

THE IMPLICATIONS OF LEGALIZING RECREATIONAL MARIJUANA

and what public health officials
need to do about them



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Introduction

It has been discussed and debated for decades. Now, ready or not, a new era of legalized marijuana has begun.

Beginning with Colorado and Washington in 2012, a growing number of states have opened the door to recreational marijuana. One of the main reasons is money. States hope to generate hundreds of millions of dollars in annual tax revenue from cannabis sales. At the same time, legalization is viewed by some as a way to de-escalate the War on Drugs. That's because the vast majority of drug arrests (more than 600,000 per year¹) are marijuana related.

Public health professionals are at the forefront of this dramatic shift in health policy. Their task is to prevent, or at least minimize, the potential harmful effects of recreational marijuana.

In Colorado, for example, a diverse group of public health experts including secondhand smoke and poisoning prevention specialists, epidemiologists, toxicologists, and maternal and child health experts put together a comprehensive public health plan to address the state's new marijuana law.

This plan includes strict labeling and packaging rules, limits on advertising, a ban on the public consumption of marijuana and cannabis-laced "edibles," and a DUI public service campaign.

The state even set up monitoring sites to track skiing and recreational injuries related to marijuana.

It is important for states considering legalization to learn from the experiences of Colorado and other pioneering recreational marijuana states, says Karl E. Mingos, an assistant professor, chair of the Department of Health Administration & Policy, and director of the Master of Public Health program at the University of New Haven.

"Public health is really about three things: preventing disease, prolonging life, and promoting health," Mingos says.

"Given this lens, when we talk about recreational marijuana, it's important to think about the implications of legalizing a drug."



What are the public health implications of recreational marijuana?

Marijuana, or cannabis, is made from the greenish-gray leaves and flowers of the hemp plant *Cannabis sativa*. Though it's thought to be the oldest drug on the planet, there is still much scientists don't know about marijuana. Few government studies have been done on its long-term effects because it's still illegal under federal law.

So what do we know?

According to an article in the *New England Journal of Medicine*,² researchers have a “high” level of confidence that marijuana use is associated with the following adverse effects:

- Addiction to marijuana and other substances
- Diminished lifetime achievement
- Motor vehicle accidents
- Symptoms of chronic bronchitis

Studies also have suggested a link to other problems, such as abnormal brain development, schizophrenia, depression and anxiety, and cardiovascular disorders, though experts say more research is needed to better understand the connections.



What can public health professionals do?

Minges and others point to several goals that ought to be top priorities for states heading down the road to legalization:

Limit youth access. Still-developing adolescent brains are particularly at risk from the effects of habitual marijuana use. Those who begin using marijuana before age 18 are four to seven times more likely than adults to develop a dependency or addiction, according to the National Institute on Drug Abuse.³ Important countermeasures include education programs, child-resistant packaging to guard against accidental poisonings, bans on advertising targeted to youth, and ID checks to stop minors from purchasing cannabis products.

DUI enforcement. Marijuana impairs motor skills, and the effects are compounded when marijuana consumption is combined with alcohol use. But vigilant enforcement is no easy feat. While roadside breathalyzers can detect if a driver is legally drunk, that technology doesn't work with marijuana. The most accurate way to check the level of THC (the chemical responsible for most of marijuana's psychological effects) is a blood test. Another complication: THC remains in the bloodstream long after the effects have worn off, as much as seven days for some chronic users, which limits the validity of simple roadside tests.

Limit secondhand smoke. Colorado and other states have added marijuana to their public smoking bans and smoke-free workplace policies.

Strict labeling laws. Clear and accurate labeling is crucial, experts say. That's because overconsumption of marijuana can lead to accidental poisonings and psychological effects such as paranoia, panic attacks, and hallucinations. Edibles are a special concern. A test of 75 retail products in three U.S. cities found only 17 percent contained the stated dose of THC, with 23 percent containing more and 60 percent containing less.⁴

Quality control. Another big concern is the potential exposure to poisonous chemicals and other substances that can find their way into marijuana and cannabis products. The dangers include bacteria, mold, pesticides, and other toxins such as benzene and formaldehyde. If there's an outbreak, states need to be able to act quickly to get contaminated products off the shelves. Regulation is important, and regular public health checks of marijuana-producing facilities are necessary.

Training. All workers along the supply chain need to be trained in the proper handling and sale of marijuana products. Training is also critical for state inspectors, first responders, nurses, and doctors.

Data collection. Public health officials and policymakers need accurate data to know who is using and abusing marijuana so they can tailor health programs to at-risk populations. Colorado, for example, has added questions about marijuana use in the forms patients fill out when they go to the hospital or a doctor's office.



The Takeaway

Ready or not, legalized marijuana is a reality today in a growing number of states.

Public health professionals have a vital role to play in developing a robust strategy to prevent or minimize the potential harms from legal weed.

More studies are needed to understand the long-term health effects of recreational marijuana use, but the available evidence points to motor vehicle accident concern, risk of addiction, diminished achievement, and cognitive impairment as serious public health threats.

Limiting youth exposure to marijuana and THC products must be a top priority because adolescents' brains are still developing, and younger users are more prone to becoming dependent or addicted.

Sources

¹"Marijuana Arrests Are Increasing Despite Legalization, New FBI Data Shows," Forbes, Sept. 24, 2018.

²"Adverse Health Effects of Marijuana Use," New England Journal of Medicine, June 5, 2017.

³"Marijuana," National Institute of Drug Abuse

⁴"Cannabinoid Dose and Label Accuracy in Edible Medical Cannabis Products," JAMA, June 23/30, 2015.



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