



## **Marijuana Issues**

*Kevin A. Sabet, PhD, President & CEO*

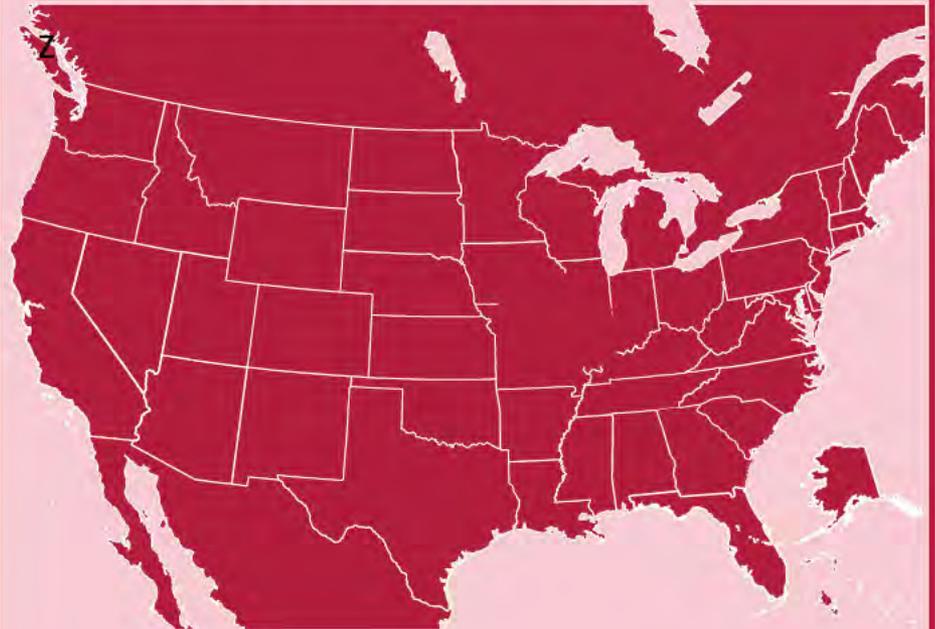
***[www.learnaboutsam.org](http://www.learnaboutsam.org)***

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

- **Non-partisan but high-profile:** founded by former Democratic Congressman Patrick Kennedy and leading Republican pundit David Frum
- **Scientific advisory board** of more than 12 leading researchers, professors, and public health/legal experts
- **Hundreds of thousands of press mentions**, including major media outlets such as:



## Several state and national affiliates



# Groups SAM has collaborated with

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- **American Medical Association**
- **American Academy of Pediatrics**
- **National Business Group on Health**
- **American Academy of Child and Adolescent Psychiatry**
- **Other leading public health authorities**
- **Over 30 state affiliates, including:**
  - Treatment centers
  - Recovery groups
  - Prevention organizations
  - Law enforcement
  - Leading medical authorities
  - Volunteer citizens
  - Business groups

# Three separate issues that often get conflated

1

Penalizing drug users/  
"decriminalization"



2

Medicinal use of  
compounds  
derived from  
marijuana



3

Legalization of  
marijuana for  
"non-medical"  
use



# Ultra Potent Marijuana



# Not This...



# ...But This



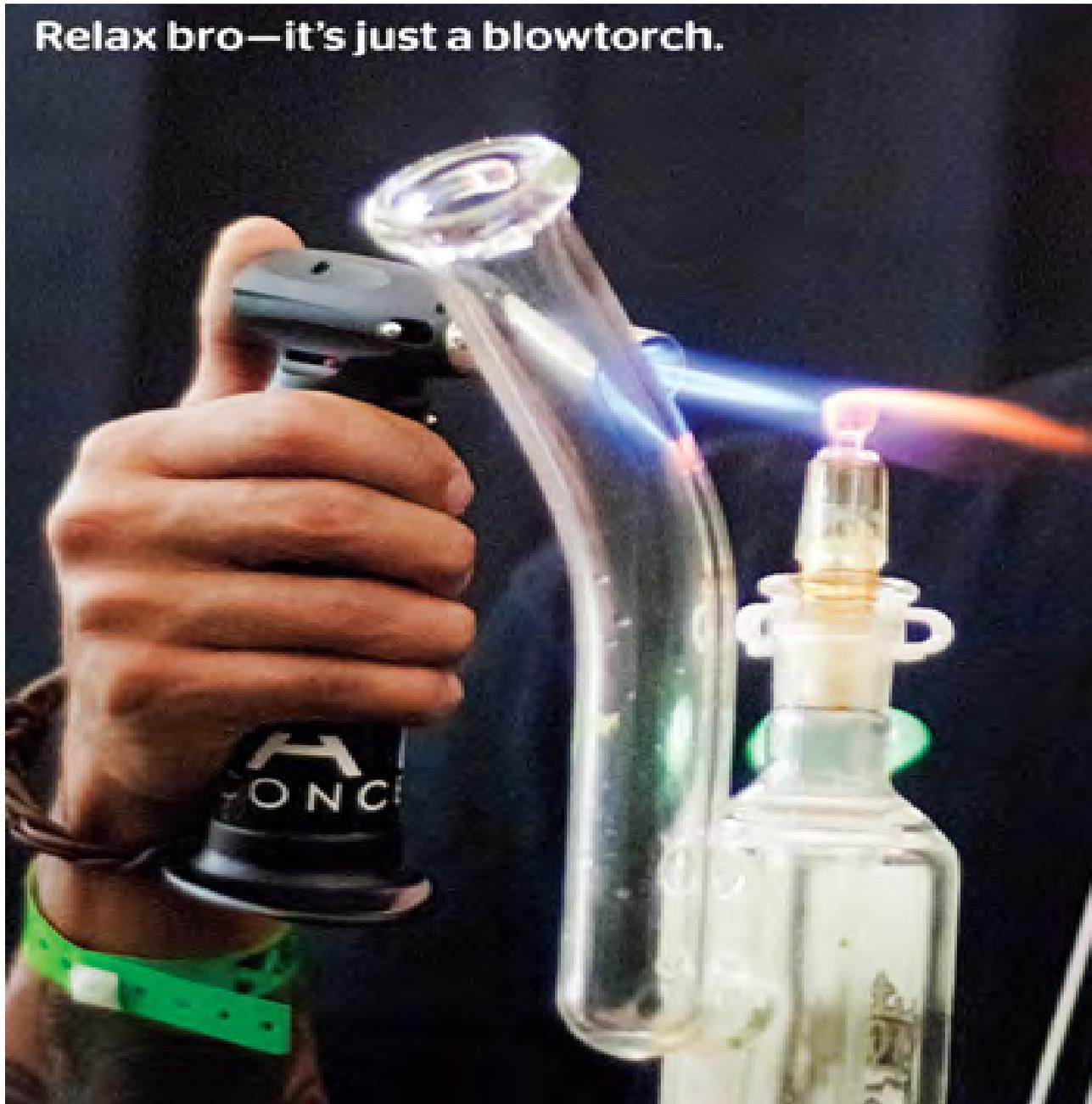


(Ben Livingston, The Cannabist)

# Stealth PUFFiT vaporizer

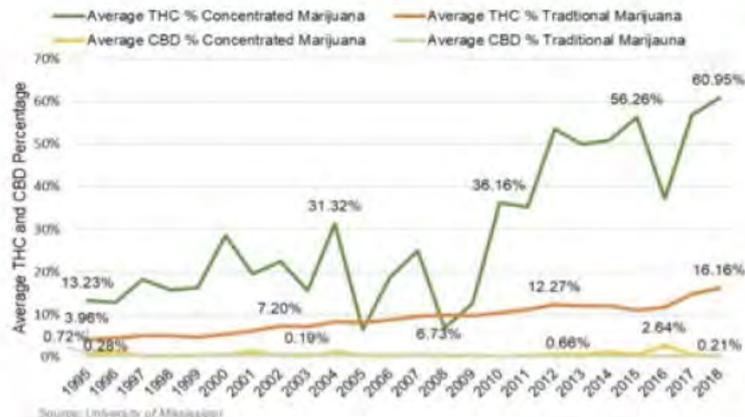


Relax bro—it's just a blowtorch.



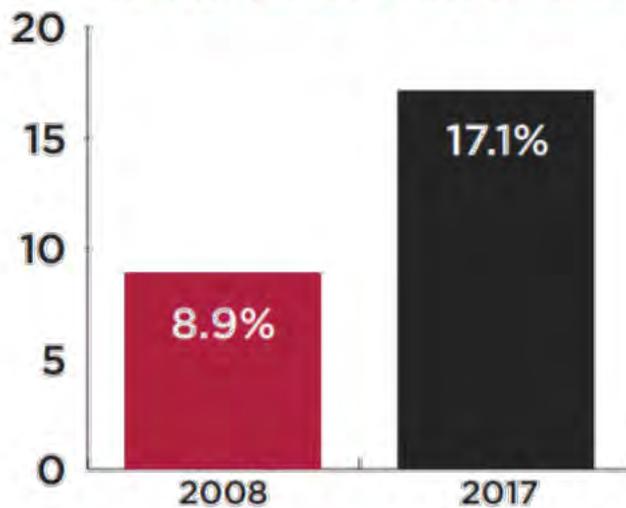


# Marijuana Has Become Significantly More Potent Since the 1960s, 70s, 80s, and 90s

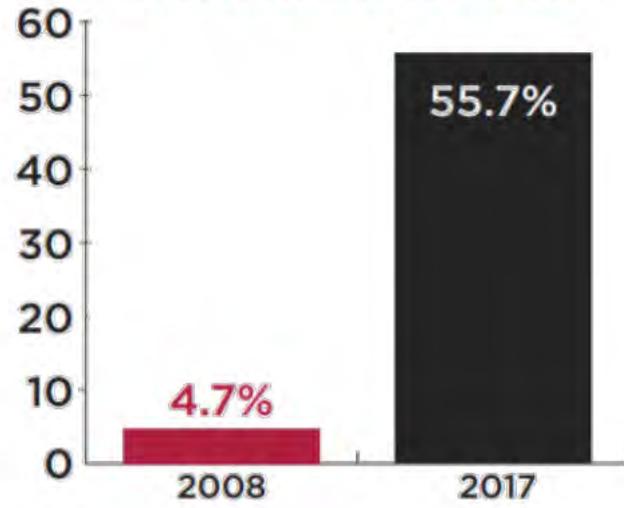


From an average of 3% to an average of nearly 20% THC

**MARIJUANA PLANT POTENCY**



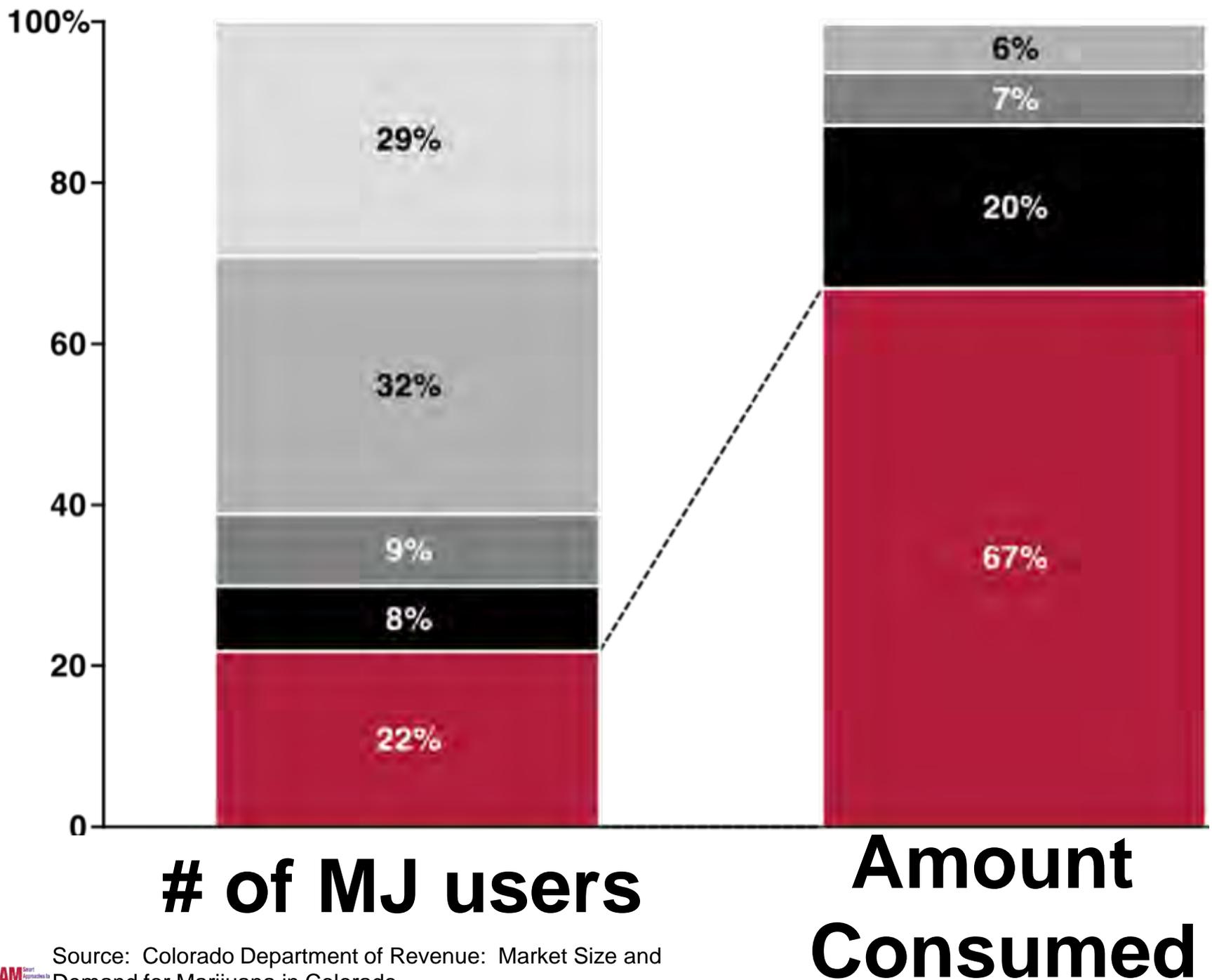
**CONCENTRATE POTENCY**



(Chandra et. al., 2019)

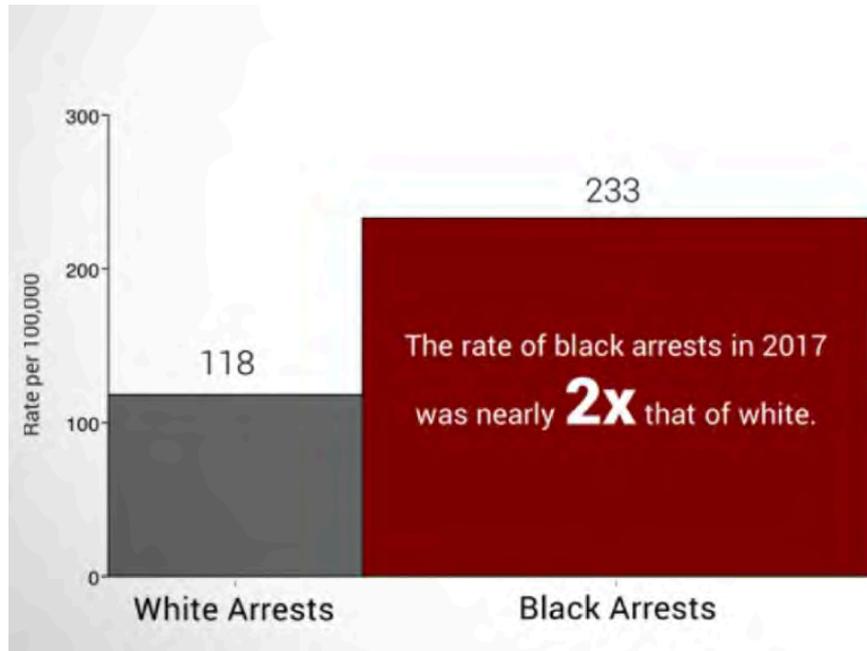
# Marijuana is Not “Just a Plant” Anymore – Derivatives Contain up to 99% THC





Source: Colorado Department of Revenue: Market Size and Demand for Marijuana in Colorado

# Disproportionate Arrests Are Still Occurring



In 2017, African American Arrests remained unchanged since 2012 -- the year Colorado legalized recreational marijuana.

Hispanic and Asian Arrests have since gone up within the same period.



# Black-Owned Pot Businesses Remain Rare Despite Diversity Efforts

STATELINE ARTICLE January 15, 2021 By: [Sophie Quinton](#)

"We don't have one successful social equity licensing program yet."

***Bonita Money, Founder & Executive. Director, National Diversity & Inclusion Cannabis Alliance***

# *‘Getting Worse, Not Better’: Illegal Pot Market Booming in California Despite Legalization*



# Legalization is Unlikely to Diminish the Power of Drug Cartels and the Illicit Market (1/2)

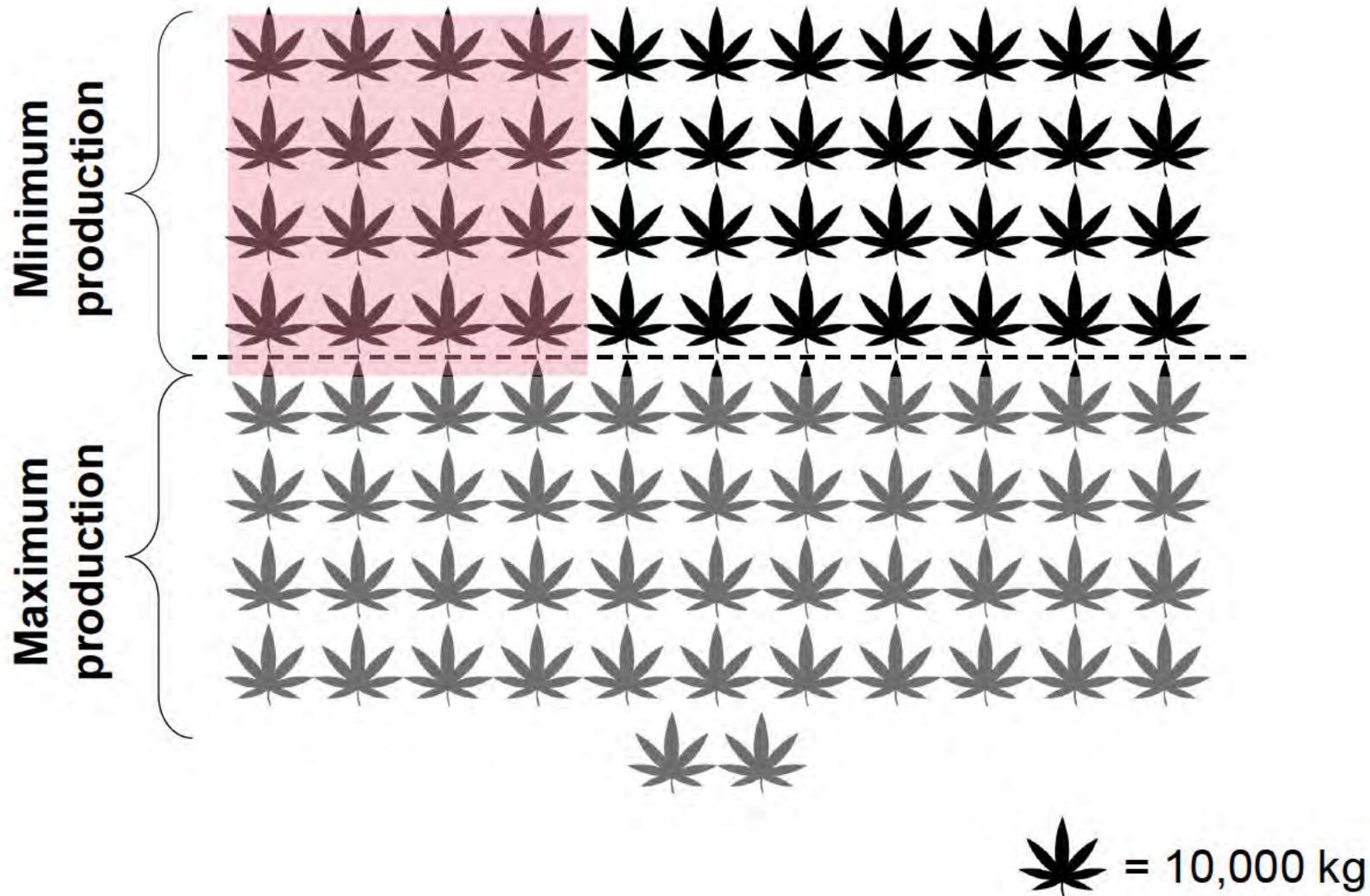
## CARTELS ARE, IN REALITY, DIVERSIFIED BUSINESSES

- “Drug cartels” are **diversified enterprises that include mining and pirated goods**
- Marijuana accounts for **only 15-25% of revenues** of drug trafficking groups
- More money is found in **other businesses, including legal ones**, than in selling marijuana
  - Estimates indicate **up to 50% of Zeta activities related to cigarette smuggling**
  - In 2014, **iron mining was the #1 source of revenue** for the Knights Templar cartel

## A HUGE ILLICIT MARKET EXISTS FOR TOBACCO

- Cigarettes are **the world’s most widely smuggled legal product**
- A **\$657 billion/year business** in 2009
- Provides **funding for organized criminal syndicates and terrorist groups** worldwide
  - In Canada alone, **~105 organized crime groups** are engaged in cigarette smuggling
  - Generates revenue for groups like **the Taliban and Hezbollah**

# Just 18 to 30 Percent of Oregon's Marijuana is Sold Legally



# 1 in 3 Past-Year Users Have CUD (Addiction)

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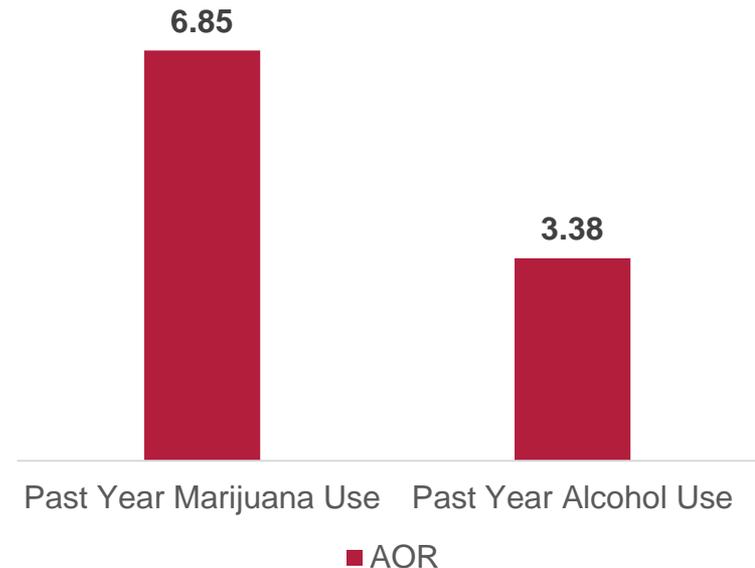
- 1 in 3 who used marijuana in the past year will become addicted to it (Cannabis Use Disorder)
- The adolescent brain is especially susceptible to marijuana use
- When kids use, they have a greater chance of addiction since their brains are being primed

# Legalization reversing downward trend in youth use

Non-Medical Marijuana Legalization (NML) is associated with an increased likelihood of youth marijuana and alcohol use

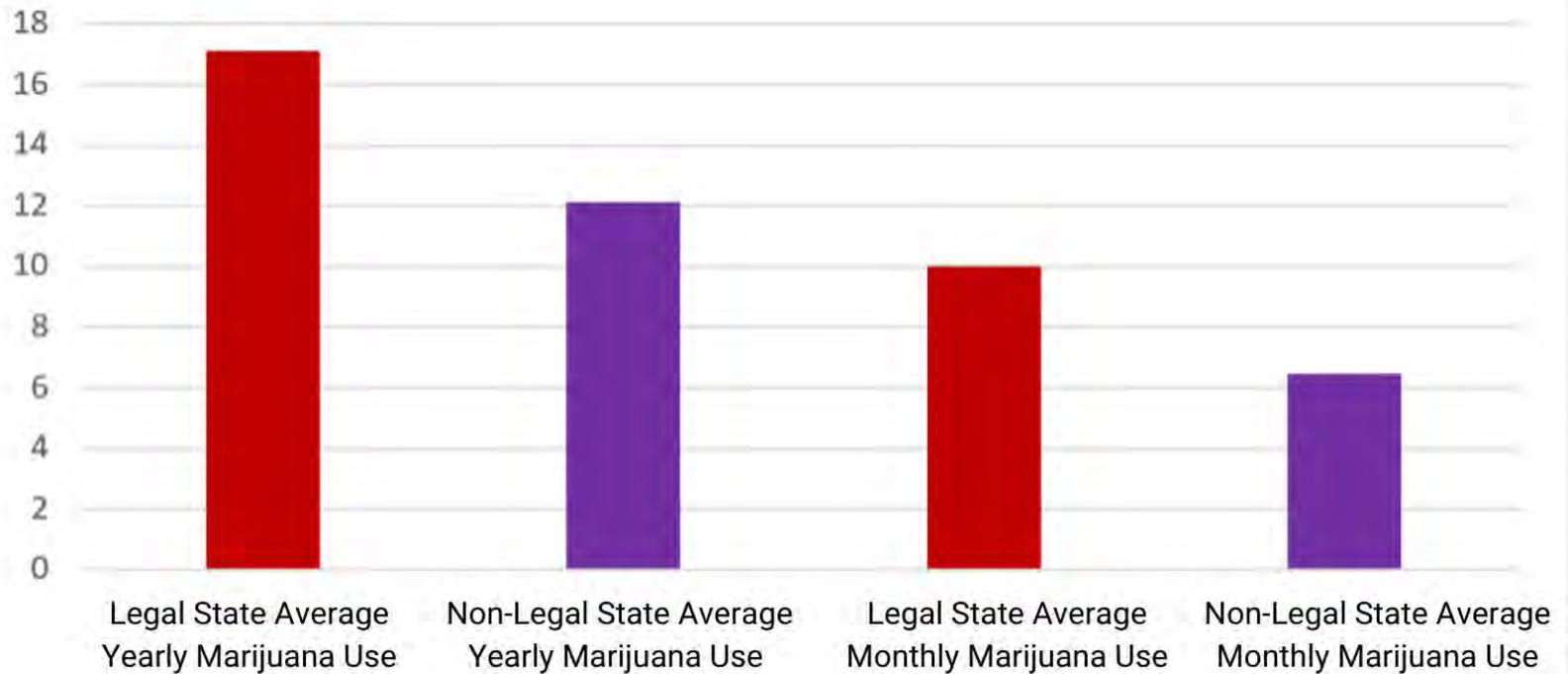
- Researchers accounted for an overall downward trend in youth substance use across the nation to more closely scrutinize use in NML states, a factor that previous studies may have missed.
- The adjusted odds ratios of youth use of marijuana and alcohol in states with NML were 6.85 and 3.38, respectively.
- “Among teens, NML may be working against hard-won, population-level decreases in the prevalence of marijuana and alcohol use.”

AOR of Past Year Reported Use in States with Non-Medical Marijuana Legalization



Bailey et al., 2020

# Past-Month and Past-Year Youth Use in “Legal” States Outpaces Such Use in Non-Legal States



NSDUH State Estimates, 2020

# Lancet 2019 Population-Level Study Conclusions

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5x

- Regular high potency marijuana users are 5 times **more likely to develop psychosis.**
- Compared to 3 times more likely for regular users of lower potency marijuana of the past.

# Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence (May 2020)

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Study of 1,087 twenty-four-year-olds who reported recent marijuana use, found that users of **high potency marijuana** were:

**4x**

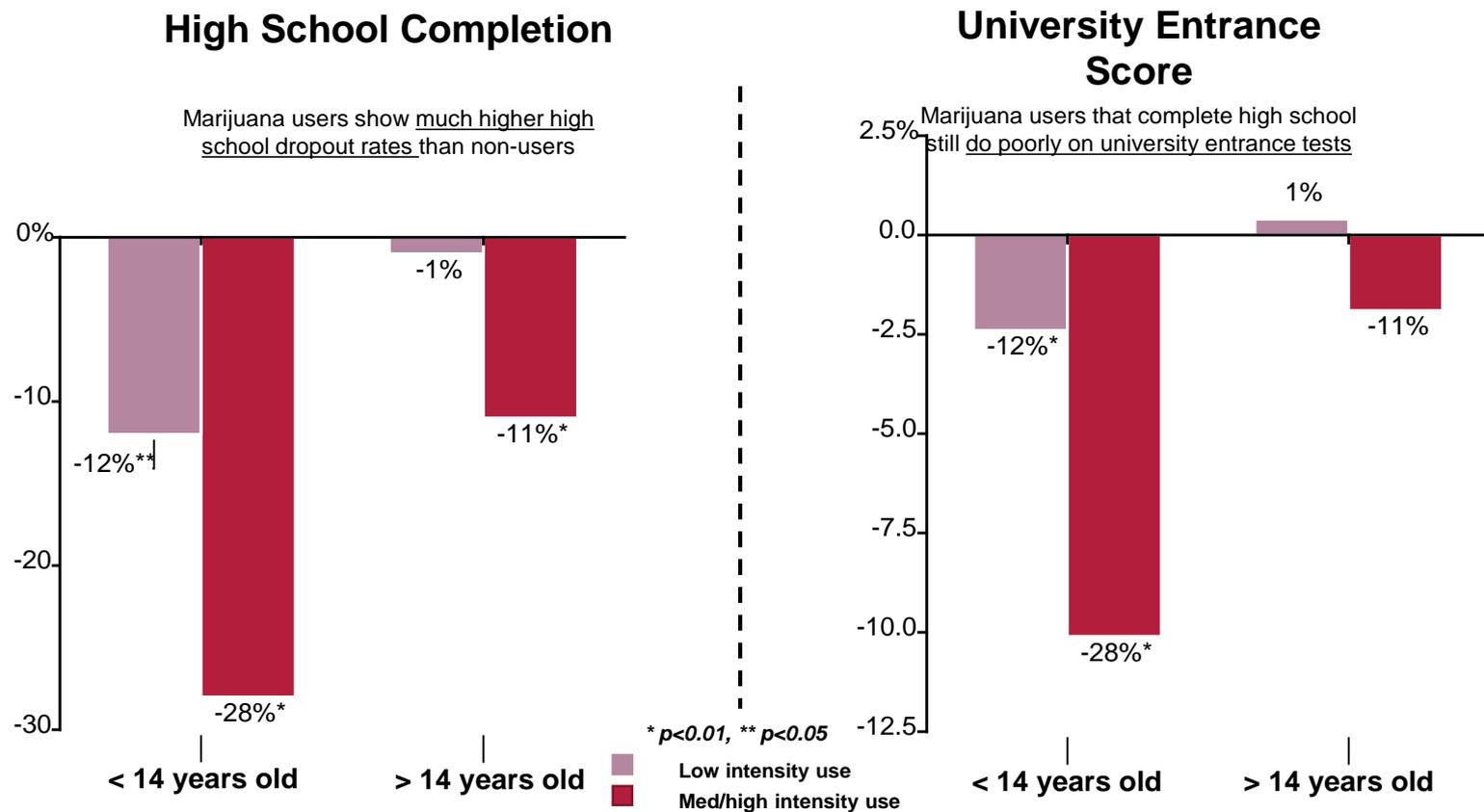
more likely to abuse marijuana

**2x**

as likely to develop anxiety disorders

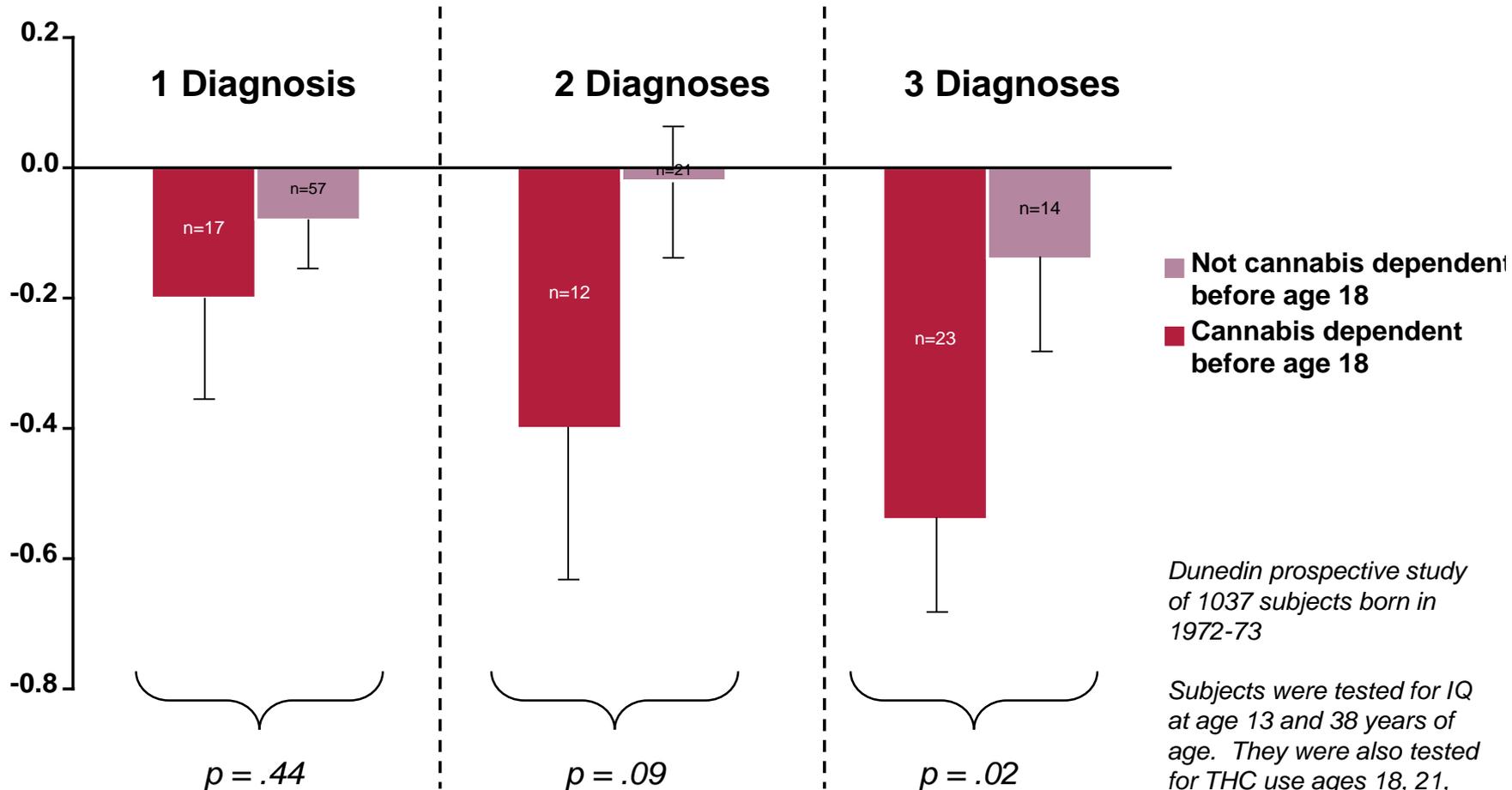
In addition to increases in anxiety, the study also found that users of high potency were twice as likely to have used other substances in the past year and more than three times as likely to be tobacco users.

# Early Marijuana Use and Intensity of Use are Associated with Lower Educational Attainment



# Marijuana use is also associated with lower IQ among adolescents

Change in full-scale IQ  $\square$   
(standard deviation units)



*Dunedin prospective study of 1037 subjects born in 1972-73*

*Subjects were tested for IQ at age 13 and 38 years of age. They were also tested for THC use ages 18, 21, 26, 32 and 38 years of age.*

# Youth Marijuana Abuse Linked to Suicide Attempts & Self Harm

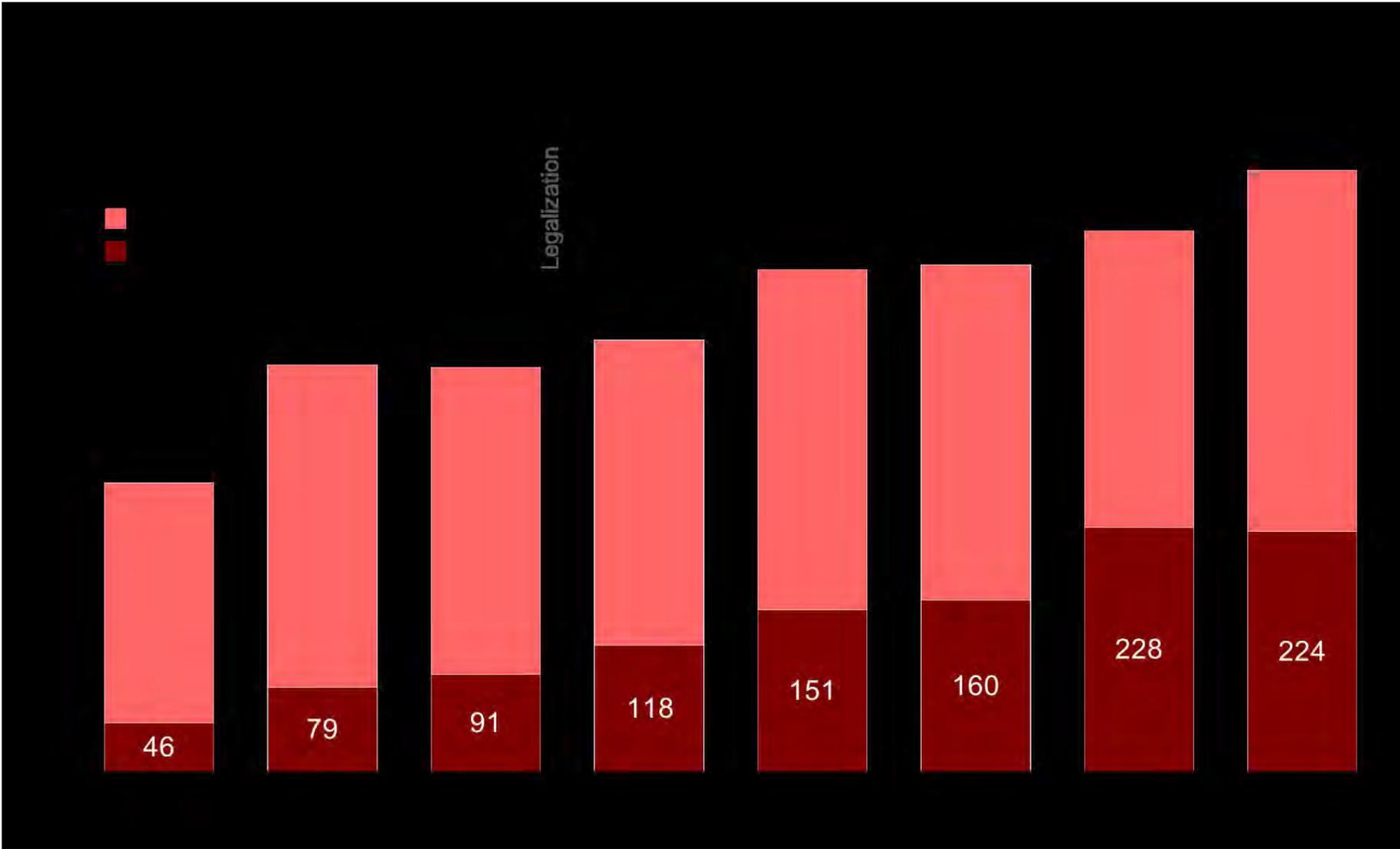
## **Marijuana abuse by youth with mood disorders linked to suicide attempts, self-harm and death, study finds**

By Sandee LaMotte, CNN

🕒 Updated 12:51 PM ET, Wed January 20, 2021

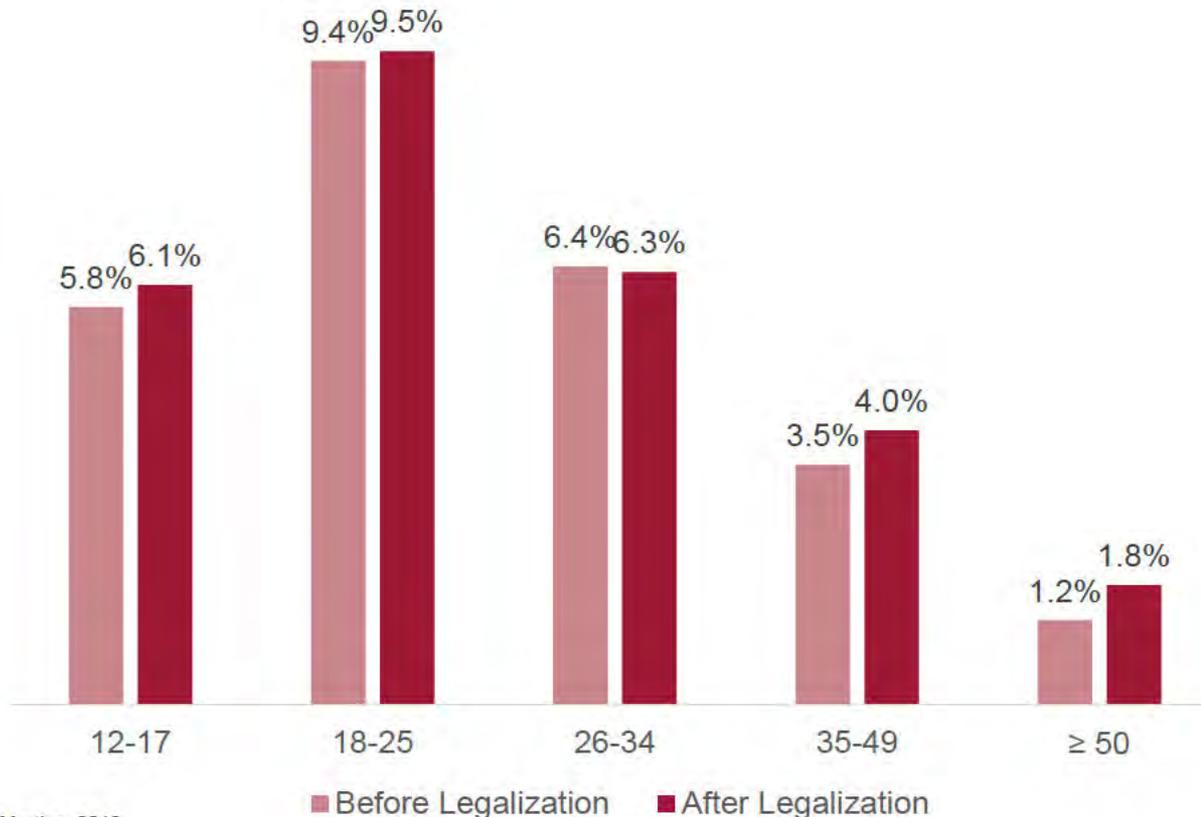
Study Conclusion: Cannabis use disorder is a common comorbidity and risk marker for self-harm, all-cause mortality, and death by unintentional overdose and homicide among youths with mood disorders.

**These findings should be considered as states contemplate legalizing medical and recreational marijuana, both of which are associated with increased CUD.**



# Medical marijuana legalization appears to be associated with increases in opioid use

## Nonmedical Prescription Opioid Use (%)



Martins, 2019

Comparison of Past-Year Nonmedical Prescription Opioid Use Between States Before MML Passage and After MML Passage – Use by Age

- Nonmedical prescription opioid use appears to increase following MML
- Increases warrant further studies

# 2019 McMaster University Study: Marijuana Did Not Reduce Opioid Use

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Canadian researchers at McMaster University analyzed twenty-three studies with more than 3,600 participants:

- Marijuana **did not lead to reduced opioid use** during treatment
- Also did not lead to people staying in treatment programs

# Targeting Our Youth



# Snob Appeal





Happiness

# Appeal to youth





# Joe Camel Returns?



# THC Vape Companies Advertise on Social Media with Cartoon Characters Targeted at ComicCon



# 2019 Colorado Health Department Report

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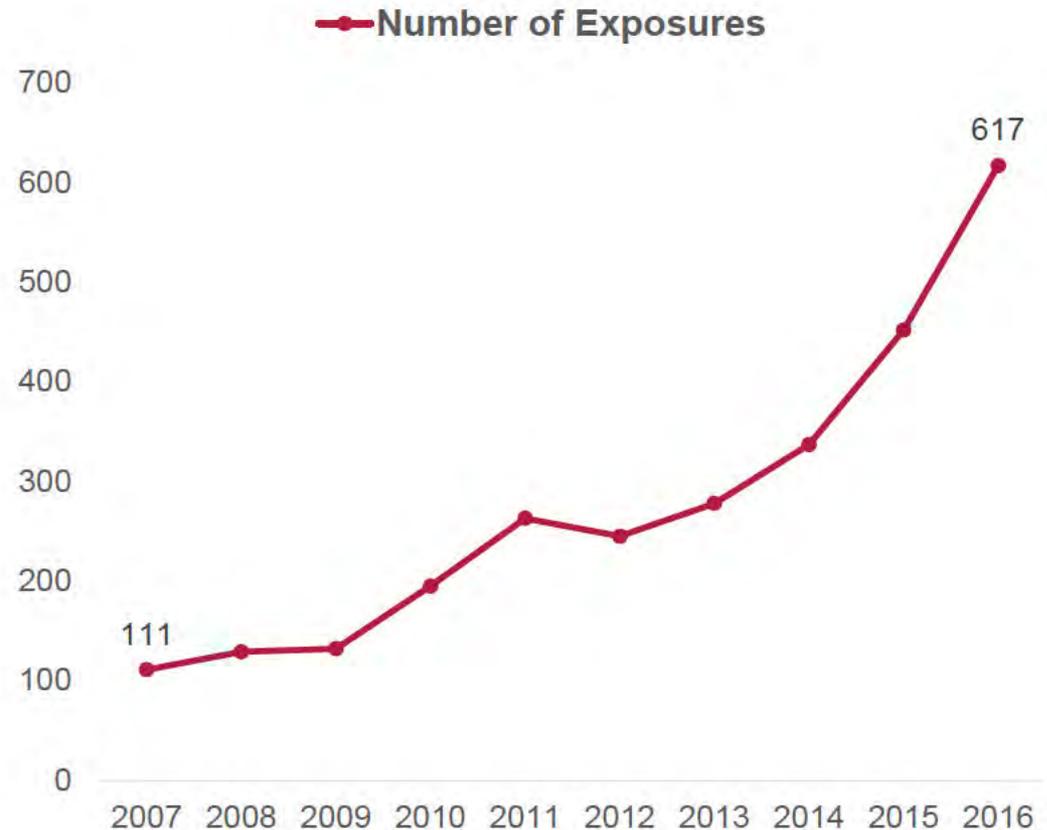
- **400% increase** in marijuana poisonings of children 0-9 years of age.
- 23,009 homes with children **are not storing marijuana products safely.**
- 32,800 homes where children 1-14 years of age **are exposed to second-hand marijuana smoke.**

# The rate of children aged 5 and younger exposed to marijuana increased by 147.5 percent

Marijuana exposures are increasing across the country

- The increased occurrence of accidental exposure to marijuana among children is attributed largely to states where medical and recreational marijuana had been legalized.
- 75 percent of exposures were attributed to accidental ingestion of marijuana products.
- Children younger than age 3 accounted for 78 percent of the exposures.

National Center on Addiction and Substance Abuse – 2018



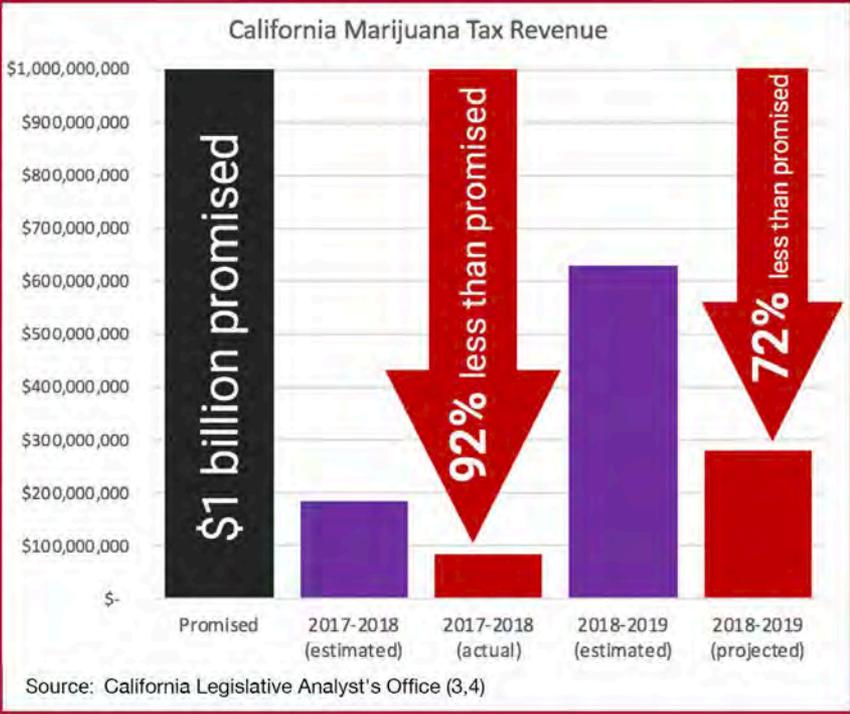
# STUDY: Living Near Marijuana Dispensaries Increases Likelihood of Youth Use, Favorable Opinions

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A study published in the journal [Addiction](#) in 2019 found that living near a marijuana dispensary increases the likelihood of marijuana use and frequency of use among young people aged 18-22.

- **84% of the nearly 2,000 participants had 10+ pot shops** within 4 miles of their homes
- Led to increased marijuana use and normalization of the drug

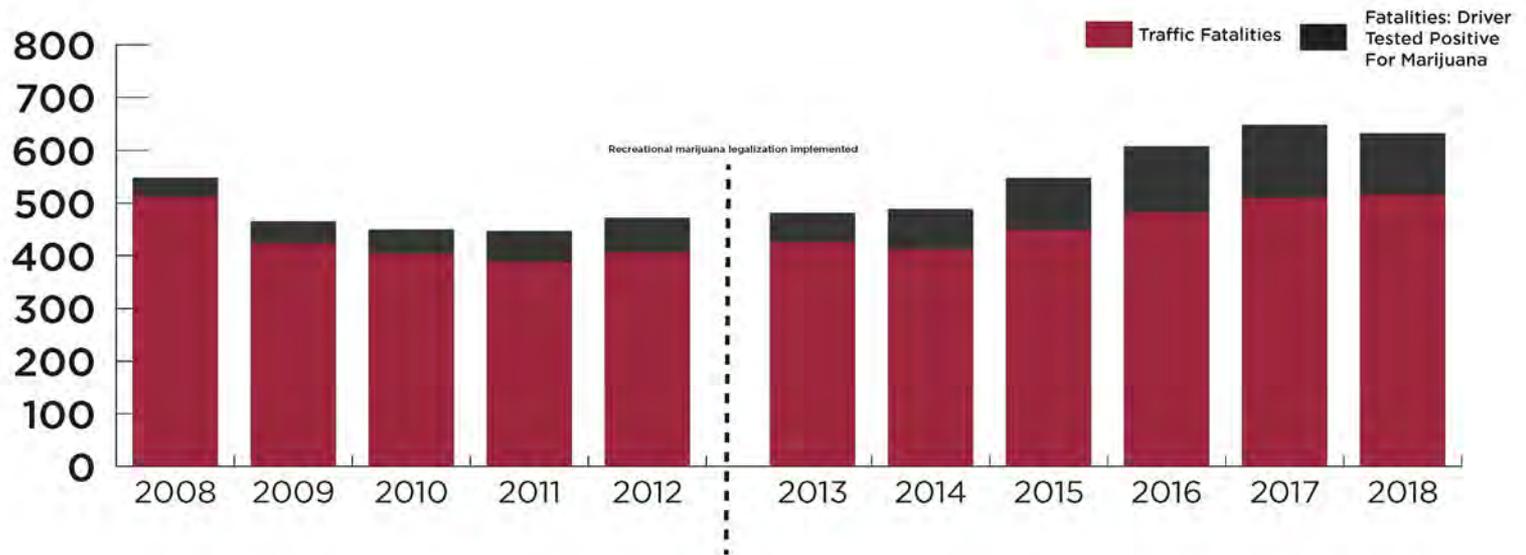
# Revenues v Reality



## Marijuana Taxes as a Percent of State Budgets

State	Percent of Budget
Colorado	0.78%
Washington	0.30%
Oregon	0.24%
Alaska	0.12%
California	0.20%

## COLORADO TRAFFIC FATALITIES WHERE THE DRIVER TESTED POSITIVE FOR MARIJUANA



(Colorado Department of Transportation, 2019)



**“AAA opposes the legalization of marijuana for recreational use** because of its inherent traffic safety risks and because of the difficulties in writing legislation that protects the public and treats drivers fairly.”

AAA Foundation for Traffic Safety (2020)

# Marijuana-Impaired Driving Fatalities are Skyrocketing

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- **Washington State & Colorado:** More than doubled since legalization
- **Oregon:** 50% of all drivers assessed tested positive for marijuana-impairment after legalization

# Washington Traffic Safety Study (2018)

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**1 in 5 drivers are stoned.**

That is up from one in ten prior to legalization.

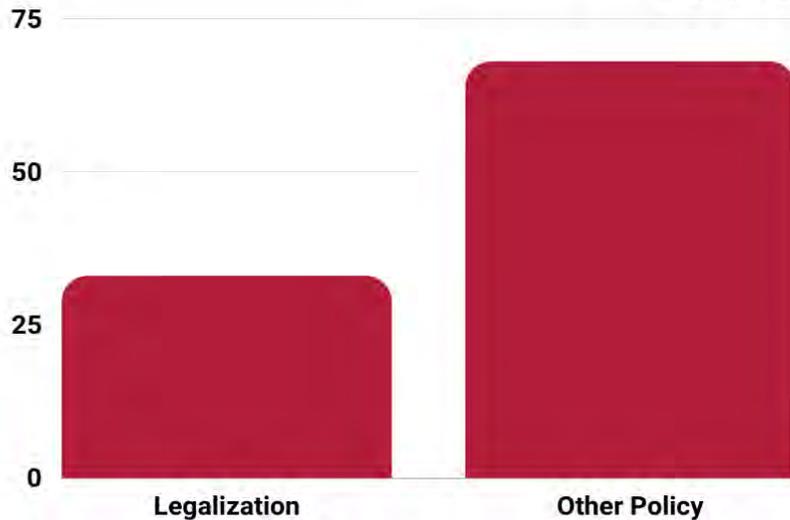
64.2% of respondents who reported using marijuana and driving **stated that they didn't think that it impaired their ability to drive at all.**

# The Washington Post

What voters really mean when they say they support marijuana legalization

## 2019 Emerson College Poll

Overwhelming Majority of Americans Support Policies Other Than Colorado-Style Legalization



**68%**

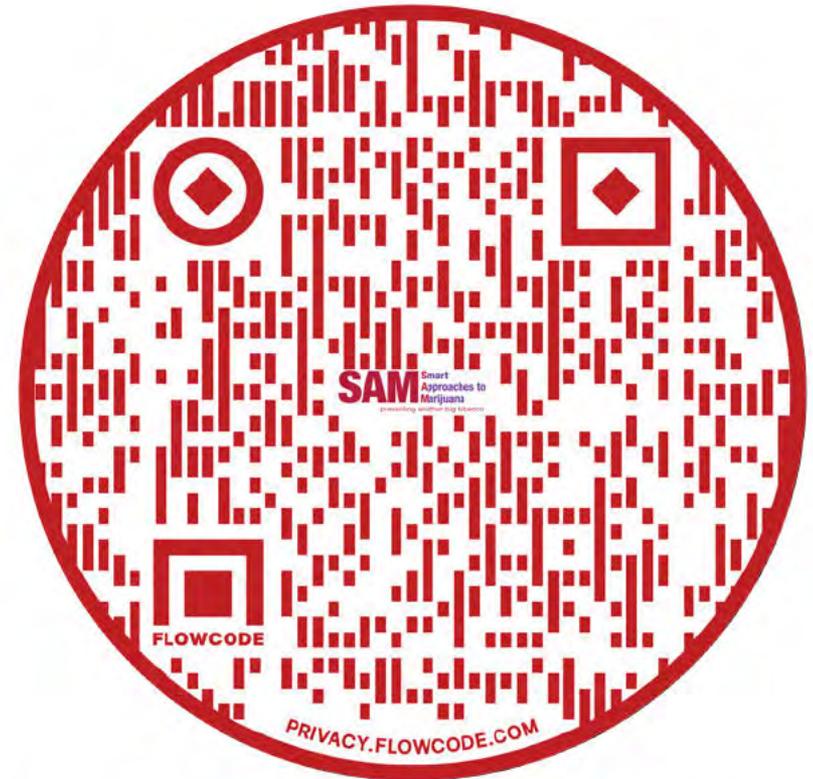
of Americans prefer either medical marijuana only, decriminalization only, or keeping marijuana illegal



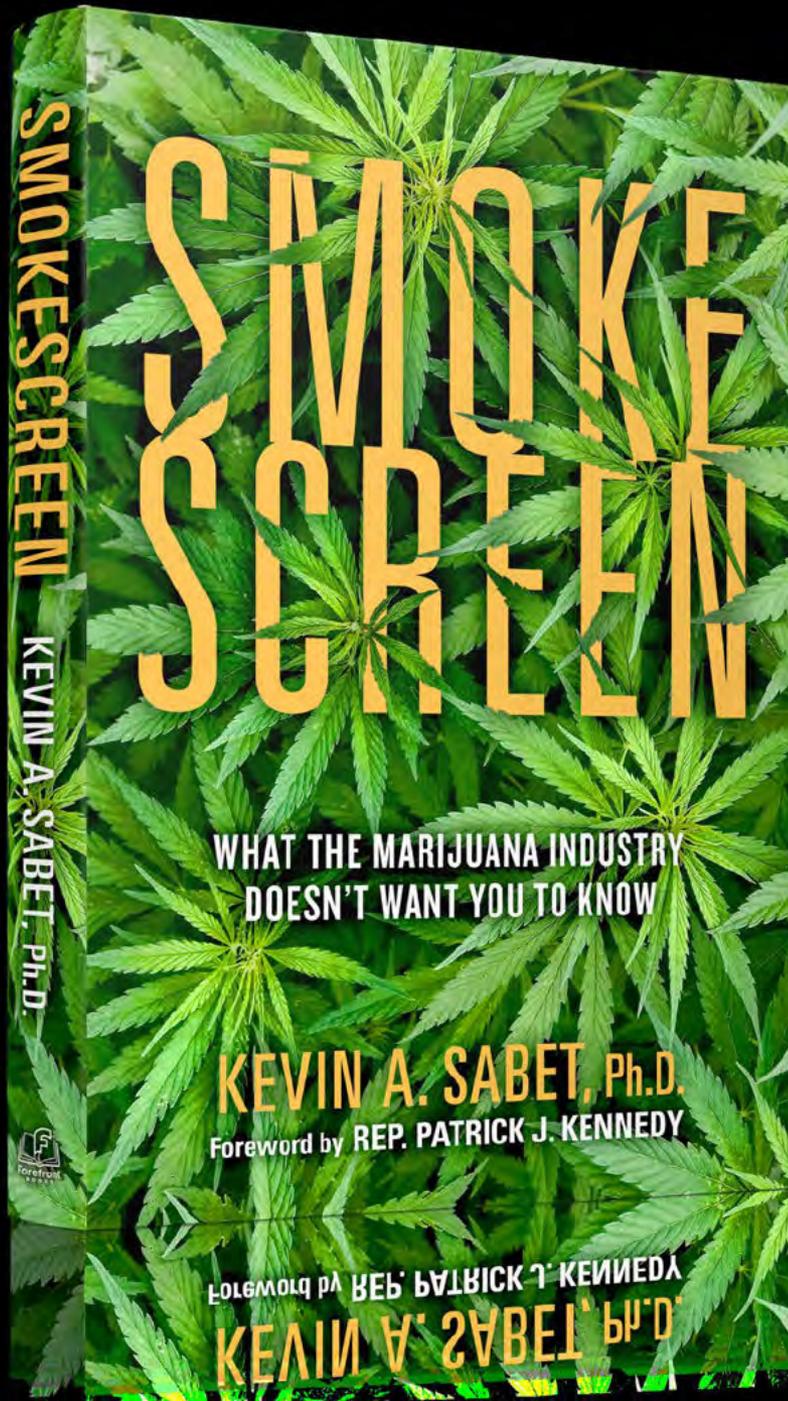
# LESSONS LEARNED FROM STATE MARIJUANA LEGALIZATION

2020-2021 Edition

Scan with your phone to buy now:



Preorder now and get some digital  
treebies including a PDF of my previous  
book, *Reefer Sanity: Seven Great Myths  
About Marijuana*.



Thank You!

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**SAM** Smart  
Approaches to  
Marijuana  
preventing another big tobacco