



The US Experience With Cannabis Legalization

April 2016

PREVENT.
DON'T PROMOTE.

www.preventdontpromote.org

About SAM

- SAM has an evidence-based, scientific approach to marijuana policy that **rejects the false dichotomy that we must either lock up marijuana users OR legalize pot**
- Instead, we support:
 - Alternatives to incarceration
 - FDA-approved medications derived from marijuana
 - Ending legalization and commercialization of pot
- We have **helped defeat five state pro-legalization initiatives**, including the 2015 Ohio ballot measure

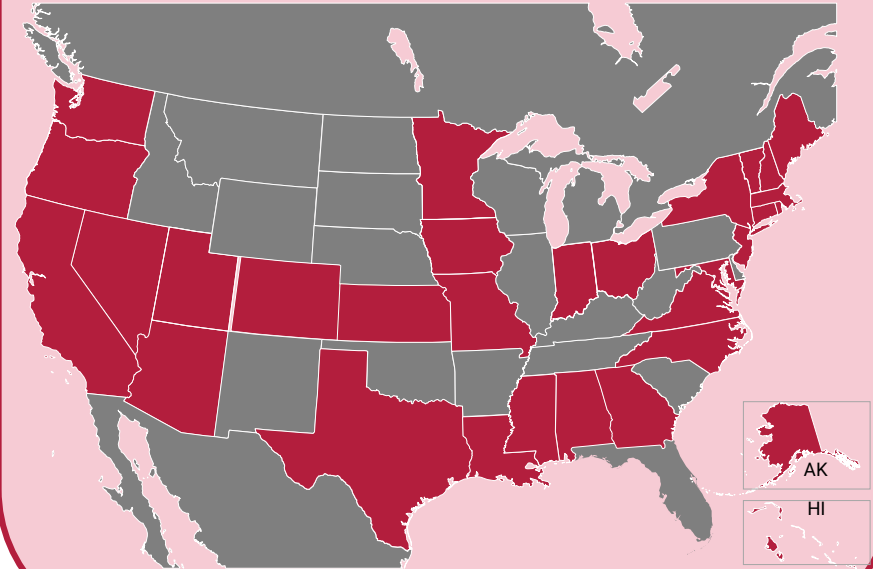


Through its prestige & 31 affiliates, SAM brings nationwide reach and media impact to the table

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



31 state affiliates across the U.S.

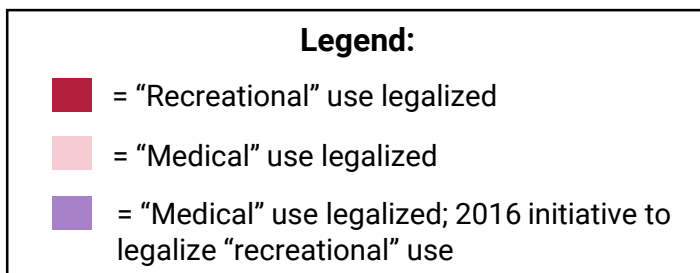
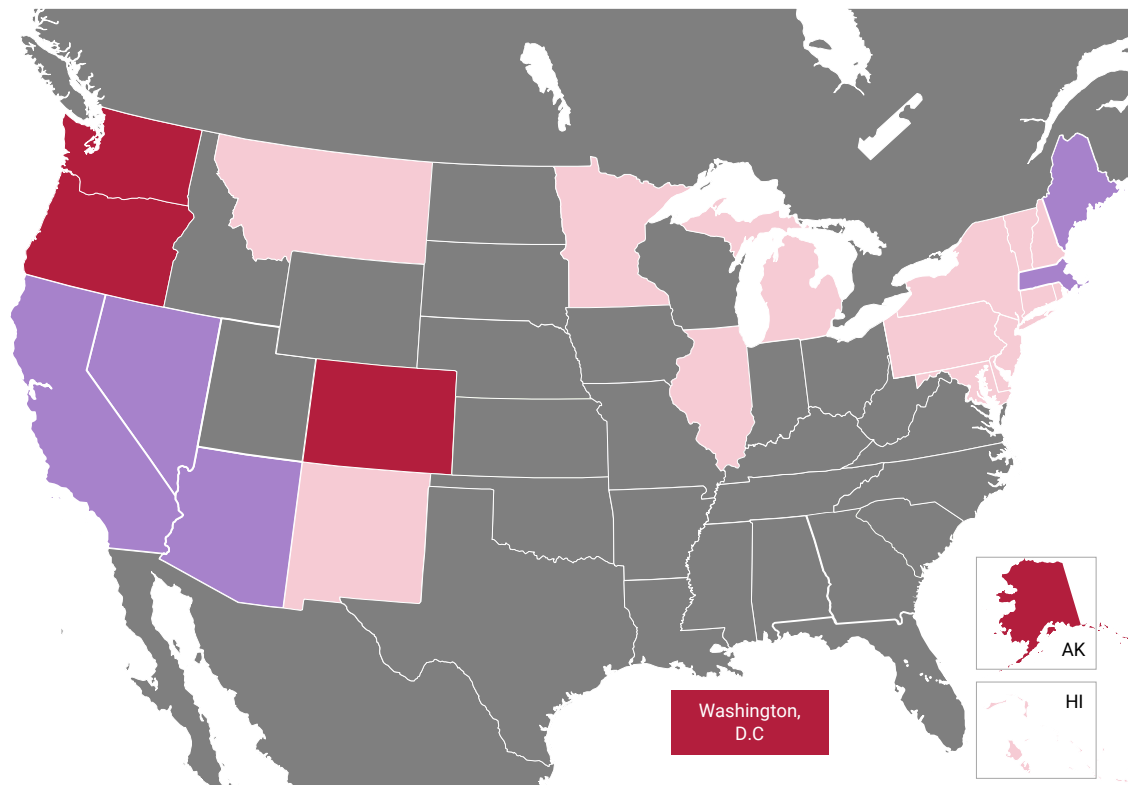




Legalization = Big Marijuana

- Legalization measures will inevitably lead to mass commercialization

This tide of money has resulted in legalization across a large portion of the United States



- In California alone, up to \$25 million is expected to be spent promoting the 2016 "recreational" marijuana initiative

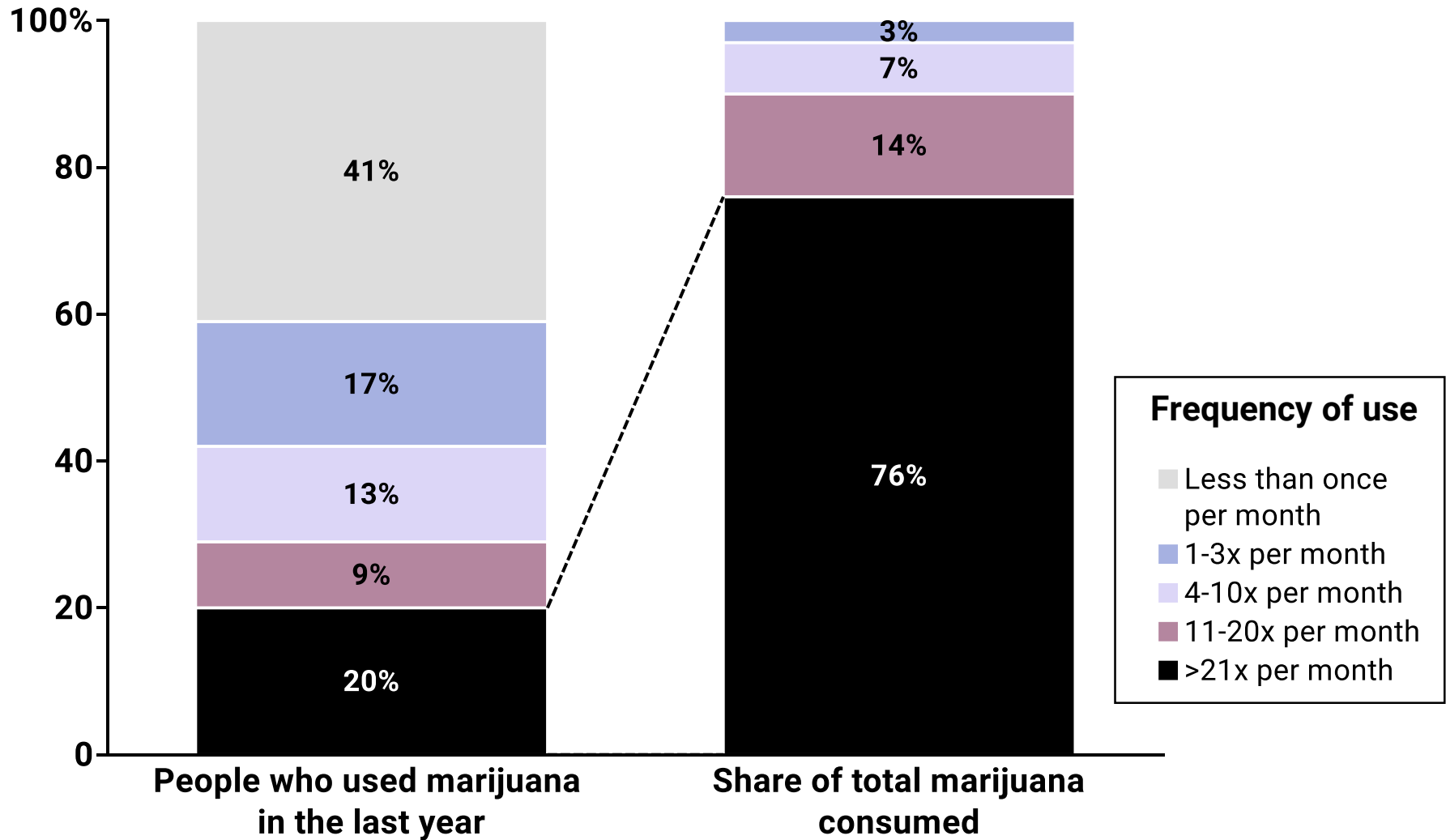


The Landscape

2016 Ballot States: California, Nevada, Arizona, Massachusetts, Maine?

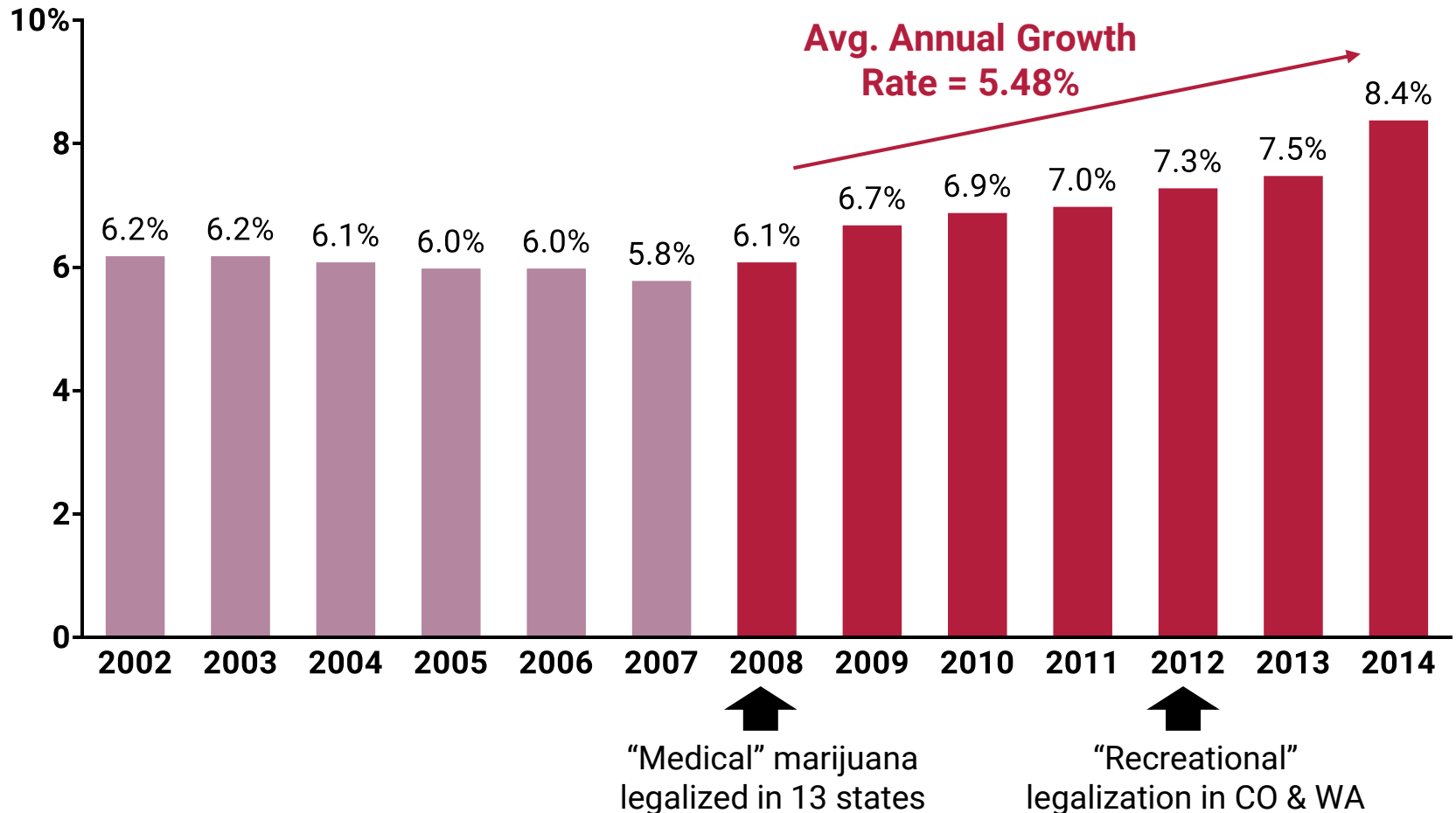
2016 Legislative States: Vermont, Rhode Island

Heavy users dominate marijuana consumption

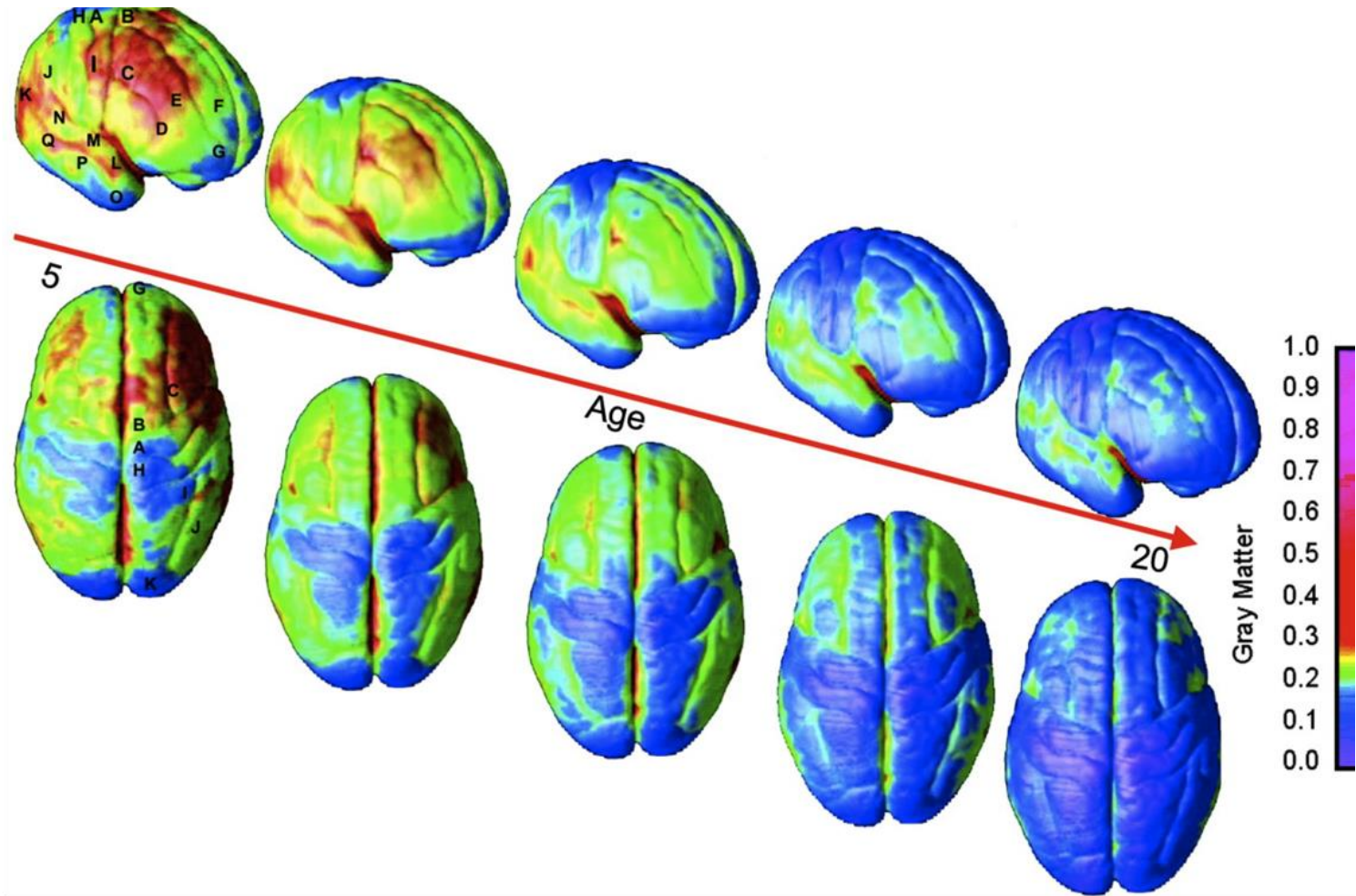


Marijuana use has been on the rise in the last decade, since legalization laws became common

Percentage of population ages 12 and up who used marijuana in the past month

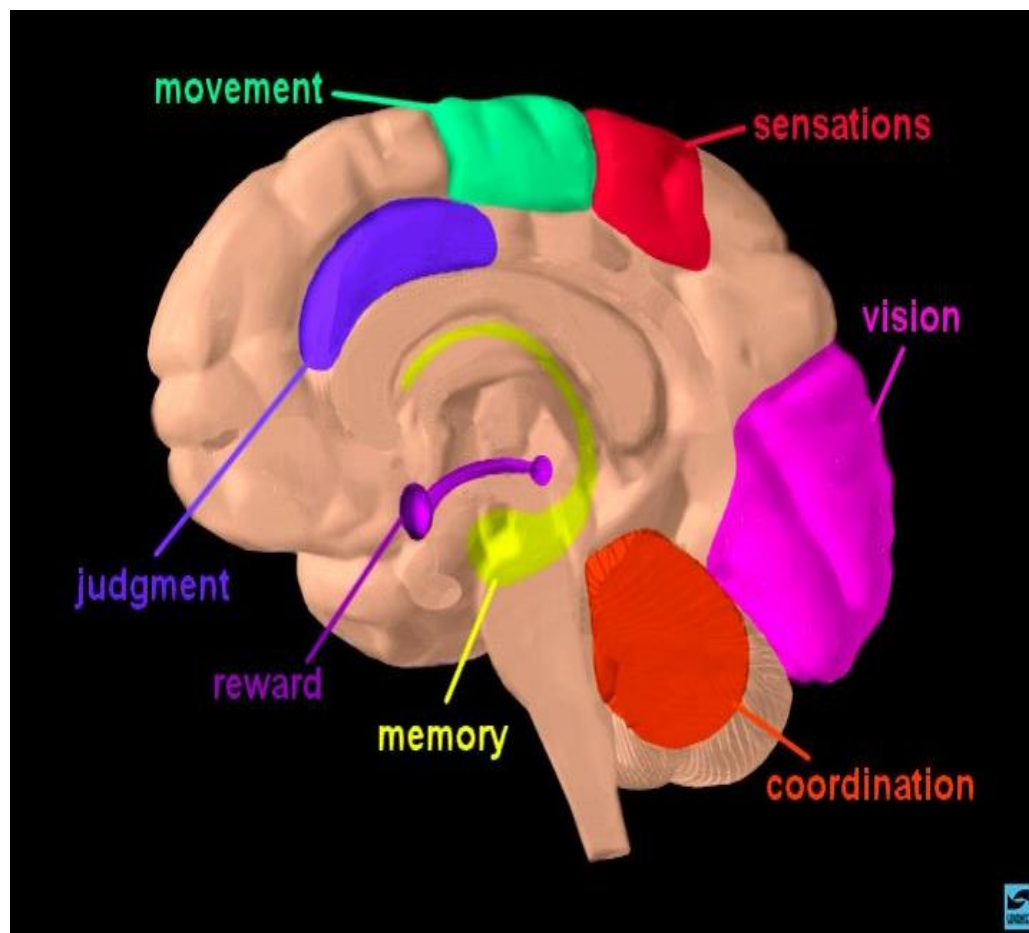


Brain development: Ages 0-20



Cannabinoid Receptors Are Located Throughout the Brain and Regulate a Host of Brain Activity

- Brain Development
- Memory & Cognition
- Motivational Systems & Reward
- Appetite
- Immunological Function
- Reproduction
- Movement Coordination
- Pain Regulation & Analgesia



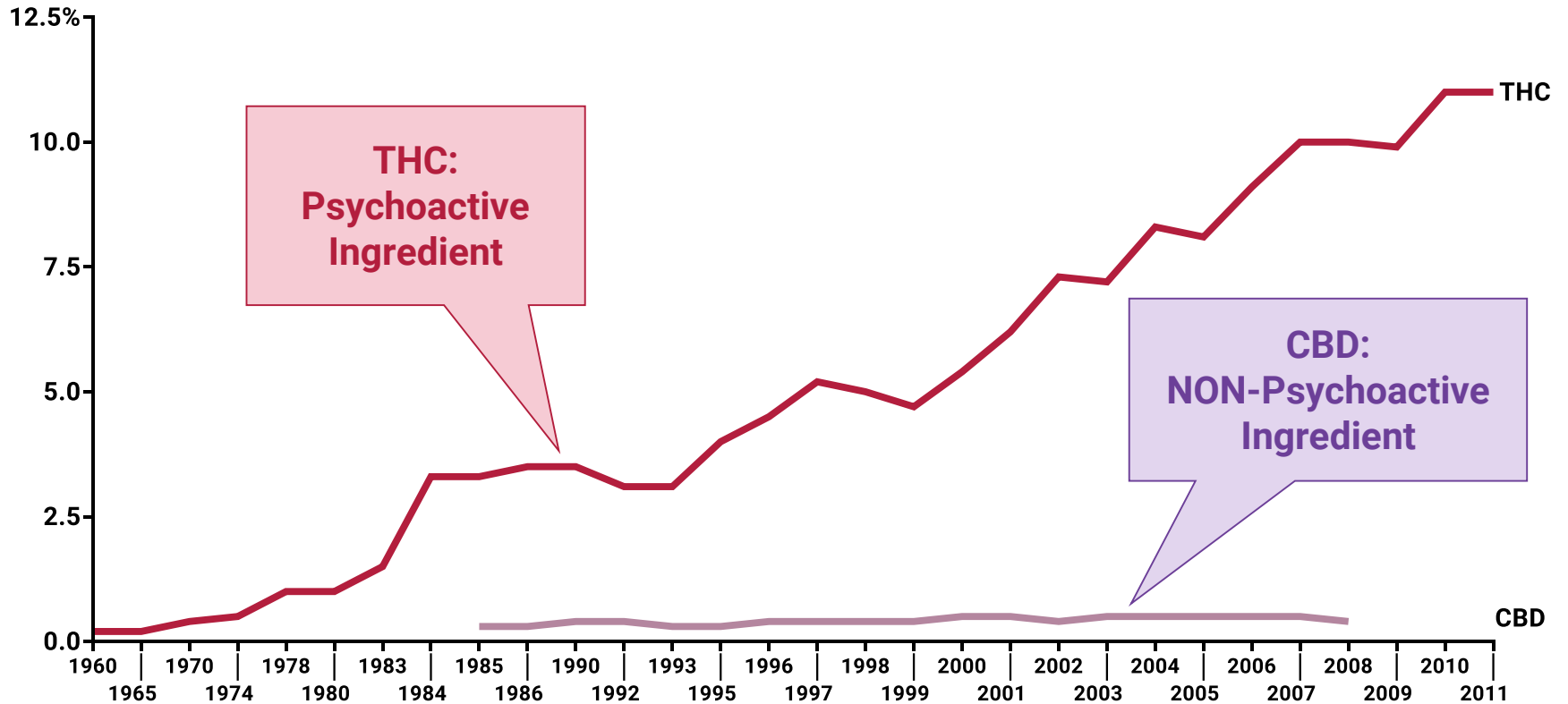
1 in 6 teens become addicted to marijuana



- 1 in 11 adults and 1 in 6 adolescents who try marijuana will become addicted to it
- 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

Marijuana has become significantly more potent since the 1960s

Average THC and CBD levels in the United States



CBD						0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4					
THC	0.2	0.2	0.4	0.5	1.0	1.0	1.5	3.3	3.3	3.5	3.5	3.1	3.1	4.0	4.5	5.2	5.0	4.7	5.4	6.2	7.3	7.2	8.3	8.1	9.1	10.0	10.0	9.9	11.0	11.0

Marijuana is not “just a plant” anymore – derivatives contain up to 98% THC



*“Green Crack”
wax*



“Ear Wax”



Butane Hash Oil
(BHO)



Hash Oil Capsules



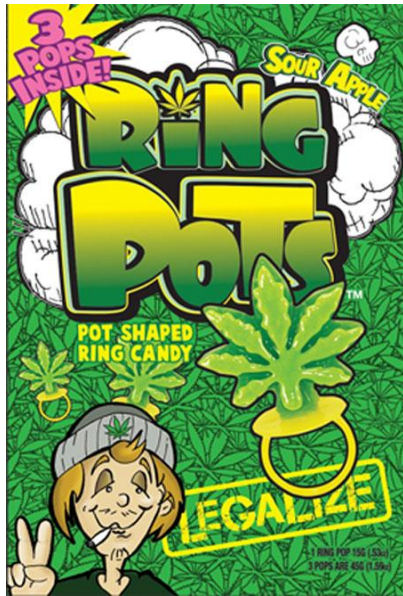
“Budder”

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“Shatter”



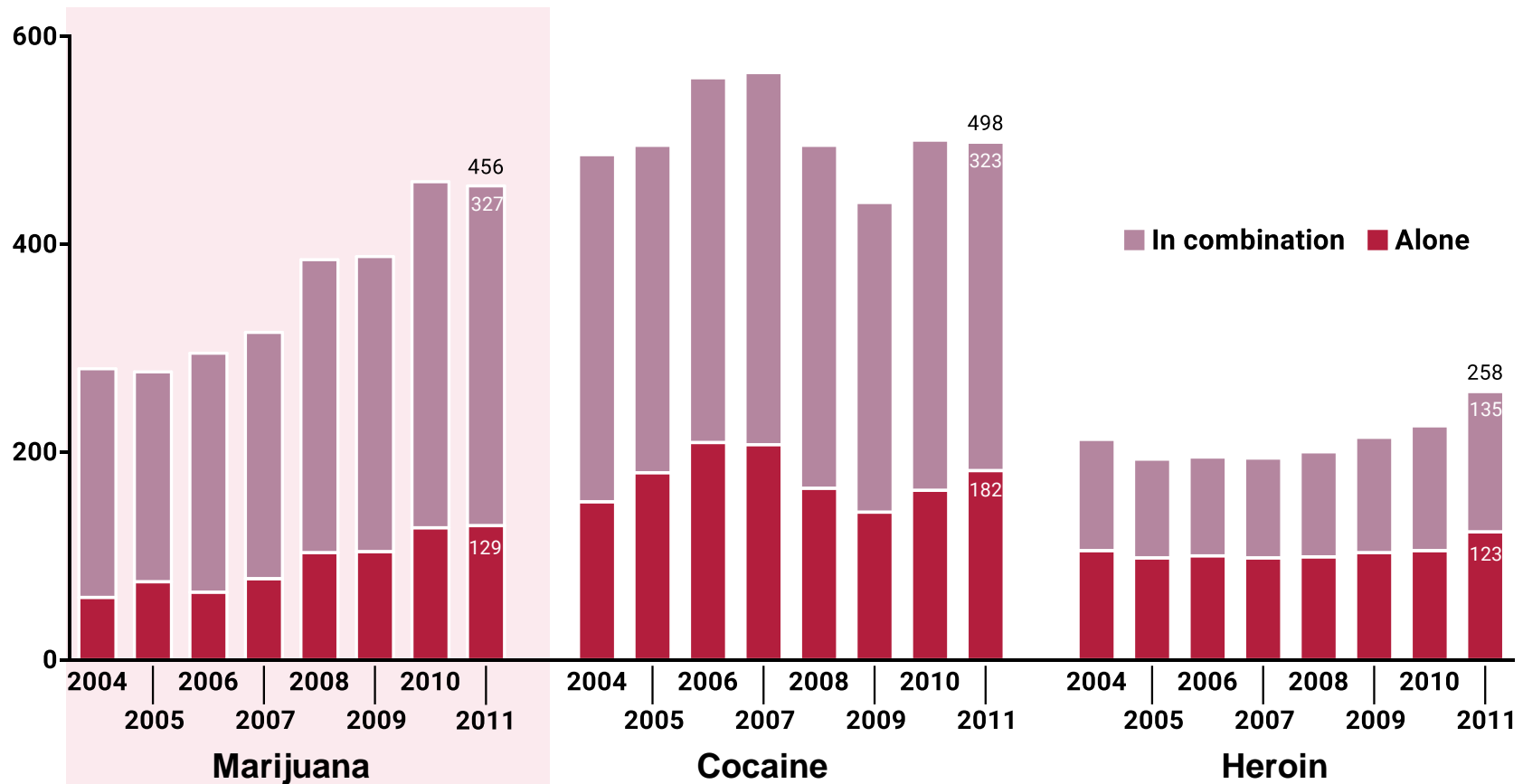
Targeting children



Marijuana-related emergency room visits have risen sharply, both in relative and absolute terms

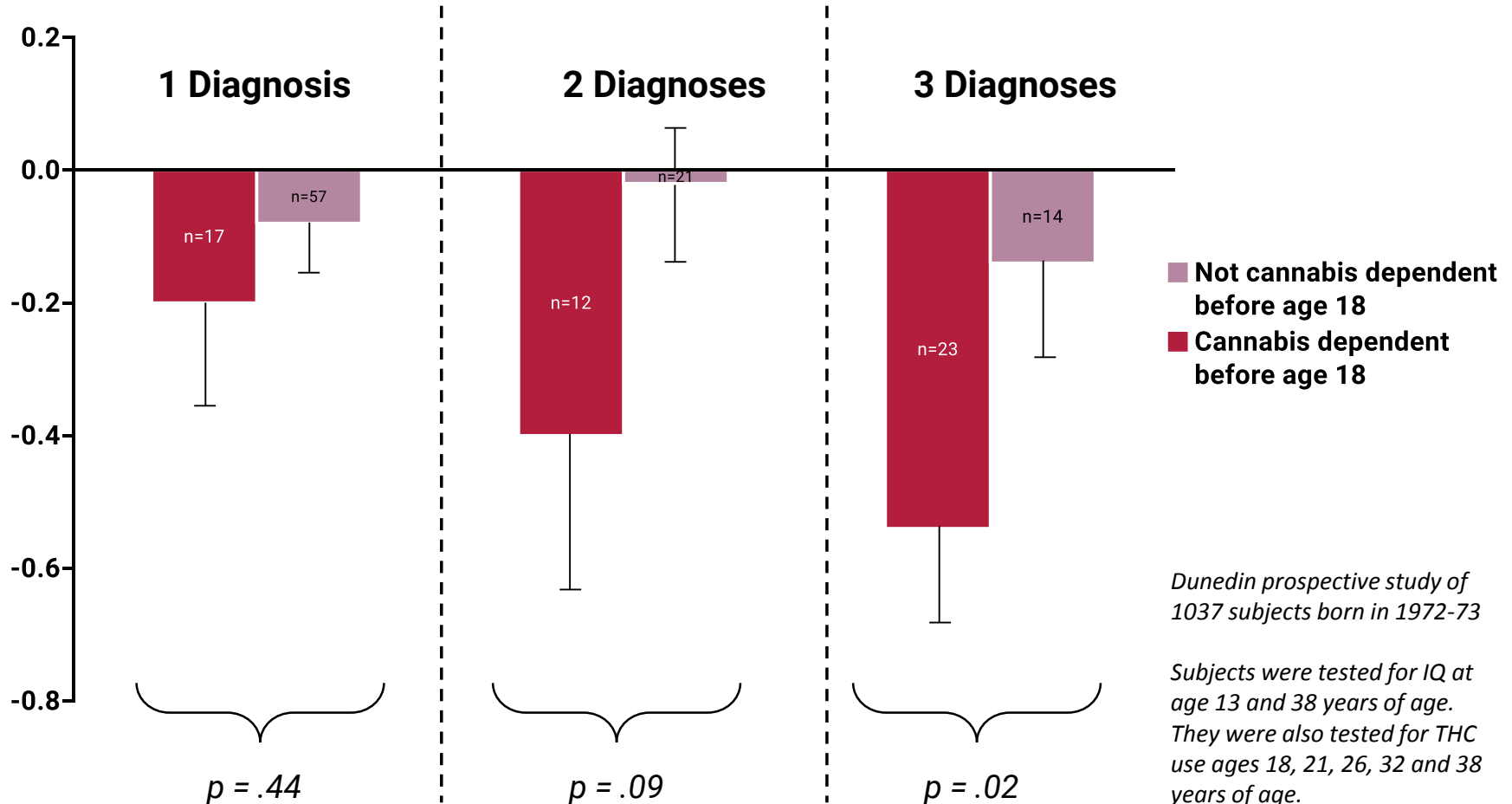
Number of Emergency Department Visits Involving Marijuana, Cocaine, or Heroin

of emergency-department visits
(in thousands)



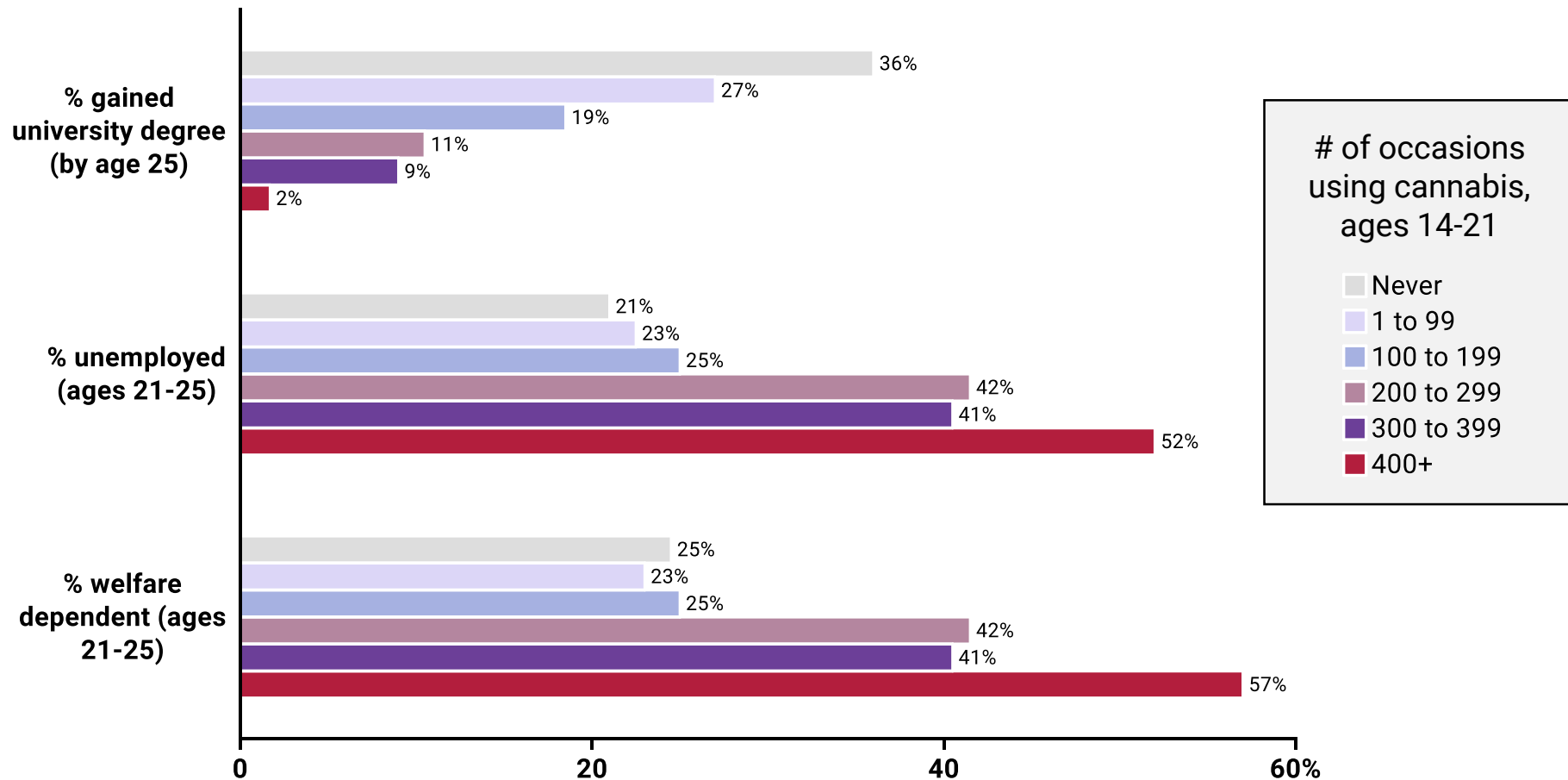
Marijuana use is also associated with lower IQ among adolescents

Change in full-scale IQ
(standard deviation units)



Cannabis use also corresponds with undesirable social outcomes such as unemployment

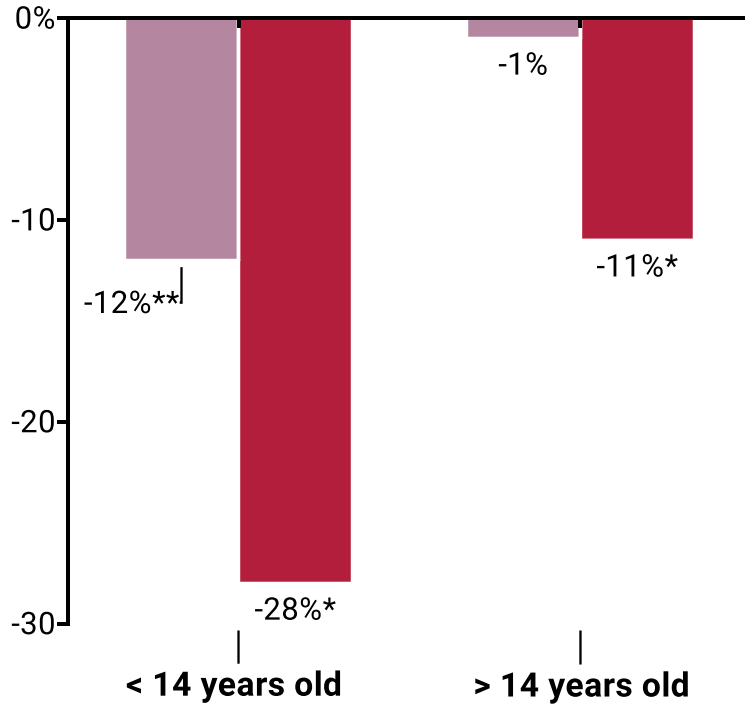
New Zealand study showing relationship between cannabis use and social outcomes



Early marijuana use and intensity of use are associated with lower educational attainment

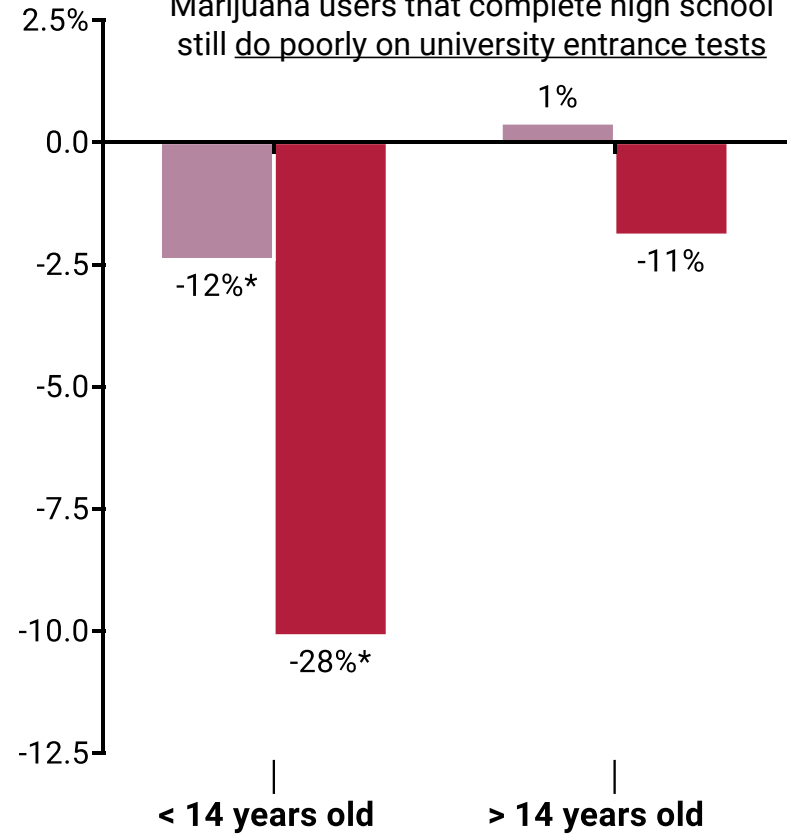
High School Completion

Marijuana users show much higher high school dropout rates than non-users



University Entrance Score

Marijuana users that complete high school still do poorly on university entrance tests



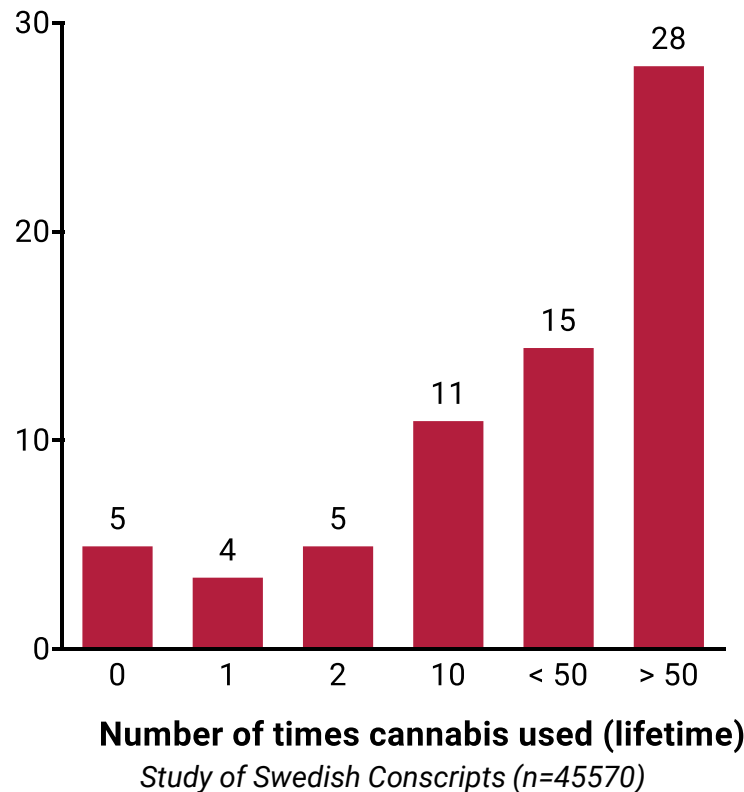
* $p < 0.01$, ** $p < 0.05$

■ Low intensity use
■ Med/high intensity use

Marijuana use is associated with mental illness

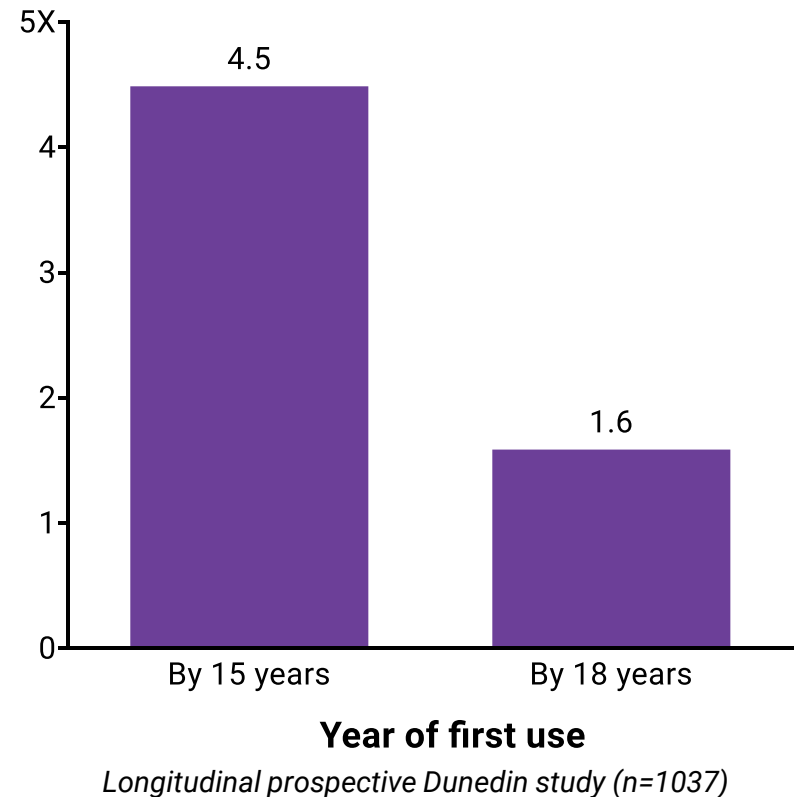
MORE MARIJUANA USE CORRELATES WITH HIGHER RATES OF SCHIZOPHRENIA

Cases of schizophrenia per 1,000 people



EARLIER AGE OF USE CORRELATES WITH INCREASED SCHIZOPHRENIA RISK

Risk multiple for schizophrenia-like psychosis at age 26



Legalization has birthed a marijuana industry, fueled by private equity and Wall Street



NYC-based private equity firm focused on cannabis



\$26 million round of funding closed July 2015



Partnership with Willie Nelson to develop a marijuana brand



Seattle-based private equity firm investing exclusively in pot



Secured the first institutional investment in cannabis

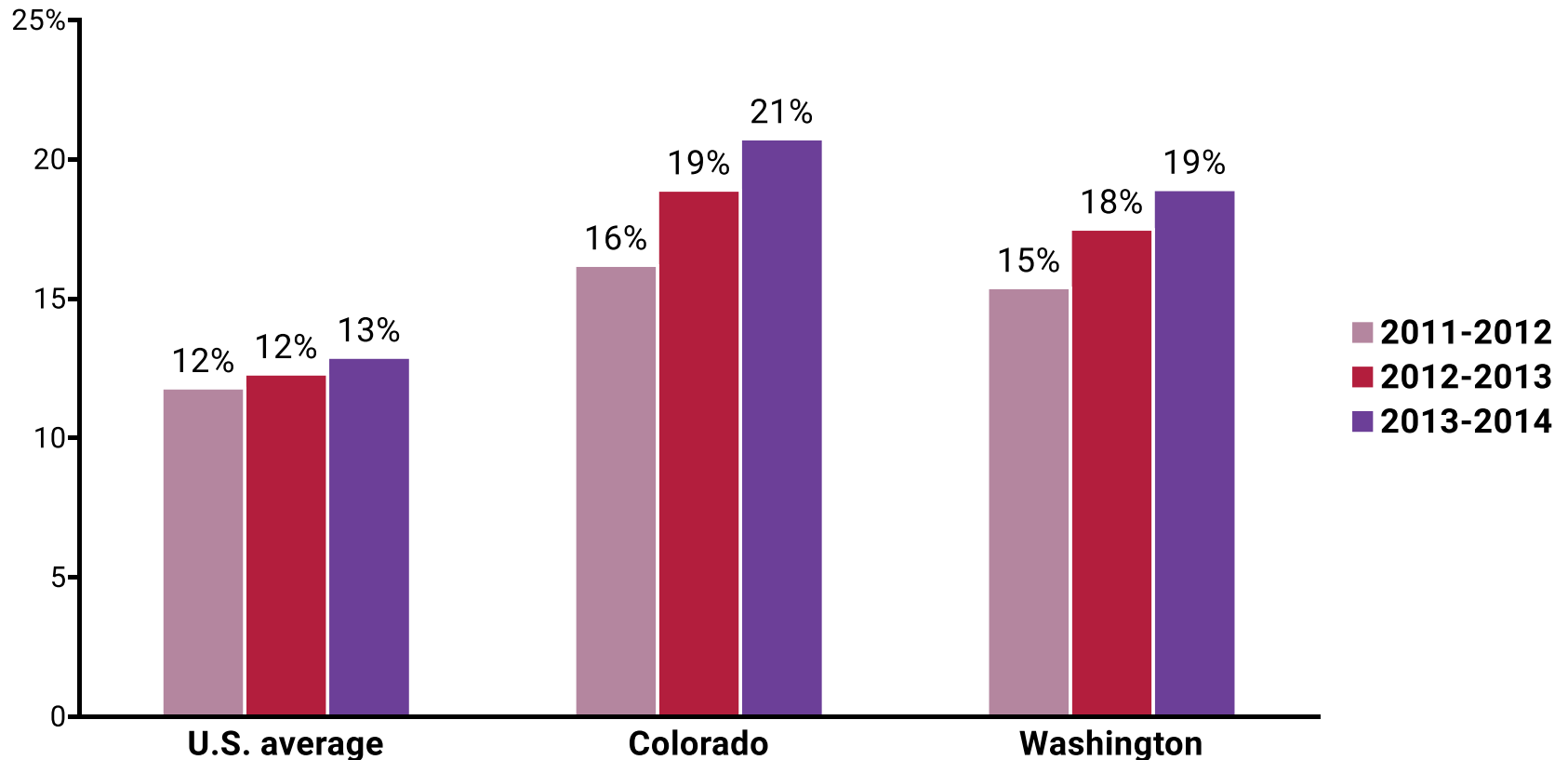


Launched the world's first global cannabis brand, "Marley Natural"



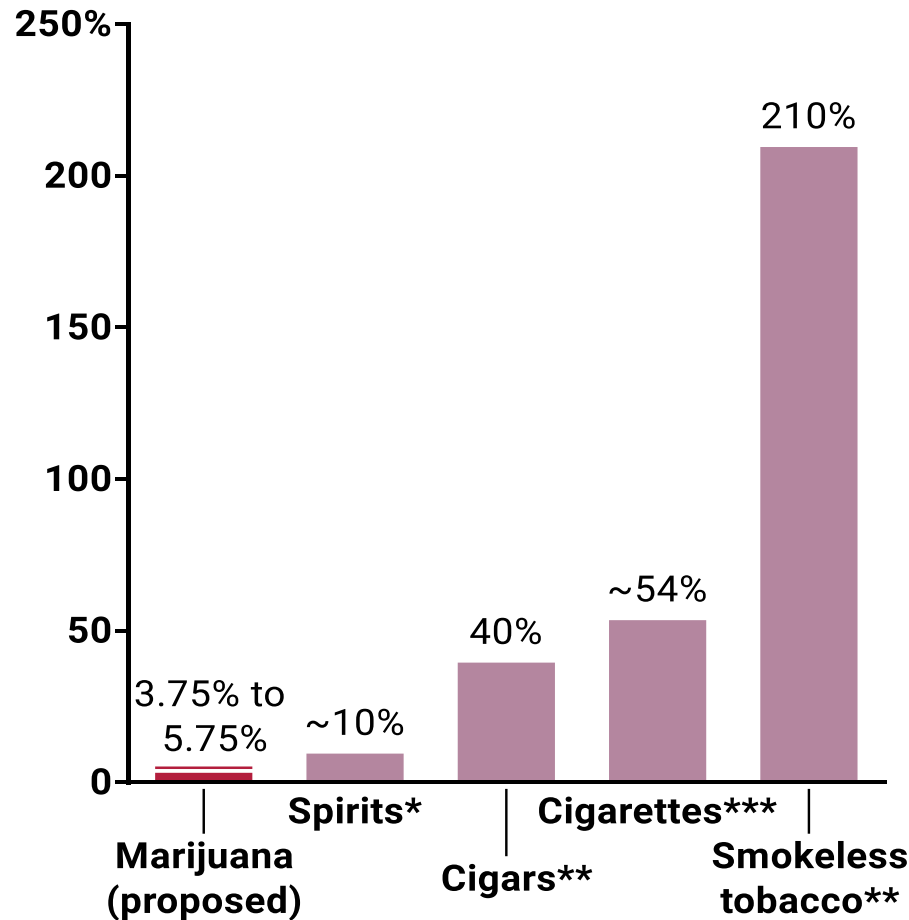
Use in CO and WA are both (A) higher than and (B) rising faster than the national average

Percentage of population ages 12 and up who used marijuana in the past year



The Mass. initiative would tax pot far less than tobacco/alcohol, and far less than other states

Massachusetts excise taxes



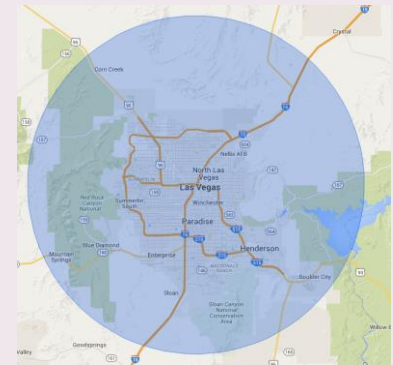
In Nevada, the home-grow ban would effectively criminalize home cultivation in all urban areas



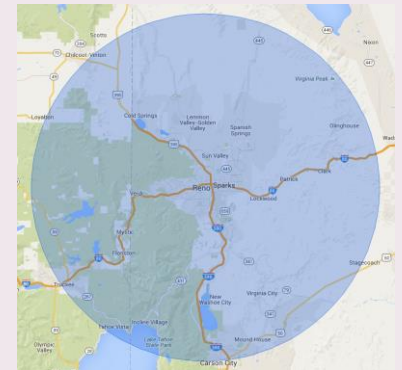
Criminalizes home cultivation w/in 25-mile radius of retail pot shops

Just one retail marijuana store in the center of any major city would exclude home grow from the entire metro area

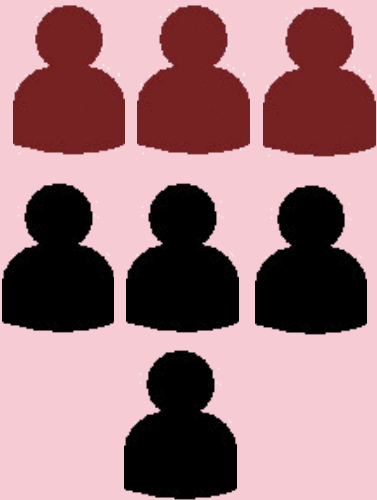
Las Vegas: 25-mile zone would extend to Hoover Dam



Reno: 25-mile zone would extend to north end of Lake Tahoe



The Arizona initiative would provide competitive advantages to the pot industry

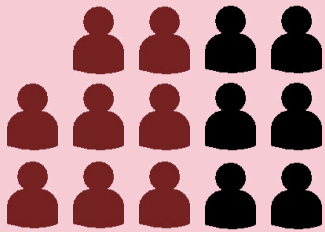


By law, 3 of 7 members of the proposed AZ Marijuana Commission must be owners, directors, or managers of pot businesses

While the four members are not allowed to have any financial interest in a marijuana business, **the other three are required to have such an interest.**

- **This means the pot industry will only need one vote to get its way on any issue before the commission, including licensing decisions.**
- Moreover, since **a quorum for decisions is four members**, the industry reps would just need one other Commissioner in the room to win on any given matter.

The MA initiative gives strong advantages to industry, incl. *de facto* control of regulatory entity



9 of 15 members
of the proposed MA
Cannabis Advisory
Board will be
industry-controlled

Industry representatives:

- An “expert in marijuana cultivation”
- An “expert in marijuana retailing”
- An “expert in marijuana product manufacturing”
- An “expert in marijuana testing”
- A “board member or officer of a medical marijuana treatment center”
- A “registered medical marijuana patient”
- An “individual who represents marijuana retail customers”
- Two “attorneys with experience providing legal services to marijuana businesses, marijuana consumers or medical marijuana patients” in MA

Potential non-industry representatives:

- Two “experts in public health”
- Two “experts in law enforcement”
- Two “experts in social welfare or social justice”

Additional advantages to industry:

- **Limits on local control:**
 - Many measures require a plebiscite
 - Cannot ban delivery/transportation of pot
- State is permitted to **fix prices via capping supply**
- Existing marijuana businesses get a **“first-to-market” advantage via a priority in licensing** in the first year after legalization
- No regulations (state or local) can make operation of a marijuana business **“unreasonably impracticable”**



Initiatives would allow for commercial sale & home production of pot edibles and concentrates

Edibles



- Retail sale and home manufacture permitted
- Usually no health or safety restrictions related to the higher risk these products pose

Concentrates



- Retail sale permitted
- Home mfg. via “chemical extraction” often banned but can be unclear if that would cover all forms of home production
- In general, no other health & safety restrictions

Five basic takeaways

- Today's marijuana is addictive
- Today's marijuana is harmful, perhaps in long-term and irreversible ways
- Legalization → commercialization
- Are you comfortable with the edibles that dominate the commercial marijuana market?
- Do you want a pot store in your community? Near your school?
Near day care centers?

the guardian

Sir Robin Murray, UK: “It’s not sensible to wait for absolute proof that cannabis is a component cause of psychosis. There’s already ample evidence to warrant public education around the risks of heavy use of cannabis, particularly the high-potency varieties. For many reasons, we should have public warnings.”

Ian Hamilton, UK: “In effect, we have a mass population experiment going on where people are exposed to higher potency forms of cannabis...”

Prof. Wayne Hall, Aus. (INCB): “We want public health messages because, for those who develop the illness, it can be devastating. It can transform people’s lives for the worse.”



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www.LearnAboutSAM.org