



Steve Camarota

Lessons Learned from Medical Marijuana Legalization in Other States

Garth Van Meter
VP of Government Affairs, SAM

SAM promotes an evidence-based approach to marijuana policy that prioritizes public health

- SAM takes an evidence-based, scientific approach to marijuana policy that **rejects the false dichotomy that we must either lock up marijuana users OR legalize pot**
- **We are non-partisan**, and work with Democrats, Republicans, and independents
- **Board members and supporters include:**
 - American Society of Addiction Medicine
 - American Academy of Pediatrics
 - American Academy of Child and Adolescent Psychiatry
 - Over 30 state affiliates



Outline

- 1** Is Marijuana Medicine?
- 2** What Happens When A State Legalizes?
- 3** Current Regulatory Failures
- 4** Marijuana and Opioids
- 5** Conclusions

Three separate issues that often get conflated

1

**Penalizing drug users/
”decriminalization”**



2

**Medicinal use of
compounds
derived from
marijuana/other
drugs**



3

**Legalization
of marijuana
or other
drugs for
”non-
medical” use**



Is marijuana medicine? It depends on how you look at the question



NO

Smoked or ingested raw marijuana is **not medicine**



YES

There are **marijuana-based pills available to treat illness**, and other such medications coming soon



MAYBE

Additional research is ongoing into the medical properties of marijuana-derived compounds

What about Schedule I?

Smoked, whole marijuana is in S-1, which means it doesn't have medical use.

Components are S-3

YOU CAN RESEARCH S-1 drugs, and this happens every day.

Scheduling is a matter of extreme confusion

Scheduling is not a “harm index”

What can't medical marijuana do?



MEDICAL MARIJUANA for depression

Learn About Diseases Treatable With Medical Cannabis

- Endometriosis
- Epidermolysis Bullosa
- Epididymitis
- Epilepsy
- F
- Feltz's Syndrome
- Fibromyalgia
- Friedreich's Ataxia
- G
- Gastritis
- Genital Herpes
- Glaucoma
- Glioblastoma
- Multiforme (Brain Cancer)
- Graves Disease
- H
- Headaches, Analgesic
- Headaches, Migraine
- Hemophilia A
- Henoch-Schonlein Purpura
- Hepatitis C
- HIV/AIDS
- Huntington's Disease
- Hypertension
- Hyperventilation
- Hypoglycemia
- Syndrome (SWS)
- Stuttering
- Joint Disorder (JMD)
- Tenosynovitis
- Terminal Illness
- Viral Hepatitis
- W
- Wasting Syndrome
- Whiplash
- Wittmaack-Ekbom's Syndrome
- Writers' Cramp

Brain Cancer

Headaches

Writers' Cramp

Dr. Sanjay Gupta: It's time for a medical marijuana revolution

By Dr. Sanjay Gupta, Chief Medical Correspondent

Updated 9:27 AM ET, Mon April 20, 2015



<https://unitedpatientgroup.com/resources/diseases-treatable-with-medical-cannabis>

Is the true goal of “medical” marijuana compassionate care or increased access to pot?

THE “AVERAGE” USER ISN’T SICK

The average “medical” marijuana user **is not whom you’d imagine:**



- White male
- 32 years old
- No history of life-threatening disease
- History of drug and alcohol abuse

ILLNESSES USED TO JUSTIFY “MEDICAL” MARIJUANA ARE RARE



Fewer than 5% of “medical” marijuana card holders are cancer, HIV/AIDS, or glaucoma patients

Safe, approved cannabis-based medicines already exist

- Research on the efficacy of cannabinoids is **not focused on raw/crude marijuana, but on individual components** that may have medical use.



Approved Cannabinoid Products

- **Marinol® and its generics**: synthetic THC in sesame oil; schedule III; nausea/vomiting in cancer chemotherapy and AIDS wasting;
- **Cesamet® (nabilone)**: a synthetic THC analogue; schedule II;
- **Epidiolex® (cannabidiol)**: used to treat Lennox-Gastaut Syndrome, Dravet Syndrome
- **Sativex®**: a botanical extract, 1:1 CBD to THC; approved in 28 countries (ex US) for spasticity in MS.

Products in Development

- **Epidiolex®** (GW Pharma): Dravet Syndrome (DS)/ Lennox Gastaut Syndrome (LGS) (2 studies in each, **FDA APPROVAL**)
 - also Tuberous Sclerosis Complex (TSC);
- **Synthetic CBD** (Insys): DS/ LGS (Phase 1b/2a) , Infantile Spasms;.
- **Synthetic CBD** (transdermal) (Zynerba): complex partial seizures; Phase 1.

Epidolex™ is one such medication

- 98% pure cannabidiol (CBD)
- Some effectiveness for treating seizures
- Many versions exist on the market that are not purified or standardized



A long-term solution to expand authorized medical cannabis research is needed

CURRENT SITUATION

- Many groups are trying to sell or give away CBD in different states without going through any FDA or NIH process. **However, these products have no such safety assurances.**



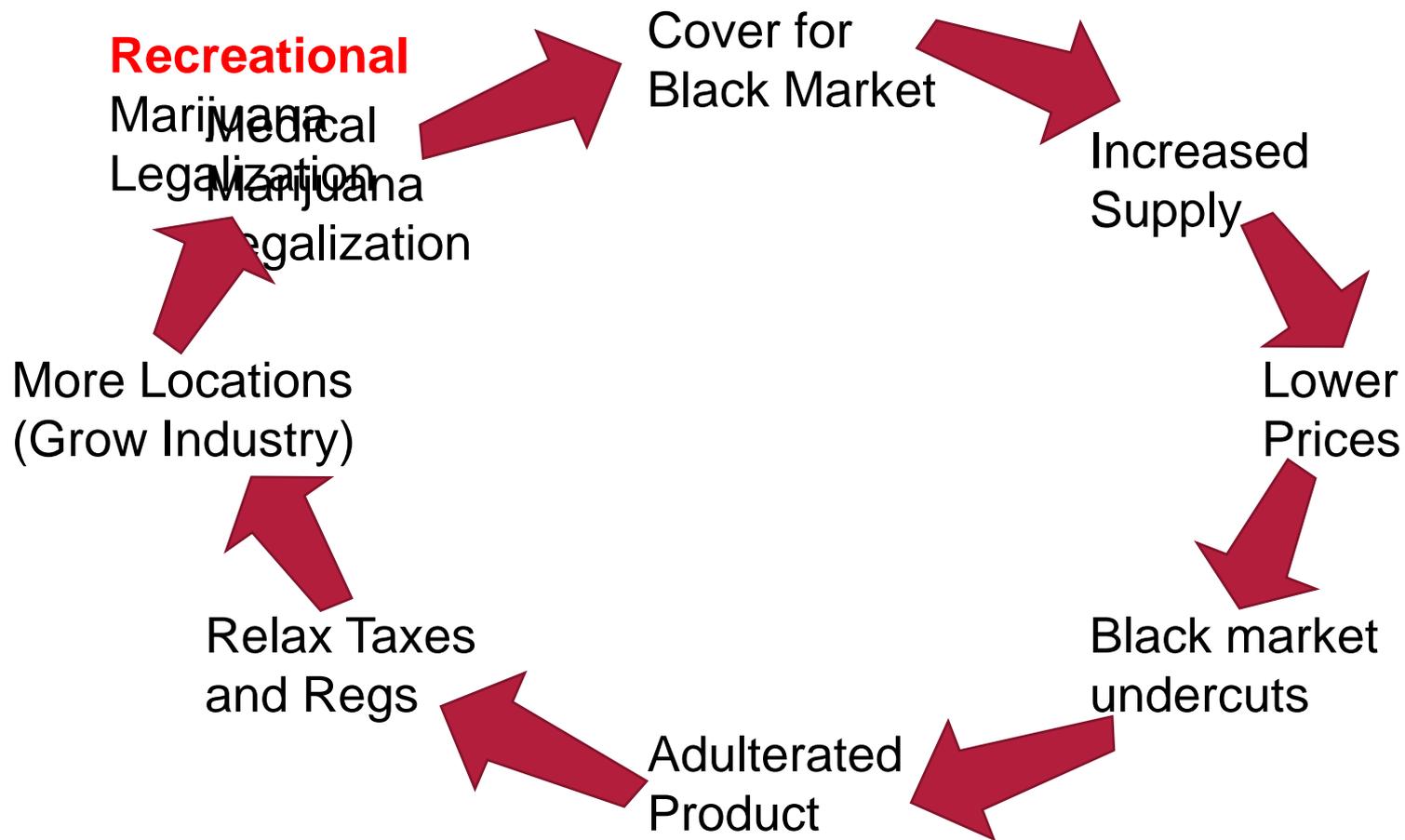
SOLUTION

- To address this problem in the long-term, the United States should **expand and accelerate current research so that every patient who might benefit from CBD can obtain it.**

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The Cycle of “Tax and Regulate”



The Oklahoma Experience

June 26, 2018

Medical Marijuana Passes

Two days later...

June 28, 2018

Recreational Ballot Initiative
Announced

Pot Shops Lead to Increased Youth Use

- Youth use in Oregon has increased in counties with more medical marijuana dispensaries between 2006-2015.
- “this relationship was **partially attributable to perceived norms favorable towards marijuana use.**”
- Oregon legalized recreational marijuana in 2014, but has had a much longer medical marijuana program.
- The leaked Oregon State Police report from January 2017 revealed that much of the marijuana grown through their medical program is being diverted to the black market.

Pot Shops Lead to More Crime

- Pot shops have heightened security to protect the immensely valuable product
- An NIH-funded study of crime in Denver shows increased property crime in the neighborhoods surrounding pot shops
- “Over time, as marijuana grows in popularity, densities of marijuana outlets may increase, resulting in higher crime...**There are definitely negative public health consequences [of legalization], including increased crime.**” – Study lead author Bridget Freisthler

Pot Shops Don't Reduce Alcohol Consumption

- Marijuana industry analysis of Canadian market projects marijuana legalization would lower alcohol sales by less than 1%
- Contradicts industry assertions that people will switch from alcohol to marijuana
- Data shows that people use both, often together, leading to much higher levels of impairment
- Telling quote: **“Our focus on these younger consumers reflects our belief that the experimenter of today is the leading consumer of tomorrow,”** – Cowen and Company report by marijuana industry analyst Vivian Azer

Legal marijuana to take less than 1 per cent out of booze sales: study. The Globe and Mail. May 10, 2017. Web, June 25, 2017.

Washington Traffic Safety Study (2018)

- Marijuana-impaired driving fatalities have more than doubled
- **One in five drivers** are under the influence of marijuana. That is up from one in ten prior to legalization.
- 64.2% of respondents who reported using marijuana and driving **stated that they didn't think that it impaired their ability to drive at all.**
- Drivers who admit to driving within three hours of using marijuana are also more likely to drink and drive, not wear a seat belt, and binge drink

NAS: Marijuana use is also associated with other physical and mental health issues

- **Respiratory problems**, including chronic bronchitis
- Injuries & deaths from **car accidents**
- **Overdose injuries** in children
- **Low birth weight** (where pregnant mother uses)
- Impaired learning, memory, and attention (including **permanent loss of IQ** in younger heavy users)
- **Suicide**

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Current Regulatory Failures

- Black Market (and Cartels)
- Increased Access for Minors
- Pesticides and Contaminants
- Recommended to Pregnant Women

The Black Market Has Gotten Worse

NEWS

GLOBAL POWER

THE VOTE TECH & MEDIA WORLD THINK SPORTS



Foreign cartels embrace home-grown marijuana in pot-legal states

Foreign gangs are finding that black-market marijuana is profitable even in states that have legalized cannabis.

by Dennis Romero, Gabe Gutierrez, Andrew Blankstein and Robert Powell / May.29.2018 / 4:31 AM ET / Updated May.29.2018 / 8:28 AM ET



Sales to Minors



Set Weather ▼
MARIJUANA NEWS
Nearly



News Release

Oregon Liquor Control Commission
9079 SE McLoughlin Blvd., Portland, OR 97222-7355
1-800-452-6522

For more information:
Mark Pettinger, Marijuana Program Spokesperson, (503) 872-5115
www.marijuana.oregon.gov

January 10, 2018

Licenseses Across Oregon Fail to Stop Sales to Minors OLCC Marijuana Retailer Minor Decoy Checks Continue

Increased Availability to Minors

≡ TIME

A 9-Year-Old Accidentally Shared Her Grandpa's Marijuana Gummi...



A 9-Year-Old Accidentally Shared Her Grandpa's Marijuana Gummies With Her Fifth-Grade Class

HOLLYWOOD



Edible marijuana at Hollywood school sends 14-year-old girl to hospital

Hollywood police officer investigates 'Weedos' marijuana incident

By Ian Margol - Reporter, Andrea Torres - Digital Reporter/Producer

Posted: 10:28 PM, April 23, 2018

Updated: 6:32 AM, April 24, 2018

One arrest, gummy bears sicken Chula Vista students

BY: Jessica Chen , Mark Saunders

POSTED: 2:53 PM, Apr 27, 2017

UPDATED: 12:05 AM, Apr 28, 2017



States are failing to regulate pesticide use

 **Kathy Curran** f t e
5 Investigates Reporter



☰ SHOW TRANSCRIPT

5 Investigates put the purity of medical marijuana to the test, working samples bought off the shelves. Investigative reporter Kathy Curran never have been sold, but uncovered gaping holes in the state regul marijuana safe and contaminant-free.

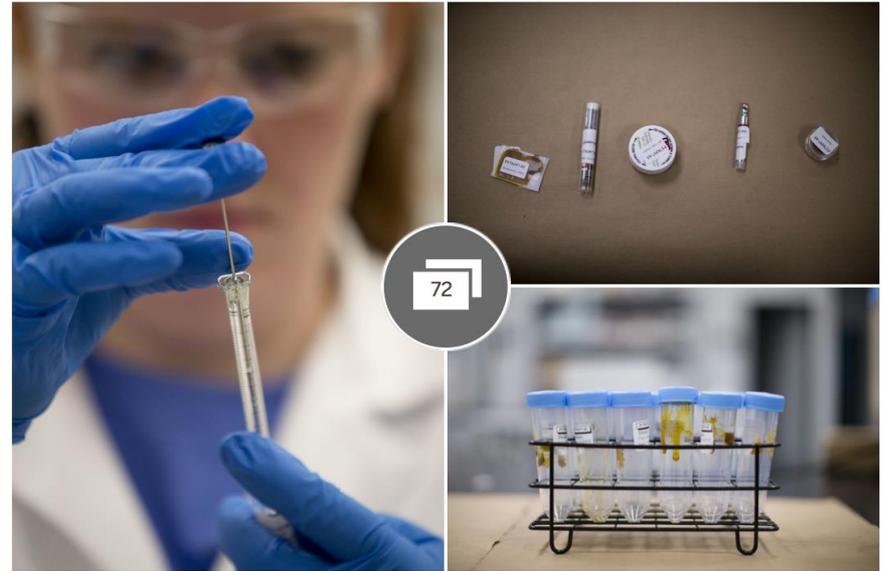
 Set Weather ▾

 OREGONLIVE
The Oregonian

MARIJUANA NEWS

Contaminated marijuana still reaching consumers in Oregon

Updated Jun 18, 2017; Posted Jun 17, 2017



Gallery: Cannabis product testing for pesticides

States are failing to regulate pesticide use

Pesticides and Pot: What's California Smoking?



An NBC4 I-Team investigation found evidence suggesting that pesticides could be present in a lot of marijuana legally sold in California

By Joel Grover and Matthew Glasser

Published at 10:57 PM PST on Feb 22, 2017 | Updated at 1:37 PM PST on Nov 8, 2017

Steep Hill Labs found 41 out of 44 samples, 93 percent, tested positive for pesticides, at levels high enough that those products would've been banned for sale in some other states that currently regulate the use of pesticides in marijuana products.

"It appears pesticides are very widely used" on California's marijuana crops, said Dr. Don Land, a UC Davis chemistry professor who is Steep Hill's chief scientist. "It was surprising that so many (samples) had so much contamination."

Non-publicized Recalls of Marijuana Products (In CO)

Denver Public Health Recalls of Marijuana products --

2018

- February 16, 2018 - [Lightshade Labs LLC Voluntarily Recalls Medical and Retail Marijuana Due to Presence of Yeast/Mold in Pre-Roll Products](#)

2017

- December 5, 2017 - [Infuzionz LLC Voluntarily Recalls Marijuana Product Due to Non-Food Grade Ingredients](#)
- October 26, 2017 - [Little Brown House Dispensary LLC/Delta-9 Delights LLC Voluntarily Recalls Marijuana and Marijuana Products Due to Pesticide Residues](#)
- August 21, 2017 - [Left Bank LLC Voluntarily Recalls Marijuana Products Due to Non-Food Grade Ingredients](#)
- August 10, 2017 - [Kirke LLC/Metro Denver Telluride Health Center LLC Voluntarily Recalls Medical Marijuana Due to Pesticide Residues](#)
- July 27, 2017 - [Buddies Wellness LLC Voluntarily Recalls Medical Marijuana Due to Powdery Mildew and Mite Contamination](#)
- July 24, 2017 - [Buddies Wellness LLC/La Bodega Voluntarily Recalls Medical Marijuana Products Due to Pesticide Residues](#)
- April 14, 2017 - [Mountain Medicines Recalls Medical Marijuana Infused-Products due to Pesticide Residues](#)
- April 7, 2017 - [Information Regarding Cannabidiol \(CBD\) Products Sold or Manufactured in Denver](#)
- April 3, 2017 - [Herbal Options LLC/Rocky Mountain Ways LLC Voluntarily Recalls Medical Marijuana and Marijuana Concentrates Due to Pesticide Residues](#)
- January 19, 2017 - [GMC LLC Voluntarily Recalls Medical and Recreational Marijuana and Products Due to Pesticide Residues](#)

2016

- November 9, 2016 - [Medicinal Wellness Center LLC Voluntarily Recalls Marijuana and Concentrates Due to Pesticide Residues](#)
- October 24, 2016 - [Tree of Wellness Voluntarily Recalls Medical Marijuana and Products Due to Pesticide Residues](#)
- August 22, 2016 - [La Conte's Clone Bar and Dispensary Voluntarily Recalls Medical Marijuana and Products Due to Pesticide Residues](#)
- June 21, 2016 - [Wash Park Boutique LLC Voluntarily Recalls Medical Marijuana and Products Due to Pesticide Residues](#)
- June 14, 2016 - [Big Toe Voluntarily Recalls Marijuana and Products Due to Pesticide Residues](#)
- June 8, 2016 - [The Tea Pot Voluntarily Recalls Medical Marijuana and Products Due to Pesticide Residues](#)
- June 6, 2016 - [Pineapple Exchange Voluntarily Recalls Medical Marijuana Products Due to Pesticide Residues](#)
- June 1, 2016 - [JVT Enterprises Voluntarily Recalls Medical Marijuana Products Due to Pesticide Residues](#)
- May 13, 2016 - [Avicenna Products Voluntarily Recalls Medical Marijuana Products Due to Pesticide Residues](#)
- February 11, 2016 - [CC Foods Voluntarily Recalls Marijuana Products Due to Pesticide Residues](#)
- January 29, 2016 - [Caregivers for Life Voluntarily Recalls Marijuana Products Due to Pesticide Residues](#)
- January 27, 2016 - [Organa Labs Voluntarily Recalls Marijuana Products Due to Pesticide Residues](#)

2015

- December 30, 2015 - [Mountain High Suckers Voluntarily Recalls Marijuana Products Due to Pesticide Residues](#)
- December 21, 2015 - [EdiPure Recalls Additional Marijuana Products Due to Pesticide Residues](#)
- December 16, 2015 - [RevTec Voluntarily Recalls Marijuana Products Due to Pesticide Residues](#)
- December 11, 2015 - [Advanced Medical Alternatives Recalls Additional Marijuana Products Due to Pesticide Residues](#)
- December 8, 2015 - [EdiPure Recalls Additional Marijuana Products Due to Pesticide Residues](#)
- December 3, 2015 - [Advanced Medical Alternatives Recalls Marijuana Products Due to Pesticide Residues](#)
- December 1, 2015 - [EdiPure Recalls Marijuana Products Due to Pesticide Residues](#)
- November 18, 2015 - [Gaia's Garden Recalls Additional Marijuana Products Due to Pesticide Residues](#)
- November 17, 2015 - [Lab710 Concentrates Recalls Marijuana Products Due to Pesticide Residues](#)
- November 3, 2015 - [Gaia's Garden Recalls Marijuana Products Due to Possible Pesticide Residues](#)
- October 30, 2015 - [Green Cross Recalls Marijuana Products Due to Possible Pesticide Residues](#)
- October 21, 2015 - [Nature's Cure Recalls Marijuana Products Due to Possible Pesticide Residues](#)
- October 14, 2015 - [Two Denver Cultivation Facilities Recall Marijuana Products Due to Possible Pesticide Residues](#)
- September 25, 2015 - [Consumer Advisory Issued for Autopilot Capsules Manufactured by Rx Green](#)
- September 18, 2015 - [Two Denver Businesses Recall Marijuana Products Due to Possible Pesticide Residue](#)
- September 10, 2015 - [Mahatma Concentrates Recalls Marijuana Product Due to Possible Pesticide Residues](#)
- July 27, 2015 - [Consumer Advisory Issued for Nature's Herbs Olive Oil](#)
- July 17, 2015 - [Advisory: The Growing Kitchen Issues Recall of Mary Mint Tincture](#)

Oregon Secretary of State Issues Scathing Audit of Marijuana Regulations

3%

of pot shops have been inspected.

"Oregon's marijuana testing program cannot ensure that test results are reliable and products are safe."

2019 OR Secretary of State

70% of marijuana dispensaries in Colorado recommended THC products to pregnant women.

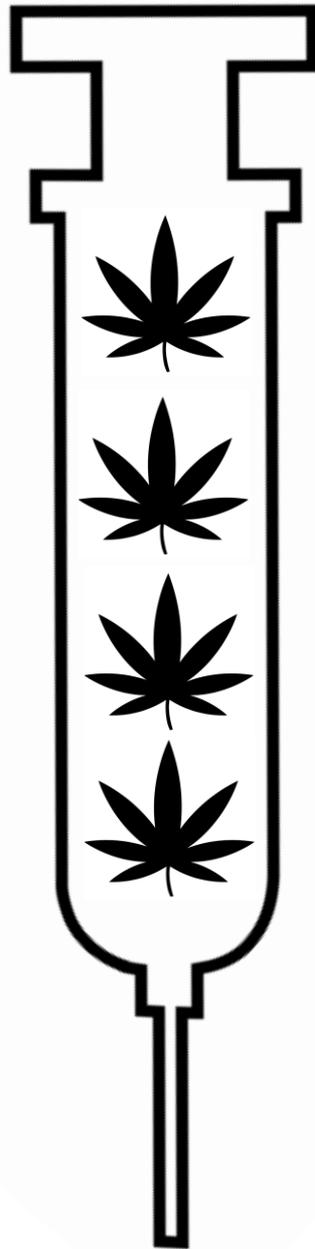
- **Medical dispensaries were more likely to recommend marijuana** products than retail dispensaries: 83% and 60% respectively
- Marijuana's effects on developing babies could include low birth weight, and other developmental problems – including fatal anencephaly

Source: Denver Health (2018)

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**Why talk
POT**



**During
an
opiate
epidemic
?**

The Marijuana Industry Sees a Business Opportunity

8604
24464

CLEAR CHANNEL

**States that legalized
marijuana had 25% fewer
opioid-related deaths.**

weedmaps

October 2014 Medical Cannabis Laws & Opioid Analgesic Overdose Mortality in the United States, 1999-2010, Marcus A. Bachhuber et. Al. (JAMA Intern Med.)

get it on
Google Play

Download on the
App Store

The billboard features a black background with white text. The main headline is in a large, bold, sans-serif font. Below the headline, there is a smaller line of text providing a citation. At the bottom right, there are two logos for mobile app stores: Google Play and the App Store. The billboard is mounted on a metal structure, and the Clear Channel logo is visible at the top center.

JAMA Study

- **This correlation disappears after 2010.**
- *Journal of Opioid Management* (2017) tried to replicate, found that Med MJ laws associated with 22% increase in age-adjusted opioid mortality
- June 2019 study completely debunks: finds a 23% increase after 2010.

Phillips, E. and Gazmararian, J. (2017). Implications of prescription drug monitoring and medical cannabis legislation on opioid overdose mortality, *Journal of Opioid Management*, 13(4):229-239

Medical Marijuana Users are More Likely to Use Prescription Drugs Medically and Nonmedically

Caputi, Theodore L., BS; Humphreys, Keith, PhD

Journal of Addiction Medicine: July/August 2018 - Volume 12 - Issue 4 - p 295–299

doi: 10.1097/ADM.0000000000000405

Original Research

BUY

SDC

Abstract

Author Information

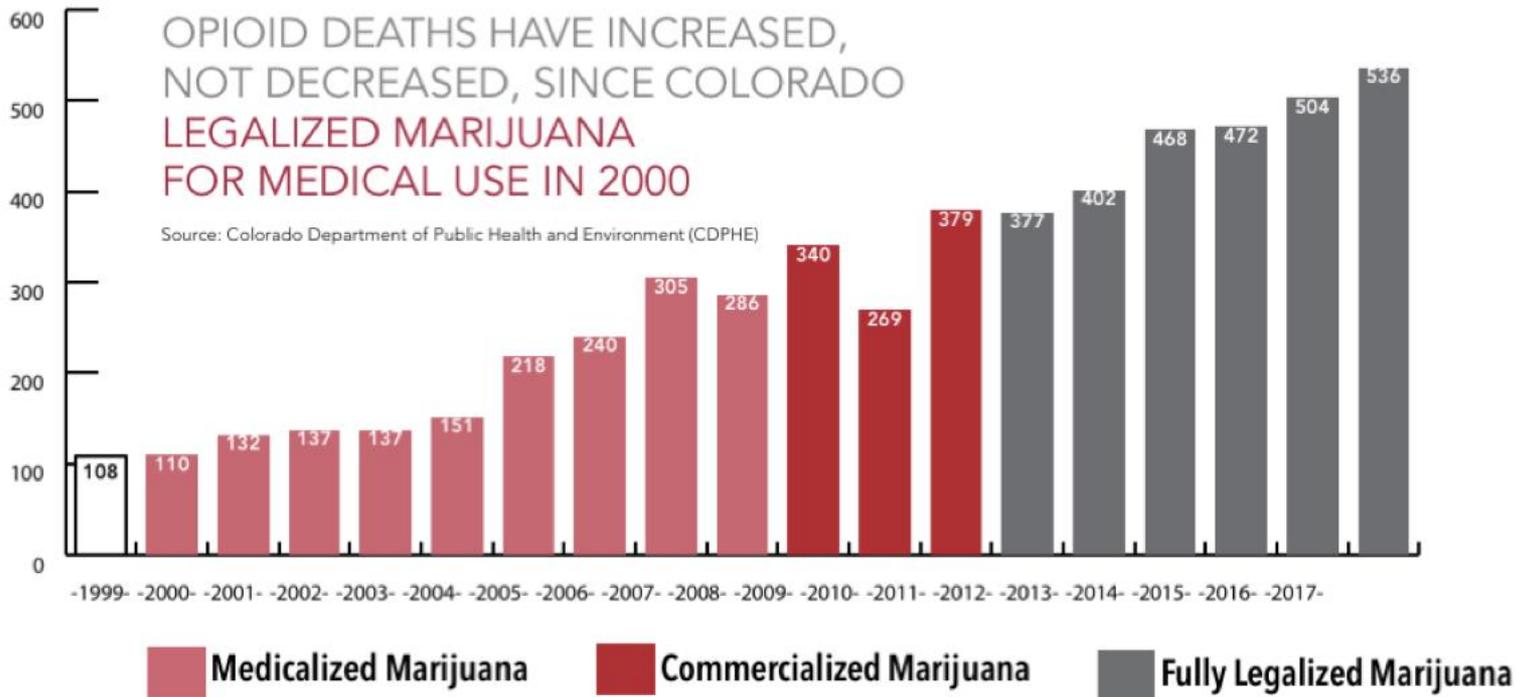
Objectives: Previous studies have found a negative pop availability in US states, and trends in medical and nonm interpreted as evidence that use of medical marijuana re This study evaluates whether medical marijuana use is a prescription drug use.

Methods: Simulations based upon logistic regression an Use and Health were used to compute associations betw prescription drug use. Adjusted risk ratios (RRs) were co status, family income, and living in a state with legalized

Results: Medical marijuana users were significantly mor to report medical use of prescription drugs in the past 12 also significantly more likely to report nonmedical use in 95% CI 1.67–2.62), with elevated risks for pain relievers CI 1.09–3.02), and tranquilizers (RR 2.18, 95% CI 1.45–

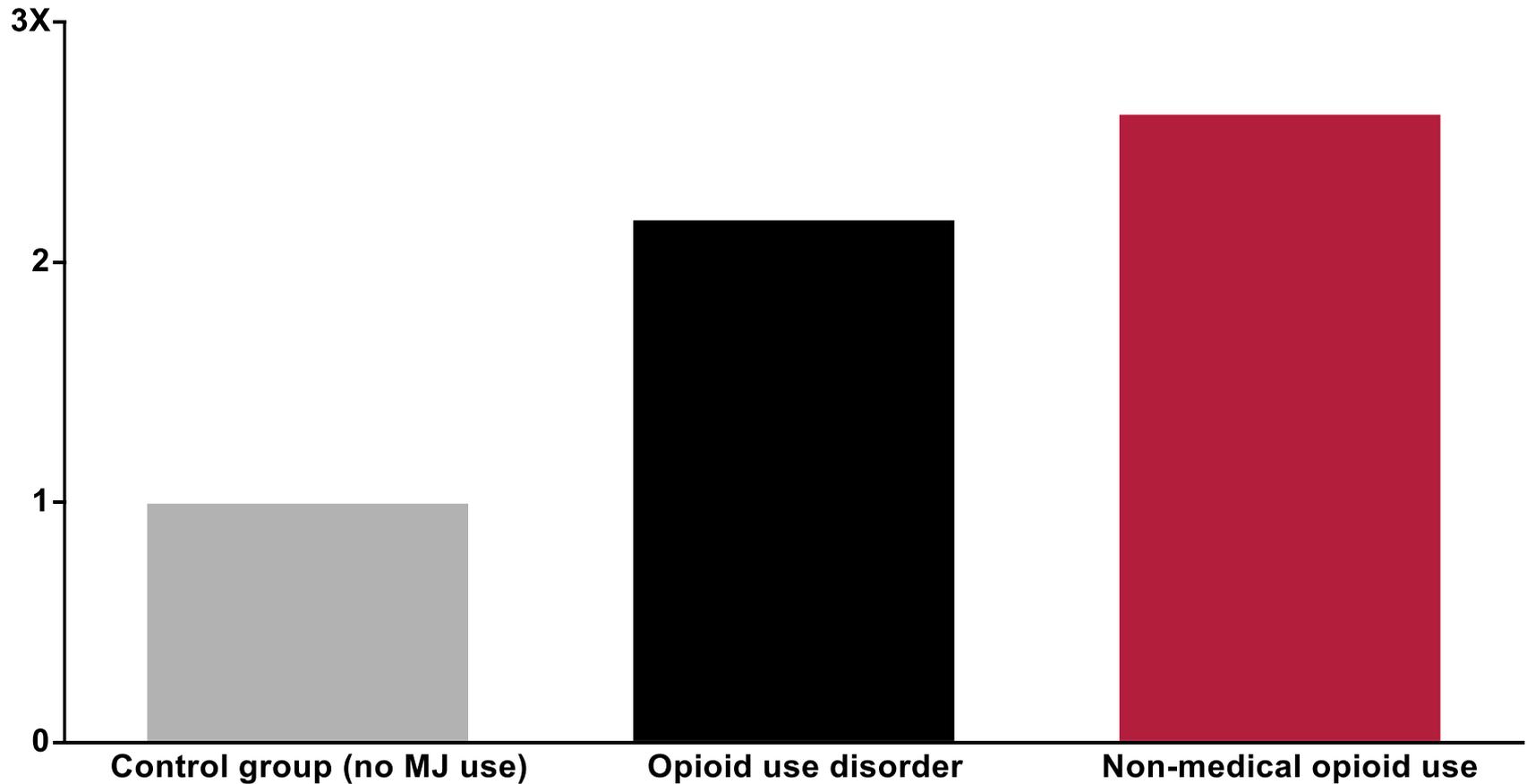
Conclusions: Our findings disconfirm the hypothesis tha marijuana use and prescription drug harms occurs becau prescription drugs, either medically or nonmedically. Med efforts to combat nonmedical prescription drug use.

“Our findings **disconfirm** the hypothesis that a population-level negative correlation between medical marijuana use and prescription drug harms occurs because medical marijuana users are less likely to use prescription drugs, either medically or nonmedically. **Medical marijuana users should be a target population** in efforts to combat nonmedical prescription drug use.”

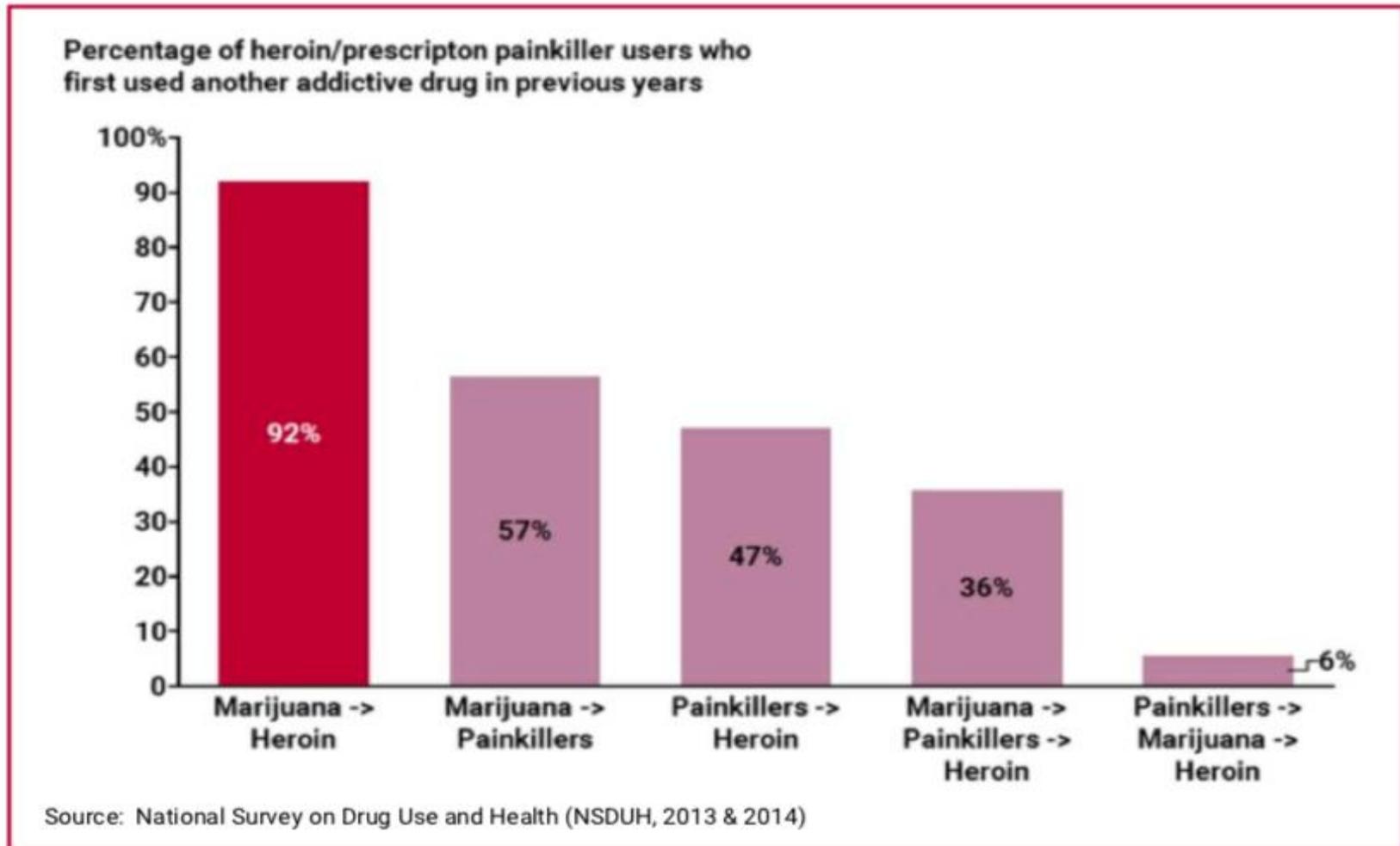


Marijuana use goes hand-in-hand with increased prescription opioid abuse

Chance of subsequent opioid abuse for marijuana users compared to control group



Opioids and Prior Marijuana Use



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Conclusions

- States are not effectively regulating medical marijuana now.
- No state has successfully put a limit on potency.
- Increased marijuana access and use is harming those who need help and hope to recover from opioid addiction.
- No matter how much you oppose recreational marijuana, once you invite the marijuana industry in, they will keep trying to increase their market share, grow customer base, and increase customer use.

A final word from Volkow et al in the NEJM:

“Repeated marijuana use during adolescence may result in long-lasting changes in brain function that can jeopardize educational, professional, and social achievements.

“However, the effects of a drug (legal or illegal) on individual health are determined not only by its pharmacologic properties **but also by its availability and social acceptability.**

“In this respect, legal drugs (alcohol and tobacco) offer a sobering perspective, accounting for the greatest burden of disease associated with drugs *not because they are more dangerous than illegal drugs* but because their legal status allows for more widespread exposure.”

SAM Smart
Approaches to
Marijuana
preventing another big tobacco