reckless cultivation.

While further study is needed, the numbers we do have suggest that legal cannabis is not the amplifier of youth use once feared. In Washington, we've found youth use either unchanged or slightly declining. In the Washington Healthy Youth Survey "The results from the 2016 survey, which was taken by more than 230,000 students, reveal that marijuana usage rates for 8th, 10th, and 12th graders have remained basically unchanged for the past decade." (25) Other reporting on the survey results noted "[In] Spokane, the number of teens reporting marijuana use actually dipped lower than its been since at least 2006." (26)

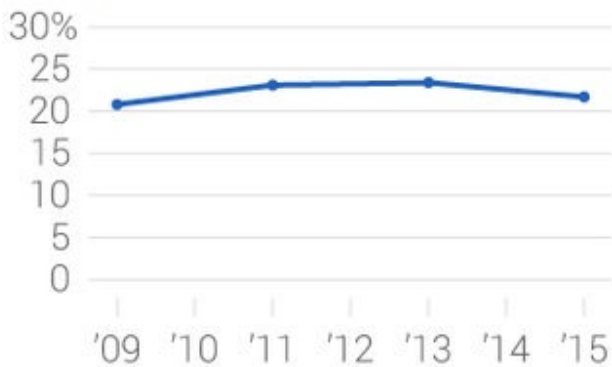
In Colorado, "According to preliminary data from the state's biennial Healthy Kids Colorado Survey, in 2013 - the first full year the drug was legal for adults 21 and older - 20 percent of high school students admitted using pot in the preceding month and 37 percent said they had at some point in their lives. The survey's 2011 edition found 22 percent of high school students used the drug in the past month and 39 percent had ever sampled it." (27) Their 2015 survey found "21.2 percent of Colorado high school students surveyed in 2015 had used marijuana during the preceding 30 days, down from 22 percent in 2011, the year before voters statewide approved recreational cannabis use by adults 21 and older. (28) This aligns

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with the National Survey on Drug Use and Health which “[Showed] that 18.35 percent of Coloradans ages 12 to 17 had used marijuana in the past year in 2014 or 2015, down sharply from 20.81 percent in 2013/2014. That works out to roughly a 12 percent drop in marijuana use, year-over-year.” (29)

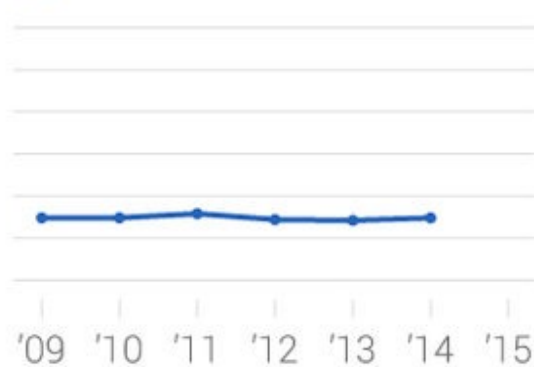
Percentage of Current Marijuana Use Across Age Groups

All High School Students



Source: CDC Youth Risk Behavior Survey

Ages 12-17

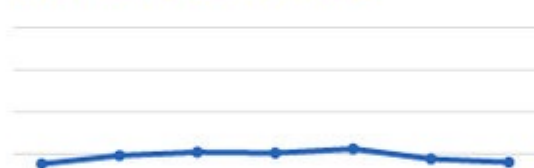


Source: SAMHSA National Survey on Drug Use and Health

High School Seniors



8th, 10th & 12th Grade



**Ethan Rosenberg for USN&WR “Another survey finds legal pot hasn’t sent teen use higher”
6/9/2016**

Nationally, cannabis use by teens has declined or remained unchanged. The 2015 Monitoring the Future national survey of drug use found, “Annual marijuana prevalence among 8th graders increased in use from 2007 to 2010, decreased slightly from 2010 to 2012, and then leveled. Among 10th graders, it increased somewhat from 2008 to 2013 and then leveled or declined some after that.¹¹ Among 12th graders, use increased from 2006 to 2011, leveled from 2011 to 2013, and held level through 2015. (None of the 1-year changes in 2015 was significant.) (30)”

That same year the Youth Risk Behavior Surveillance as reported by the Centers for Disease Control & Prevention (CDC) found “The prevalence of current marijuana use increased during 1991–1995 (14.7%–25.3%) and then decreased during 1995–2015 (25.3%–21.7%). The prevalence of current marijuana use did not change significantly from 2013 (23.4%) to 2015 (21.7%).” (31)

Similar federal surveys for last year found “The percentage of adolescents [aged 12-17] in 2016 who were current marijuana users was lower than the percentages in most years from

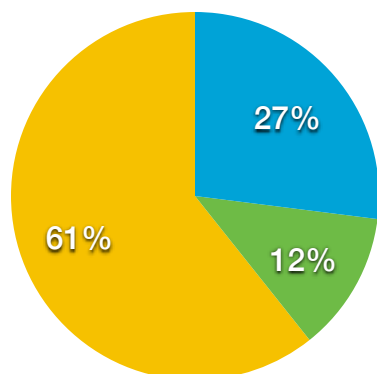
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2009 to 2014, but it was similar to the percentage in 2015.” as well as “The percentage of young adults who were current marijuana users in 2016 was higher than the percentages between 2002 and 2013, but it was similar to the percentages in 2014 and 2015.” (32) That same survey noted that monthly teen marijuana use was at the lowest point in more than 20 years.

More generally, a study of nationwide cannabis use in the journal *Addiction* found “Marijuana policy liberalization over the past 20 years has certainly been associated with increased marijuana use; however, policy changes appear to have occurred in response to changing attitudes within states and to have effects on attitudes and behaviors more generally in the U.S. (33)”

To summarize, the fears of legal cannabis having a dramatic impact on youth use have proven overblown. The state should not ignore risks of cannabis abuse on developing bodies. However, it should regulate such risk posed in relation to the normal responsibilities a parent/guardian has in safeguarding a residence from potential dangers.

Consumer Survey: How would you grow?



● Indoor ● Outdoor ● Both

IMPACT ON LOCAL/TRIBAL ZONING:

Along with the benefits of home growing, there are areas where regulation is likely including limits on rental properties, extraction methods, or public visibility of outdoor gardens. Tribal and local officials have a critical role to play in seeing these policies implemented rationally. Updating compacts between Washington and Native Tribes for personal grows on tribe-controlled land may be necessary. Because outdoor cultivation is both season-dependent and generally more environmentally friendly than indoor cultivation, local governments or tribes would do well to also consider environmental implications of any outdoor regulation.

Jurisdictions in Washington which have been slow to implement, or outright banned commercial cannabis will find themselves in a difficult position if they fail to regulate small grows by adults. Colorado has all but banned outdoor marijuana growing on one’s property, pushing all legal grows inside. An outdoor ban is an extreme most states haven’t followed. Stricter requirements for outside grows make sense in dense population centers, but become enforcement burdens for policing rural areas with matching diligence.

Concerns about excessively large outdoor cannabis plants are exaggerated, some strains grow tall and thin, others short and bushy, without ideal conditions for the specific strain, plants rarely grow taller than an adult. Local government should consider existing zoning, environmental impacts, and public sentiment on any outdoor growing restrictions.

IMPACT ON LEGAL CANNABIS INDUSTRY:

Because other states with legal cannabis and home growing still manage to sell hundreds of millions of dollars of cannabis and employ tens of thousands nationwide it’s unlikely that personal cultivation practices will noticeably hinder the commercial industry. In

PERSONAL CULTIVATION OF CANNABIS

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“Should I Buy or Should I Grow?” Belackova asserts that as cannabis access becomes safer and more available, fewer people want to invest the time and money of growing their own. Anyone can grow this weed, but having any quality or quantity takes time, material, and work.

Home grows are less about large market capture, or new customer bases than respecting privacy and focusing resources on the most dangerous grow operations. The benefits of offering a traceable, accountable system for seed and clone sales will help policy makers better estimate small-scale cultivation statewide. There remain opportunities for businesses able to meet needs of growers to benefit through sales of seeds and plant clones by the licensees, or ancillary gardening/lighting materials, or contracting.

In Colorado, “In its first year revenue hit \$699.2 million, followed by \$996.2 million the second year.” (34) Estimates for 2016 put sales revenue at \$1.3 billion, producing \$200 million in taxes for the state. This from a state allowing personal cultivation. The risk of significant decline in revenue due to personal growing is unlikely due to the establishment of commercial markets prior to recreational cultivation.

In Massachusetts, their 2016 home growing law has already boosted the state's hydroponics industry. One shop owner says 10 customers a day have questions about home growing. A different hydroponics company opened a new location to address increased demand. Also, the Northeastern Institute of Cannabis, a cannabis industry trade school, expanded their curriculum to include a home growing course (35).

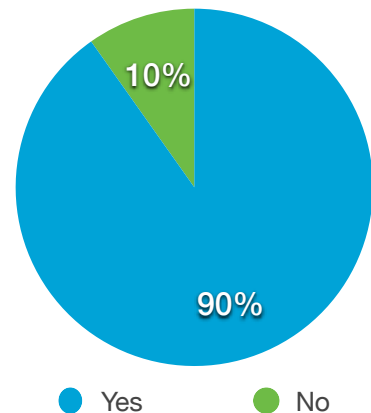
Similarly, legalizing personal cultivation while maintaining prohibitions on seed/immature clone sale is an invitation for criminal elements to sell to adults. Any policy changes should identify which licensees can sell these products and under what limits. This can capture existing home grows and aide regulators in tracking quantities and points-of-sale helping identify diversion and estimate size and geographic distribution of the practice. This does little to capture people determined not to buy from legal retailers. Only time and opinion of the legal market will change that. But because we've waited to formalize small-scale cultivation until retailers have already established we're likely to see fewer first-time growers.

IMPACT ON MEDICAL MARIJUANA PATIENTS:

With the previously identified 0.5-0.9% of Washington's population growing their own cannabis in 2014, and the U.S. Census estimating a population of 7.054 million for that year we can loosely estimate a personal cultivating population between 35,000 and 64,000. It's likely a significant portion of that population were medical marijuana patients.

With increased regulations and limits put on medical gardens and cooperatives by SB5052 in 2015, several patients/caregivers are looking to home growing as a means to supplement their need for cannabis in amounts beyond the recreational adult limit, or quantities

Consumer Survey: Would you shop at WSLCB licensed marijuana retail stores if given the legal opportunity to grow for yourself?



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that would be prohibitively expensive, even with the tax break of being registered. However, during a home grow hearing in the state house this year, one lawmaker discussed patient needs as being a separate issue from recreational grows. (36) This is a reasonable observation, but ignores the civil liberties concerns of recreational consumers.

The truth is the registry for medical cannabis has a history of questionable data security, gaps in management, and lingering evidence for the potential of federal probing. Since combining medical cannabis laws with the state's recreational industry in 2015, the agencies tasked with maintaining patient or licensee privacy have experienced serious leaks. In February of last year the state's health care authority improperly handled 91,000 Medicaid clients personal information, losing birth dates, social security numbers, and medical information. (37) The following June "The Washington State Liquor and Cannabis Board has made an incredibly embarrassing mistake: the accidental disclosure of a bunch of sensitive personal data on pot license applicants." (38)

There have also been difficulties in managing the rollout of SB 5052 into stores beyond the agencies tasked with managing patient information. Licensees were unfamiliar with how to enter patients into the database and many endorsed stores stocked no medically compliant products after Washington allocated \$2.4 million to establish the database (39). A state estimate of medical marijuana patients assumed there were roughly 90,000 before SB5052 passed in 2015, as of August 1st, only 24,000 patients registered in the database (40). The majority of medical patients chose to avoid registry with the state. A breakdown of authorized patient's justifications doesn't exist, but concern over how personal information would be handled is a reasonable assumption.

The federal government has a poor record of respecting state marijuana policies. Attorney General Jeff Sessions has been clear in his opposition to cannabis legalization (41). Even laws restricting federal interference in state medical cannabis laws have had their legitimacy questioned by President Donald Trump (42). Recently, law enforcement groups approached other states' regulators requesting patient information: "California and Nevada were contacted by [National Marijuana initiative, an offshoot of the federal High Intensity Drug Trafficking Area], while Oregon was contacted by a regional HIDTA task force. Both were seeking demographic data about the state's registered medical marijuana cardholders. Additionally, the program contacted health officials in Massachusetts, Connecticut, Rhode Island, Maine and Vermont," (43)

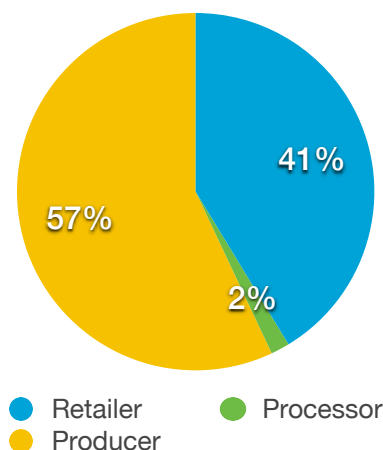
As federal law adapts to allow state marijuana policies beyond prohibition, medical cannabis databases will be a less threatening option for patients. Until then, its unwise to expect recreational growers to be better served by a similar plan.

IMPACT ON OTHER ISSUES:

Further reforms that can stabilize home growing laws include impacts on residences, allowing individual contracting for cannabis lab testing, legal purchase of cannabis seeds or immature clones, or coordination with utilities providers to address increased energy use by indoor gardens.

In 2012, Evan Mills, a Lawrence Berkeley National Laboratory researcher estimated roughly 1% of U.S. electricity use was for indoor cannabis. Mills also observes: "For legally

**Consumer Survey:
Where would you prefer
to get your seeds or
clones?**



sanctioned operations, the application of energy performance standards, efficiency incentives and education, coupled with the enforcement of appropriate construction codes could lay a foundation for public-private partnerships to reduce undesirable impacts of indoor Cannabis cultivation.” (44)

The environmental impact of cannabis grows is often cited as a health concern for individuals, buildings, or public lands. The most egregious examples are always larger operations, and these operations won’t end because of home growing. However, most are not representative of personal cultivation.

A study of indoor marijuana grow operations by National Jewish Health and the Colorado Drug Investigators Association noted serious health concerns in the illegal grows they busted but also found “The MGO’s that did not show elevated mold spore levels generally had smaller numbers of plants with the exception of MGO#2 and MGO#

9. There were four MGO’s that had elevated levels of mold spores but only a few plants. Two of these grows, MGO 1C and 1D were in duplexes with other larger grows were present that may have increased the spore counts for these smaller grows.” (45)

In Colorado, utility provider Xcel Energy is testing a rebate program to encourage growers to replace their older lighting equipment with more efficient models. While the program is aimed at commercial grows, Xcel spokesman Gabriel Romero hopes the program will be a model other utilities can use. One issue is the emissions of greenhouse gases by grows. The city of Boulder addressed this through rules that pot growers use renewable energy (46). Legal personal cultivation can also increase energy efficiency in small grows by removing one cause of indoor cultivation, the need to keep even a few plants hidden. A developed cultivation policy takes into account utilities providers and home contractors’ roles in educating home owners trying to grow indoors about energy use or green house kits.

While large-scale indoor cultivation can damage residences’ interior with humidity, mold, or fire hazards due to amateur wiring. However, as you scale down the grows, you scale down the risks. Marcia Waters, director of Colorado’s Division of Real Estate confirms that homes with a few cannabis plants are unlikely to suffer the most extreme effects (47). This practice was exaggerated in Colorado in part due to medical marijuana laws which allow up to 99 plants until earlier this year when they were limited to 12 plants per residence (48).

The cost of grow set up varies depending on the equipment and time the person commits but a general rule of thumb is that outdoor growing is cheaper but seasonal, while you pay much more to get the same quality plant indoors. Oregon estimates for start up costs range from about \$200 for an outside grow to roughly \$1000 for an effective indoor grow (49). This investment for a chance to have cannabis months later is another reason “Should I buy or should I grow?” suggests for lower personal cultivation in places with legal access.

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Previous bills had opened up licensed testing laboratories to allow individuals to contract for testing samples from personal grows. This can be crucial for medical patients, but is a sensible tool for any adult cultivator to learn about their plant genetics, results of growing products or techniques. It also expands service offerings of those businesses.

COMPARISON TO OTHER NONCOMMERCIAL RESIDENTIAL LAWS:

Washington may not be ideal for tobacco agriculture, but no state law prohibits personal tobacco cultivation. State law does prohibit tobacco sale without proper licensing (50). Similarly, while home brewing of alcohol was not permitted in Washington following prohibition in the early 20th century, cannabis is safer to produce and use than alcohol. Repeating this pattern for cannabis offers no benefit to citizens or the state. As previously noted, most legal cannabis states had no gap between legalization of adult possession and legal cultivation.

Gary Glass, director of the American Homebrewers Association points out that in the decades following alcohol prohibition the beer industry consolidated into only 50 breweries nationally, all producing light lager. Glass further notes: "There could potentially be a direct correlation between what happened with home brewing and craft brewing. If commercial cultivation is allowed but home cultivation is not, there could be a homogenization of what's available to consumers." (51)

Regulation of non commercial behavior in one's home is rare in Washington state. The few exceptions on Washington's Department of Licensing (DOL) include birth, death, and marriage licenses, an endorsement for underground storage tanks on private property, alien firearms license, recreational fishing license (which may be for public water sources), or registration for some pesticides use (52). Washingtonians are even exempt from asbestos removal requirements (53).

Personal cultivation in other jurisdictions tends to be firmly regulated outside the home, and minimally regulated within it through limits set by policymakers. Evaluating existing licensing and permitting suggests this is consistent with how Washington law treats the vast majority of noncommercial and nonviolent private behavior.

REFERENCES:

- (1) Armentano, Paul, National Org. for the Reform of Marijuana Laws, "Marijuana: Primer", 1/29/2013, Retrieved from: http://norml.org/pdf_files/NORML_Marijuana_A_Primer.pdf .
- (2) Wash. Rev. Code, § 9A.20.021, § 69.50.401, § 69.50.430.
- (3) State of Wash., Wash. State Patrol (2008), "Crime & Safety - Marijuana Eradication", Retrieved from: <http://www.wsp.wa.gov/crime/hotline.htm> .
- (4) U.S. Dept. of Justice, "Northwest Nigh Intensity Drug Trafficking Area Drug Market Analysis 2008", National Drug Intelligence Center, June 2008, Retrieved from: <https://www.justice.gov/archive/ndic/pubs27/27505/27505p.pdf> .
- (5) U.S. Dept. of Justice, "Rocky Mountain High Intensity Drug Trafficking Area Drug Market Analysis 2008", National Drug Intelligence Center, June 2008, Retrieved from: <https://www.justice.gov/archive/ndic/pubs27/27511/product.htm> .
- (6) Exec. Office of the President, "High Intensity Drug Trafficking Areas Program Report to Congress," Office of National Drug Control Policy, June 2010, Retrieved from: https://obamawhitehouse.archives.gov/sites/default/files/ondcp/policy-and-research/hidta_2010.pdf .

WASHINGTON NORML

- (7) Gholipour, Bahar, "Where Americans Smoke and Grow Marijuana (Maps)", 11/5/2014, Retrieved from: <https://amp.livescience.com/48606-marijuana-maps-of-united-states.html> .
- (8) Cole, James, Department of Justice Office of the Deputy Attorney General, "Guidence Regarding Marijuana Enforcement", 8/29/2013.
- (9) Wash. State Senate Committee Services, "A Legislator's Guide to Washington's Marijuana Laws", 11/9/2016, Retrieved from: http://leg.wa.gov/Senate/Committees/CLS/Documents/SCS_Guide_to_WA_Marijuana_Laws.pdf .
- (10) Wash. Const. art. I, §7.
- (11) Johnson, Charles W. and Scott P. Beetham, "THE ORIGIN OF ARTICLE I, SECTION 7 OF THE WASHINGTON STATE CONSTITUTION", Seattle University Law Review, Vol. 31, 2008.
- (12) Concerning the possession and transfer of marijuana, marijuana plants, useable marijuana, marijuana-infused products, and marijuana concentrates, HB1212, 2017-18 Biennium, Wash. Legislature, 2017.
- (13) Instituto de Regulación y Control del Cannabis, "Cultivo doméstico de cannabis psicoactivo", 2014, Retrieved from: <http://www.ircca.gub.uy/cultivo-domestico-de-cannabis-psicoactivo/> .
- (14) Government of the Netherlands, "Toleration policy regarding soft drugs and coffee shops", Accessed: 9/22/2017, Retrieved from: <https://www.government.nl/topics/drugs/toleration-policy-regarding-soft-drugs-and-coffee-shops> .
- (15) "Policy Directives and Resolutions for Consideration", 2017 NCSL Legislative Summit, Boston, MA, 8/7/2017.
- (16) Gurman, Sadie, "Sessions' marijuana task force report gives him no ammo to go after legal states", The Associated Press, 8/4/2017, Retrieved from: <http://www.thecannabist.co/2017/08/04/sessions-marijuana-task-force-report/85436/> .
- (17) Lynch, Sarah, "Attorney General Sessions says marijuana still illegal", Reuters, 9/20/2017, Retrieved from: <https://www.reuters.com/article/us-usa-justice-marijuana/attorney-general-sessions-says-marijuana-still-illegal-idUSKCN1BV2OU> .
- (18) "Status Report: Marijuana Legalization in Washington After 1 Year of Retail Sales and 2.5 Years of Legal Possession", Drug Policy Alliance, July 2015, Retrieved from: http://www.drugpolicy.org/sites/default/files/Drug_Policy_Alliance_Status_Report_Marijuana_Legalization_in_Washington_July2015.pdf .
- (19) "Filing and Disposition Standards" King County Prosecuting Attorney's Office, §21 (B)(11)(b)(ii), Revised May 2016, Retrieved from: <http://kingcounty.gov/~media/depts/prosecutor/documents/2016/fads-may-2016.ashx?la=en> .
- (20) Humphries, Keith, "Pot legalization hasn't done anything to shrink the racial gap in drug arrests", The Washington Post Wonkblog, 3/21/2016.
- (21) Roberts, Chris, "California Is Still Arresting Too Many People of Color for Cannabis", 8/22/2017, Retrieved from: <https://www.leafly.com/news/politics/california-is-still-arresting-too-many-people-of-color-for-cannabis> .
- (22) Smith, Joan, et al., "The Crime In Washington 2016 Annual Report", Washington Assoc. of Sheriffs and Police Chiefs, September 2016, Retrieved from: <http://www.waspc.org/assets/CJIS/2016%20crime%20in%20washington.small.pdf> .
- (23) Carter, Mike "Seattle police officer charged in large coast-to-coast pot-smuggling operation", The Seattle Times, 5/8/2017.
- (24) Downs, Ray, "No prison time for California cops who sold drugs they confiscated", United Press International, 8/7/2017.

WASHINGTON NORML

- (25) Loria, Keving, “New data shows that teens aren't using marijuana more after it's been legalized”, Business Insider, 3/22/2017 Retrieved from: <http://www.businessinsider.com/washington-state-survey-shows-marijuana-legalization-didnt-affect-teen-use-rates-2017-3> .
- (26) Criscione, Wilson, “After legalization, Spokane teen pot use lowest it's been in at least a decade”, Inlander, 3/15/2017, Retrieved from: <https://www.inlander.com/Bloglander/archives/2017/03/15/after-legalization-spokane-teen-pot-use-lowest-its-been-in-at-least-a-decade> .
- (27) Nelson, Steven, “Pot Use Among Colorado Teens Appears to Drop After Legalization”, US News & World Report, 8/7/2014, Retrieved from: <https://www.usnews.com/news/articles/2014/08/07/pot-use-among-colorado-teens-appears-to-drop-after-legalization> .
- (28) Gorman, Steve, et al., “Colorado’s Teen Marijuana Usage Dips after Legalization”, Scientific American, 6/21/2016, Retrieved from: <https://www.scientificamerican.com/article/colorado-s-teen-marijuana-usage-dips-after-legalization/> .
- (29) Ingraham. Christopher, “After legalization, teen marijuana use drops sharply in Colorado”, The Washington Post Wonkblog, 12/21/2016. Retrieved from: <https://www.washingtonpost.com/amphml/news/wonk/wp/2016/12/21/one-of-the-greatest-fears-about-legalizing-marijuana-has-so-far-failed-to-happen/> .
- (30) Johnston, L. D., et al., “Monitoring the Future national survey results on drug use, 1975-2015: Overview, key findings on adolescent drug use.”, Ann Arbor: Institute for Social Research, The University of Michigan., 2016, Retrieved from: <http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2015.pdf> .
- (31) Surveillance Summaries / Vol. 65 / No. 6 June 10, 2016 Page 23, youth risk behavior surveillance <https://www.scribd.com/doc/315268053/2015-YRBS-Results>
- (32) Ahrnsbrak, Rebecca et al, “Key Substance Use and Mental Health Indicators in the United States: 2016 National Survey on Drug Use and Health”, Substance Abuse and Mental Health Services Administration, Sept 2017, Retrieved from: <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.htm#summary> .
- (33) Kerr, William, et al., “Trends and age, period and cohort effects for marijuana use prevalence in the 1984 to 2015 US National Alcohol Surveys”, Addiction, 9/12/2017, DOI: 10.1111/add.14031.
- (34) Williams, Trey, “Marijuana tax revenue hit \$200 million in Colorado as sales pass \$1 billion”, MarketWatch, 2/12/2017, Retrieved from: <http://www.marketwatch.com/story/marijuana-tax-revenue-hit-200-million-in-colorado-as-sales-pass-1-billion-2017-02-10> .
- (35) Haddadin, Jay, “Home growers in Mass. experimenting under new marijuana law”, Daily News WCVB 5, 1/7/2017.
- (36) TVW, 1/23/17, “House Commerce & Gaming Committee”, Retrieved from: www.tvw.org/watch/?clientID=9375922947&eventID=2017011259&eventID=2017011259&autoStartStream=true .
- (37) Press Release, “State notifies 91,000 Apple Health (Medicaid) clients of data breach by Health Care Authority employee”, Washington State Health Care Authority. 2/9/2017.
- (38) Coughlin-Bogue, Tobias, “The State Accidentally Released a Boatload of Personal Data on Pot License Applicants”, The Seattle Stranger SLOG, 6/13/16.
- (39) Sailor, Craig, “Medical pot going through bumpy transition”, The Olympian, 7/15/16.
- (40) Harshman, Melissa, “Merging of marijuana markets gets mixed reviews”, The Columbian, 8/1/2017.
- (41) Blake, Andrew, “Jeff Sessions says he’s ‘surprised’ Americans aren’t embracing his anti-marijuana stance”, The Washington Times, 4/13/2017.
- (42) Olorunnipa, Toluse, “Trump Spurns Congress as He Signals Medical Marijuana Fight”, 5/5/2017, Retrieved from: <https://www.bloomberg.com/news/articles/2017-05-05/trump-may-ignore-congressional-protections-for-medical-marijuana> .

WASHINGTON NORML

- (43) Ferner, Matt, “Federal Requests For Patient Info Raise Red Flags In States That Allow Medical Pot Use”, 9/12/2017, Retrieved from: http://www.huffingtonpost.com/entry/federal-requests-for-patient-info-raise-red-flags-in-states-that-allow-medical-pot-use_us_59b85c78e4b0edff97175dea?ncid=engmodushpmg00000003 .
- (44) Mills, Evan, “The carbon footprint of indoor Cannabis production”, Energy Policy, Iss. 46, Elsevier Ltd., 4/17/2012.
- (45) Martyny, John W. et al., “Health Effects Associated with Indoor Marijuana Grow Operations”, Div. of Environmental and Occupational Health Sciences, Dept. of Medicine, National Jewish Health, 2012.
- (46) Howland, Ethan, “This is the grid. This is the grid on legalized marijuana. Any questions?”, 2/27/2014, Retrieved from: <http://www.utilitydive.com/news/this-is-the-grid-this-is-the-grid-on-legalized-marijuana-any-questions/233103/> .
- (47) McGhee, Tom, “Marijuana grows leaving more Colorado homes filled with mold”, The Denver Post, 7/31/2017.
- (48) Heuberger, Brian, “Colorado reduces marijuana growing limits on residential properties”, 4/5/2017, Retrieved from: <https://coloradopolitics.com/colorado-reduces-marijuana-growing-limits-residential-properties/> .
- (49) Crombie, Noelle, “Want to grow your own marijuana? Here is how to get started in Oregon”, The Oregonian/OregonLive, 6/27/2016, Retrieved from: http://www.oregonlive.com/marijuana/index.ssf/2015/06/planning_to_grow_your_own_mari.html .
- (50) Wash. Rev. Code, § 70.155, § 26.28.080, Wash. Admin Code, Title 314-10.
- (51) Warner, Joel, “Marijuana Legalization Is Leaving Home Growers Without a Pot to Grow In”, 8/11/2016, Retrieved from: https://motherboard.vice.com/en_us/article/gv5wpq/marijuana-legalization-is-leaving-home-growers-without-a-pot-to-grow-in .
- (52) Wash. State Dept. of Licensing, “List of Licenses”, Retrieved from: <http://www.dol.wa.gov/listoflicenses.html?fldt> .
- (53) Wash. State Dept. of Labor and Industries, “Asbestos Removal Requirements”, Retrieved from: <http://www.lni.wa.gov/TradesLicensing/LicensingReq/Asbestos/default.asp> .