



Photo by Gonzalo G. Userra

“The Last March With Illegal Marijuana,” which took place on the day the Uruguayan Senate voted on the Marijuana Regulation Law.

## DRUGS

# The “10 Ps” of Marijuana Legalization

By Beau Kilmer

### Setting the Stage

Up and down the Western Hemisphere, marijuana policy is a growing topic of discussion, and laws are starting to change.

In 2014, retail marijuana stores opened in the states of Colorado and Washington, where anyone over 21 years old can purchase a wide variety of marijuana products: buds, baked goods, candies, drinks, lotions, e-cigarettes infused with hash-oil solutions, etc. Similar stores are expected to open in Oregon and Alaska in the upcoming year. While marijuana remains illegal under U.S. federal law, the Obama administration has decided not to block these efforts.

At the southern end of the hemisphere, Uruguay became the first country in the world to remove its prohibition on marijuana in late 2013. While the new law allows users to

grow their own, join a cooperative, or purchase marijuana from a participating pharmacy — those who want to legally obtain marijuana must choose one of these options and register with the government — it remains unclear when the pharmacy option will be made available.

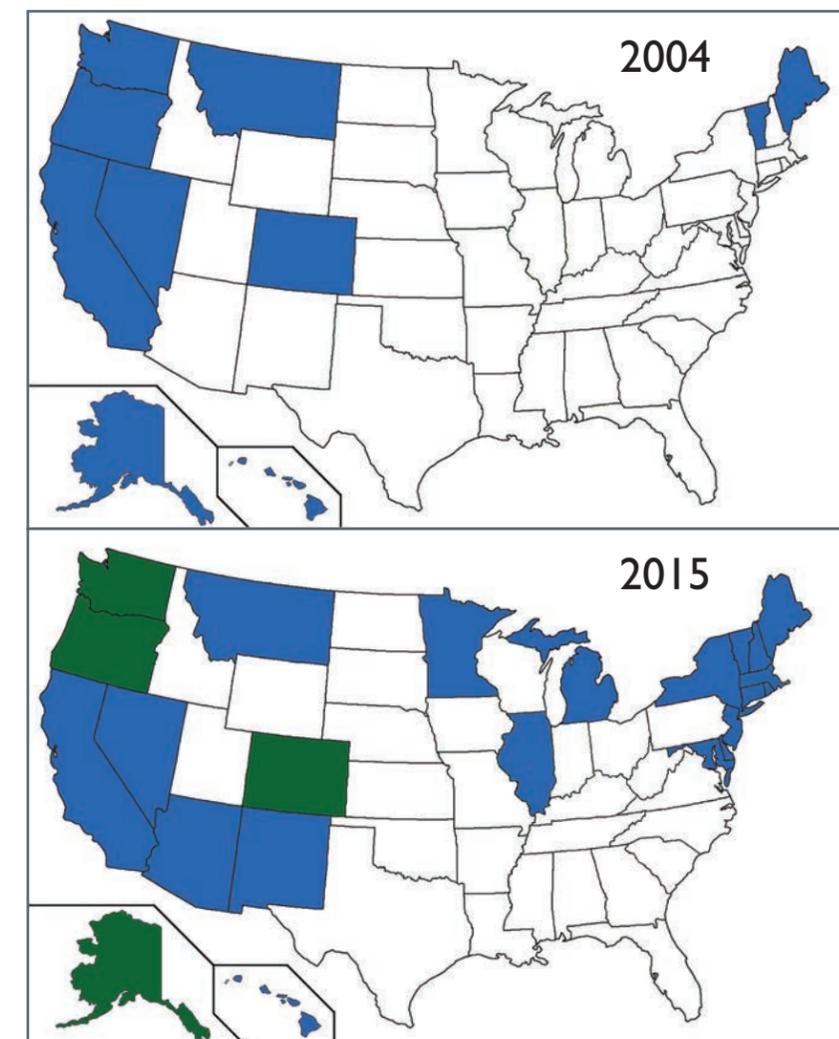
In addition, both Colombia and Costa Rica have bills in Congress that would make allowances for medical marijuana. In February, Jamaica passed a law to decriminalize personal possession and create a regulatory system for supplying marijuana for medical and religious purposes. In April, the Chilean congressional health committee approved a bill to legalize home marijuana production for medical and nonmedical purposes. The bill has now moved to the lower house of the Chilean Congress.

Legalizing marijuana for nonmedical purposes is especially controversial, with many arguments made

by advocates on all sides of the debate. For example, those seeking to legalize marijuana hope to diminish the black market and the violent crime that can be associated with the trade, depending on the country. They also want less money going to criminal organizations and more to governments via taxation; however, the revenue aspect has been much more a topic of discussion in the United States than in Uruguay. Legalization proponents do not want people arrested and incarcerated for marijuana use, often saying that it does more harm than good and that it is an inefficient use of criminal justice resources. Finally, many advocates argue it is hypocritical to allow alcohol to be legally consumed but not marijuana.

Those on the other side of the debate worry that legalization will increase marijuana consumption — especially among youth — because of increased availability, reduced stigma, lower prices, and marketing (when it is allowed). Marijuana is not a harmless substance, and its consumption is correlated with adverse outcomes (e.g., high school drop-out, mental health disorders); however, it is often hard to prove that marijuana use causes those outcomes. There is, on the other hand, clear causal evidence linking marijuana use to accidents, cognitive impairment during intoxication, and anxiety and panic attacks that sometimes lead to emergency-room visits. Persistent heavy users run the risk of becoming dependent and also suffering from bronchitis. There is also strong evidence linking heavy marijuana use with psychotic symptoms, cardiovascular disease, and testicular cancer. We know very little about the health consequences — both harms and benefits — of the new marijuana products that are proliferating in places that have legalized.

Since no jurisdictions had removed the prohibition and legalized production before these experiments (not even the Netherlands goes this far), it is difficult to project the consequences. Further, legalization is not a binary choice; several decisions need to be made that will ultimately shape whether legalized marijuana ends up being good or bad for society.



■ Legal for medical use ■ Legal for medical & recreational use

Evolution of marijuana laws by state. (Sources: Norml and governing.com.)

Based on insights obtained from a series of research collaborations and through consulting with various government entities, I have identified 10 important choices confronting jurisdictions that legalize. Conveniently, they all begin with the letter “P.” (This section closely follows and extends two of my essays published in the *American Journal of Drug and Alcohol Abuse* and *USA Today*.)

### The 10 Ps

**1. Production.** Prohibition dramatically raises the costs of producing and distributing agricultural products. The costs are inflated because suppliers need to be compensated for the risk of arrest, incarceration, theft, and sometimes violence. There are also inefficiencies associated with having to operate covertly in relatively small spaces. Jurisdictions considering alternatives to prohibition need to decide on the number of producers (e.g., permit three facilities or 300?), the amount of production allowed,

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and the location where it can be produced (indoors or outdoors). They also need to decide on the types of products that can be sold in the market.

**2. Profit motive.** Research suggests that roughly 80% of marijuana expenditures in the United States are made by 20% of the users. These are the heavy users who report using marijuana on a daily or near-daily basis. If a profit-maximizing firm wants to make serious money in the marijuana market, they will have to focus on creating and maintaining a large stock of heavy users. There are also concerns that a for-profit industry and its lobbyists will fight against regulation and taxation.

Thus, serious thought should be given to whether marijuana should be supplied by profit-maximizing firms. Besides home production and cooperatives, other options include limiting the market to nonprofit organizations or "for-benefit corporations," which typically focus on the triple-bottom line of people, planet, and profits. Jurisdictions could also limit supply to a state-run monopoly, although that option does not receive much attention in the United States because of the federal prohibition of marijuana.

**3. Promotion.** If a jurisdiction is going to allow marijuana sales, it will need to decide whether to allow advertising. Uruguay banned marijuana marketing, and other jurisdictions have this option; this is not the case in the United States. While regulators in Colorado and Washington have attempted to limit advertising, they cannot ban it because that would be inconsistent with the doctrine of "commercial free speech" in the United States. As my frequent collaborator Jonathan Caulkins noted in an essay in *The Washington Monthly*, "Most restrictions on alcohol and tobacco advertising come from voluntary restrictions, negotiated agreements, and lawsuits, not legislation, which helps explain why they are so weak."

**4. Prevention.** Legalizing jurisdictions will also have to decide if they are going to devote resources to prevention efforts (especially for youth), and if so, whether they plan to change the messaging to reflect the new legal environment. There is also the issue of timing. Many legalization advocates will argue that tax revenues from legal marijuana can be used to fund prevention, but jurisdictions need to decide whether they want to have these prevention efforts developed and implemented before legal marijuana hits the streets.

Marijuana seedlings in a legal Colorado growing facility.



Photo by Brett Levin.

Ideas about prevention should not be limited to school-based programs or counter-marketing campaigns. Regulations that can prevent access to marijuana, such as days and times of store operation, should be considered.

**5. Policing and enforcement.** Legalizing marijuana will not eliminate police interactions involving marijuana. In Colorado and Washington, it is illegal to consume marijuana in public, and possession is still illegal for those under 21 — a group that accounts for 20 to 25 percent of the entire market in the United States. Police departments and regulatory agencies will need to decide how much time and effort they want to expend enforcing these laws as well as conducting inspections and minor sting operations.

Perhaps an even more important decision will be what to do about the existing black market. A legalized industry is expected to largely eliminate the black market, but this can take time. During this transition, states could lose out on significant fees and tax revenues; however, arresting illicit producers and adjudicating these cases comes with costs of their own. Thus, jurisdictions will need to decide how aggressive they want to be about cracking down on illicit producers and distributors — especially if there is a well-entrenched export industry.

**6. Penalties.** Closely related to policing and enforcement is deciding how to sanction those who break marijuana laws. Will it be a criminal offense for minors to possess marijuana, or will it be a civil penalty that only results in a fine? What about for those who supply minors?

Decisions also need to be made about how production violations will



Photo by Owen Lin.

A door hanger with coupons for the purchase of marijuana in Denver, Colorado.

be punished for those licensed to legally sell marijuana. Will penalties be limited to progressive fines and the possibility of license revocation, or will firms that are illegally producing face criminal charges?

**7. Potency.** There are dozens of cannabinoids in the cannabis plant, but tetrahydrocannabinol (THC) is the chemical compound that receives the most attention. THC is what gets users intoxicated and can increase the probability of panic or anxiety attacks. The average amount of THC in marijuana flowers consumed has

increased over time (although the increase is often exaggerated), and THC is now regularly extracted from the plant to produce oils, waxes, and other products that can be quite potent. Jurisdictions considering a legal medical market need to decide whether they will limit the amount of THC in products sold. Neither Colorado nor Washington limit THC levels, but the Dutch continue to discuss whether to limit THC in the marijuana sold in their coffee shops to 15 percent.

Of course, other cannabinoids should be considered, including

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Photo by erossid/Flickr.

Prepackaged and labeled marijuana in Washington.

cannabidiol (CBD), which is receiving an increasing amount of scientific attention. Some researchers believe CBD can offset some of the psychoactive effects of THC, and clinical trials are underway to determine if a high-CBD extract can be used to treat children suffering intractable seizures.

**8. Purity.** Choices will also need to be made about whether to monitor and limit the levels of mold, pesticides, and other contaminants associated with agricultural production of marijuana. Another important decision is whether to allow the sale of marijuana products infused with alcohol or nicotine.

**9. Price.** The role of price cannot be overstated: it shapes what happens to the black market, government revenues, and perhaps most importantly, consumption. A number of studies by economists have found that when the price of marijuana decreases, the prevalence of marijuana use increases. While marijuana prices are typically described in terms of grams or ounces, what largely matters is the price per unit of intoxication or THC.

Since legalization is expected to reduce the production and distribution costs — especially if there are a number

of for-profit firms competing against one another — jurisdictions should consider all of the tools they have for affecting the retail price. License fees and regulations can add costs that can be passed on to consumers, but the biggest tool is taxation. However, if the tax is set too high, it could fuel black-market transactions.

No one knows the best way to tax marijuana, and none of the options is perfect. Colorado and Washington are taxing marijuana as a function of its value, while Alaska and Oregon plan to tax marijuana as a function of its weight. Analysts often offer another option of taxing marijuana: as a function of its power to intoxicate (e.g., by the amount of THC or some combination of cannabinoids), but this will require more work up front and has yet to appear as an option on ballot initiatives. Decisions about the tax bases and levels of taxation are extremely important, and there is no reason to believe that the chosen tax structure in the early years will be optimal as the market matures. Smart jurisdictions will leave their options open with respect to taxation.

**10. Permanency.** For those designing legalization regimes, decisions have to be made about the amount of flexibility

that will be built into the system. This is not only critical for taxation, but also for the regulations. We have a lot to learn about cannabinoids and new marijuana products, and there should be mechanisms in place for incorporating new information into these regimes. One option would be to create an independent commission that would be charged with handling these decisions.

Since we do not know how marijuana legalization will play out, jurisdictions should consider sunset provisions that would allow them to change course without getting locked into a particular regime. The state of Illinois built such a provision into its medical marijuana law, enacted in 2013: if the state does not renew or create a new law by the end of 2017, the program will cease to exist.

### In Conclusion

When it comes to marijuana legalization, we are in uncharted waters. There is much to learn from what is happening with the earliest adopters — Colorado and Washington — but their for-profit commercial approach is only one alternative to easing marijuana prohibition.

The home production model in Washington, D.C., and collectives being implemented in Uruguay highlight some of the other non-commercial approaches.

While these 10 Ps are not the only choices confronting jurisdictions considering changes in marijuana policy, they cover many of the critical decisions that will determine whether removing prohibition is a good idea. May they serve as fodder for debate and as an outline for jurisdictions seeking guidance if they decide to legalize.

Beau Kilmer is the co-director of the RAND Drug Policy Research Center. The second edition of his co-authored book *Marijuana Legalization* is scheduled to be released next year by Oxford University Press. Dr. Kilmer spoke for CLAS on November 20, 2014.

A medical marijuana dispensary blends into Denver, Colorado.



Photo by Kent Kanouse.