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Marijuana: What You Need to Know

Kevin A. Sabet, Ph.D.



SAM Smart Approaches to Marijuana preventing another big tobacco

SAM promotes an evidencebased approach to marijuana policy that prioritizes **public health**

SCIENTIFIC ADVISORY BOARD

composed of more than 12 leading researchers, professors, and public health/legal experts

NON-PARTISAN BUT HIGH-PROFILE founded by former Democratic Congressman Patrick Kennedy and leading Republican pundit David Frum

HUNDREDS OF THOUSANDS OF PRESS MENTIONS including major media outlets such as The New York *Times*, NBC News, Slate, BBC News, and FoxNews





American Medical Association



National Business Group on Health

Colaboration SAM has collaborated with credentialed and reputable groups across the country



American Academy of Pediatrics

National **Business Group on Health**

AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY A A C A P . O R G

American Academy of Child and Adolescent Psychiatry

Other leading public health authorities



The False Dichotomy









Three separate issues that often get conflated





2

3

Penalizing drug users/ "decriminalization"

Medicinal use of compounds derived from marijuana

Use, sales, production, and distribution





Ultra Potent Marijuana





Not this...





...but this



Marijuana Plant Potency From an average of 3%	
to an average of nearly 20% THC 4.7%	
95-99% 2021 55.7% 2017	

El Sohly Mahmoud A et al. "A Comprehensive Review of Cannabis Potency in the USA in the Last Decade." doi: 10.1016/j.bpsc.2020.12.016. Cannabis Policy: Public Health and Safety Issues and Recommendations. Caucus on International Narcotics Control, United States Senate,

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





"Green Crack" Wax



Hash Oil Capsules



"Ear Wax"





"Budder"



Butane Hash Oil (BHO)



"Shatter"

Marijuana is not "just a plant" anymore Derivatives contain up to 99%

THC



Former U.S. Surgeon General Jerome Adams warns against marijuana use by pregnant women, teens:

"This isn't your mother's marijuana; the marijuana of today is significantly more potent."

"Ada drug"

"A dangerous

ADAMS

3000



"Public policy is outpacing science when it comes to marijuana.

"What we know is that marijuana is in fact addictive... this may come as a surprise to some people... We don't at this point have highquality evidence that tells us that in fact, marijuana is both safe and effective for use for medical purposes."

U.S. Surgeon General Vivek Murthy July 27, 2017

"Marijuana is, in fact addictive



"When it comes to youth, I worry that there is a perception that marijuana is completely harmless in children. Our data tells us otherwise.

Our data tells that in fact a portion, a substantial minority, of people who use marijuana will actually develop an addiction to marijuana. That number is significantly higher among youth.

When kids also have underlying mental health conditions, the impact of marijuana use can also be more significant.

And, so, I worry Senator about the messages we may send that say this is 'utterly harmless' and 'there's no problem here'. We need to be responsible in how we teach our kids about marijuana. I think how we talk to families about marijuana use and I think health care providers also need to be empowered to have these conversations early on as well as teachers."

U.S. Surgeon General Vivek Murthy February 2022



900,000 versus 15 million

Times as many daily users now vs 1992 (12 years old +)

NSDUH

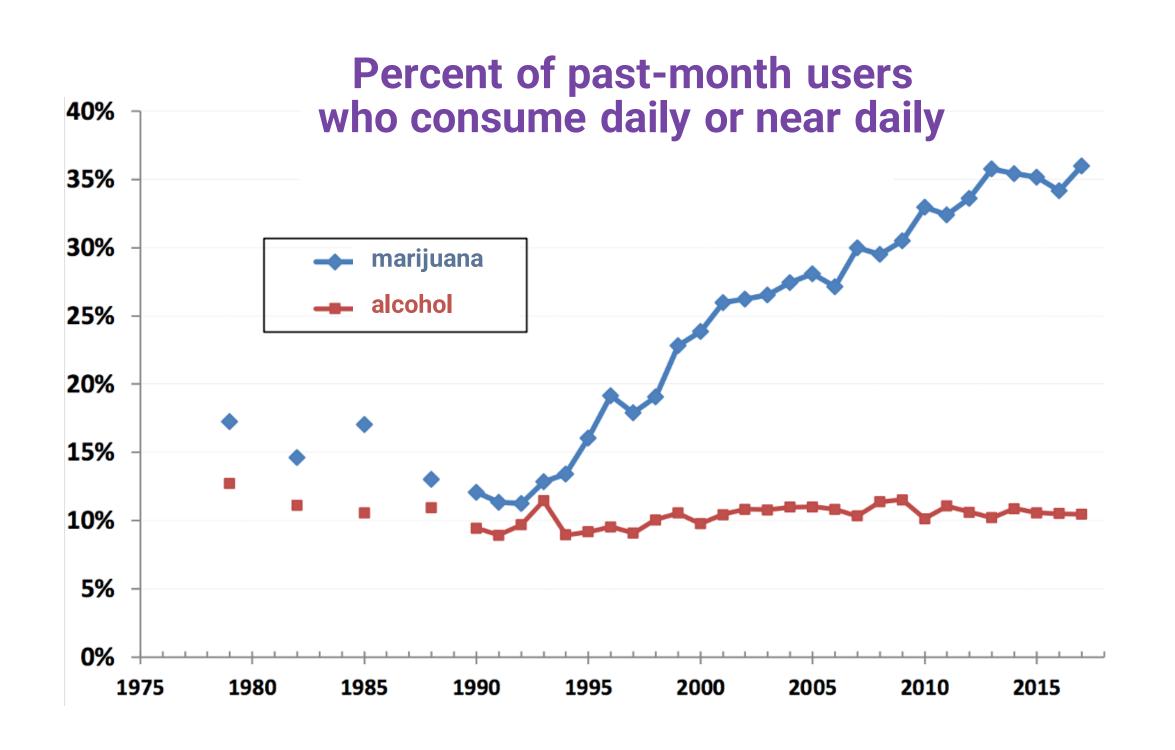
***** = 100,000





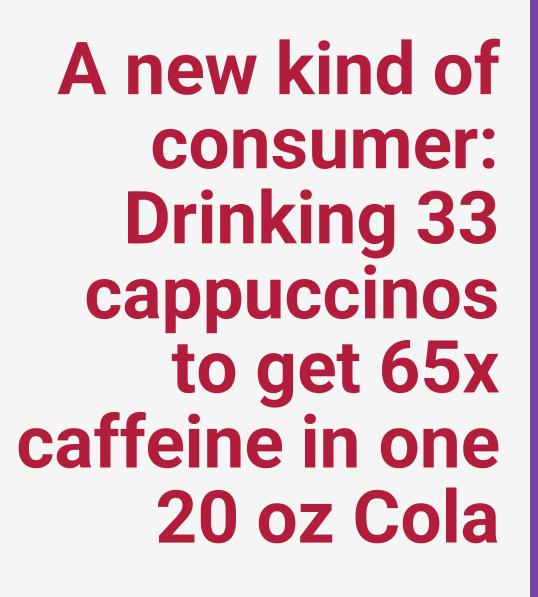
Why this matters

Daily and Near-Daily (DND) Use is much more common

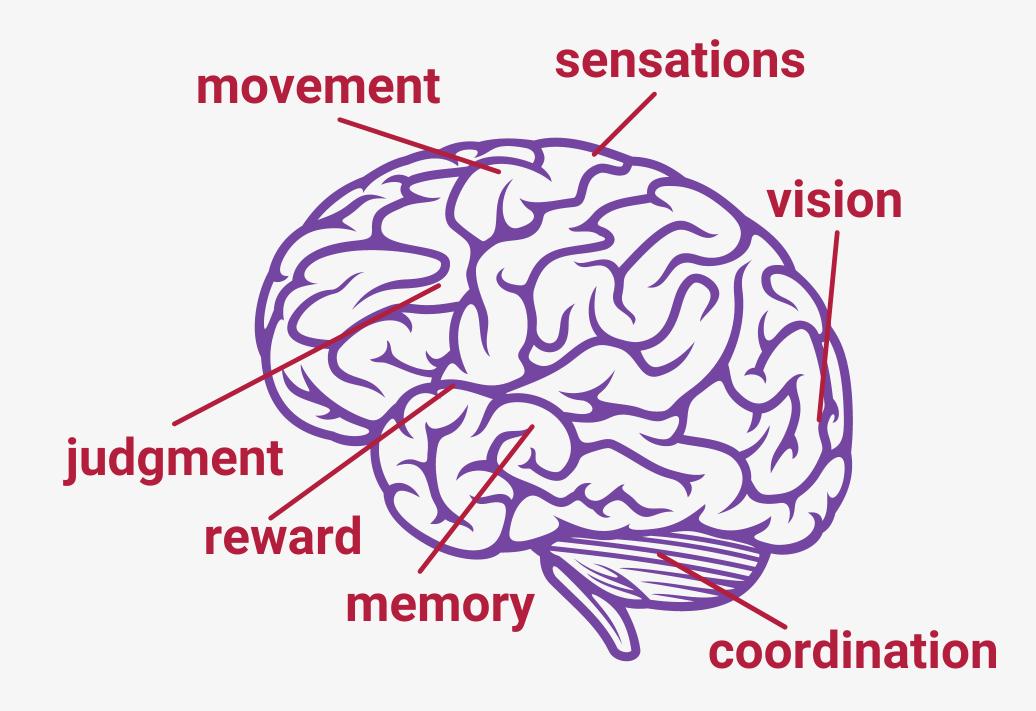


Source: Caulkins based on NSDUH









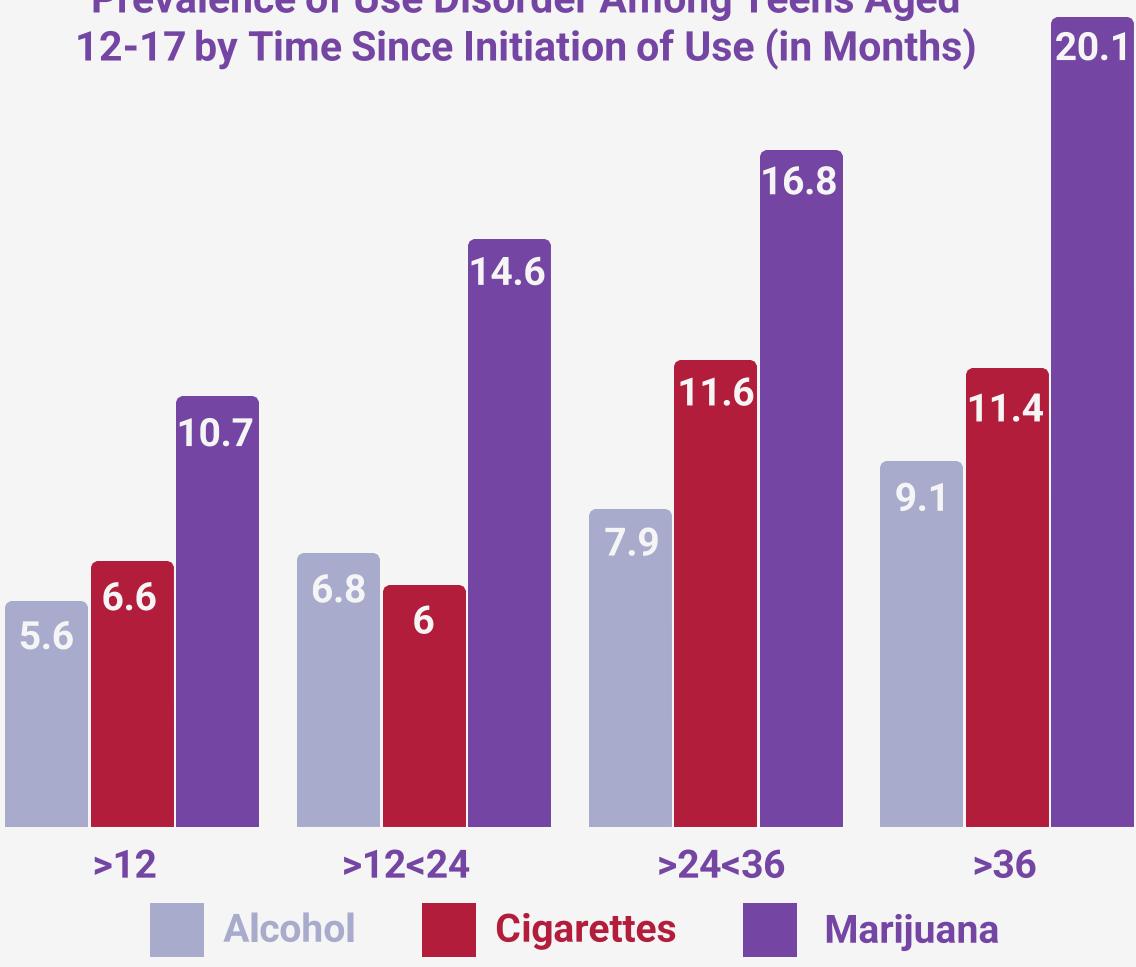
Brain Development Memory & Cognition Motivation & Reward Appetite **Immunological Function** Reproduction **Movement Coordination Pain Regulation & Analgesia**

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





Prevalence of Use Disorder Among Teens Aged



Youth Marijuana Addiction Prevalence **Double That of Alcohol & Other** Substance Use Disorders



11

1 in 3 who used marijuana in the past year will become addicted (Cannabis Use Disorder)

The adolescent be to marijuana use

When kids use, they have a greater chance of addiction since their brains are being primed



The adolescent brain is especially susceptible



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 hardwon, population-level decreases in the prevalence of marijuana and alcohol use."

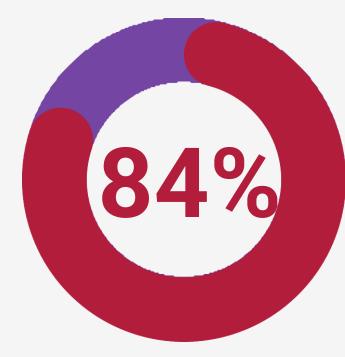
Bailey et al., 2020

Legalization reversing downward trend in youth use



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

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



homes

Led to increased marijuana use and normalization of the drug







84% of the nearly 2,000 participants had 10+ pot shops within 4 miles of their





Past-Year Users Have CUD (Addiction) The prevalence of Marijuana Use Disorder in children 12-17 increased 25% after recreational legalization.

Cerda, et al., 2020





Lancet 2019 Population-Level **Study Conclusions**



Compared to 3 times more likely for regular users of lower potency marijuana of the past.

Di Forti et al https://doi.org/10.1016/S2215-0366(19)30048-3

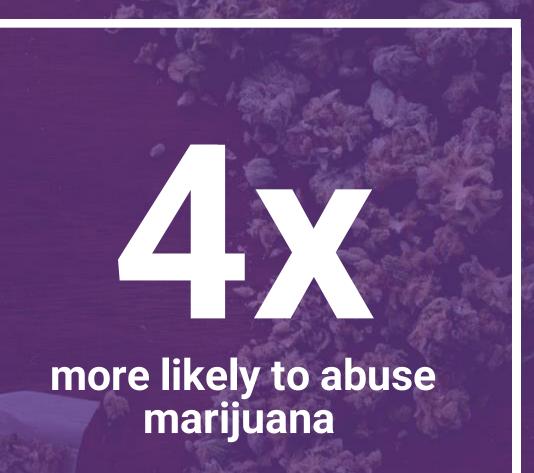






Study of 1,087 twenty-four-year-olds who reported recent marijuana use, found that users of high potency marijuana were:

Association of High-Potency Canabis Use With Mental Health and Substance Use in Adolescence



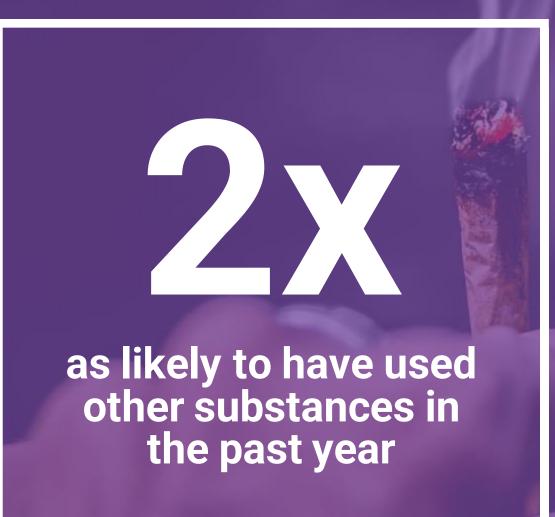
JAMA Psychiatry (2020)



2200 as likely to develop anxiety disorders



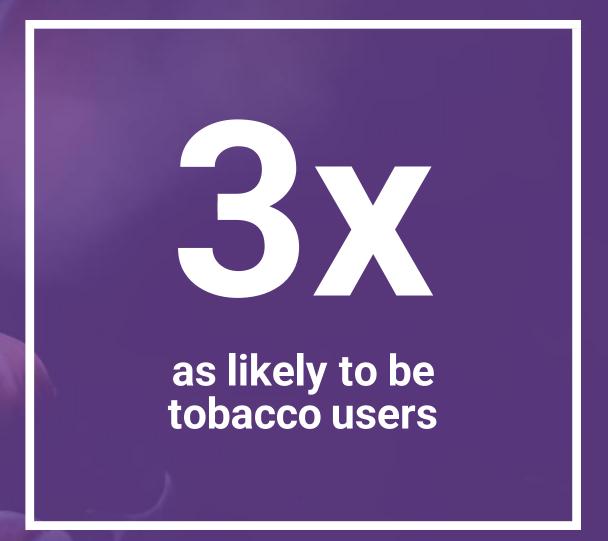
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JAMA Psychiatry (2020)





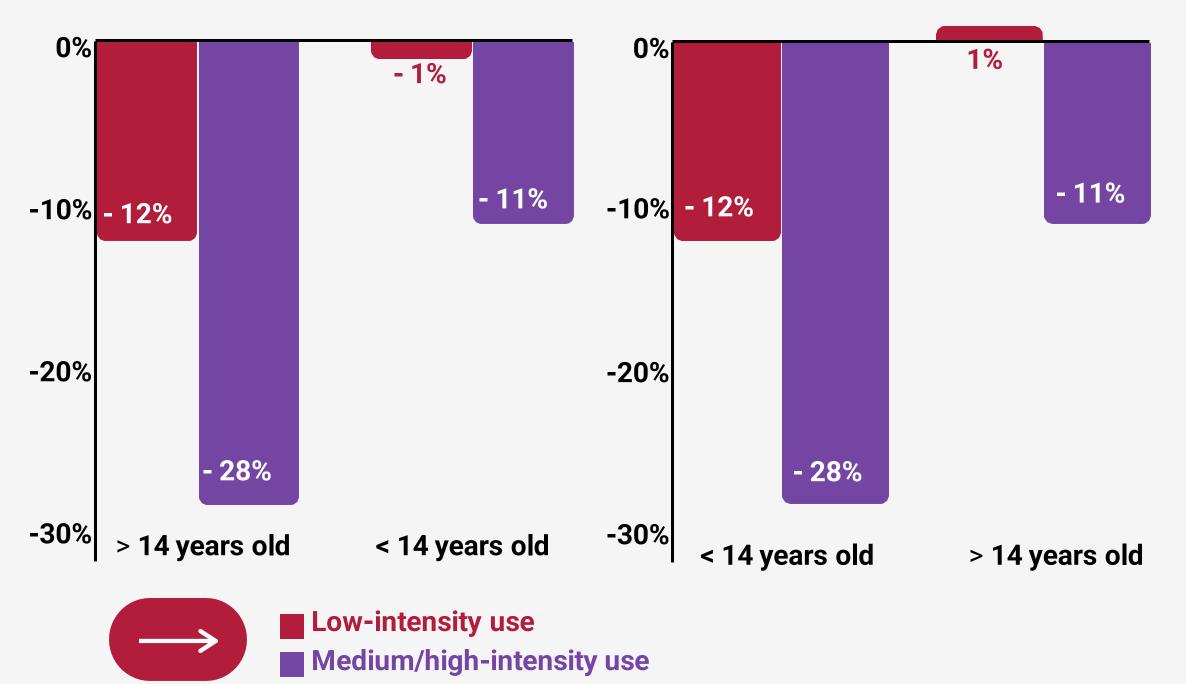


High School Completion

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

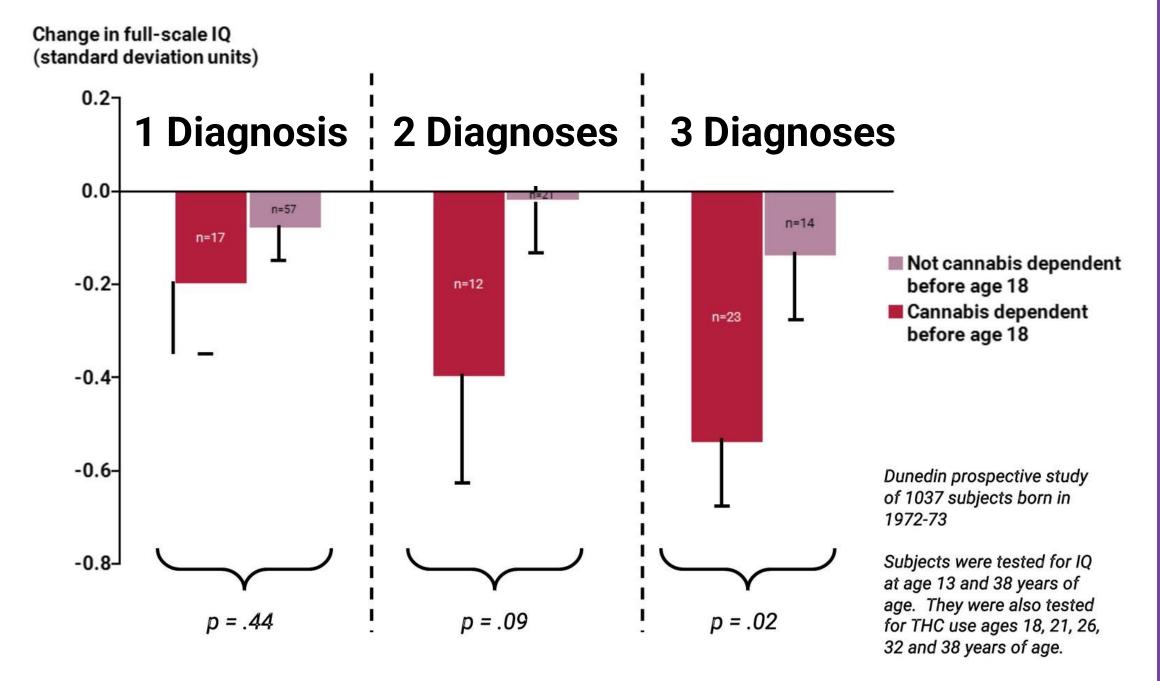
University Entrance Score

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



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







Marijuana use is also associated with lower IQ among adolescents



Marijuana use among veterans was associated with negative outcomes such as:

Other Substance Abuse Developing of/Worsening of Psychiatric Disorders Self-Harm and/or Suicidality

Authors of study stated that: "very few studies have examined the therapeutic efficacy of medical cannabis in veterans and those that have are of low quality methodologically."



Source: Turna, J., & MacKillop, J. (2021). Cannabis use among military veterans: A great deal to gain or lose? Clinical Psychology Review. doi:https://doi.org/10.1016/j.cpr.2021.101958

Massive **Review of Over 500** Studies on Veterans and Marijuana Use



According to a study in JAMA Pediatrics, among youths with mood disorders, Cannabis Use Disorder is a common comorbidity and risk marker for:

Self harm **All-cause mortality Death by unintentional overdose** Homicide



Fontanella CA, Steelesmith DL, Brock G, Bridge JA, Campo JV, Fristad MA. Association of Cannabis Use With Self-harm and Mortality Risk Among Youths With Mood Disorders. JAMA Pediatr. Published online January 19, 2021. doi:10.1001/jamapediatrics.2020.5494



Youth Marijuana Abuse Linked to Suicide **Attempts &** Self Harm



Public Health & Industry Capture





The Vape and Marijuana **Industries** are Inextricably Linked







2015

In conjunction with the JTI deal. Monsees & **Bowen buv** back their stake in the company and relaunch as Pax Labs.

2015

JUUL by

PAX®

Pax Labs releases their new ecig, Juul, shortly after announcing \$46.7 million in Series C funding from investors.

PAX® **ERA**

2016

In the fall of **2016, Pax Labs** unveils the Pax Era, an electronic marijuana vaporizer that uses similar proprietary technology of pre-filled THC pods.

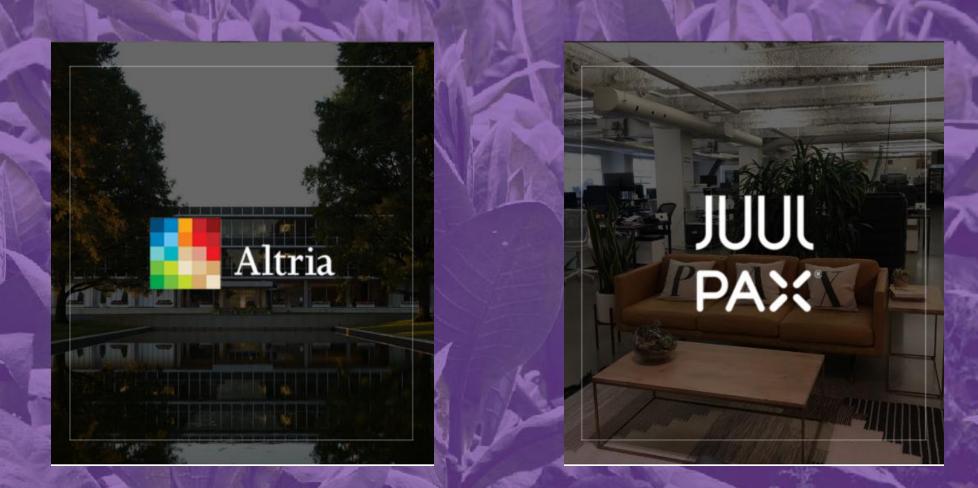
JUJU

2017

Juul splits off From Pax Labs and becomes its own entity.

In the spring of 2018, the FDA launched an investigation into predatory marketing to underage children.





www.learnaboutsam.org/industry-profiles







Atria Makes \$1.8 Billion Investment in Big Marijuana



Cronos Group holds 100% ownership of the only two Canadian companies licensed to cultivate and sell medical marijuana





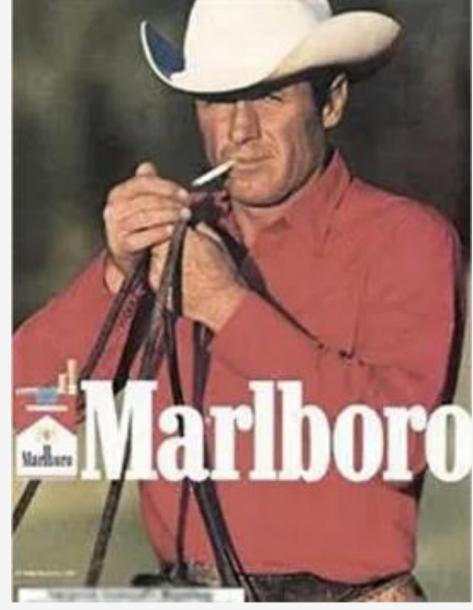


Majority shareholder



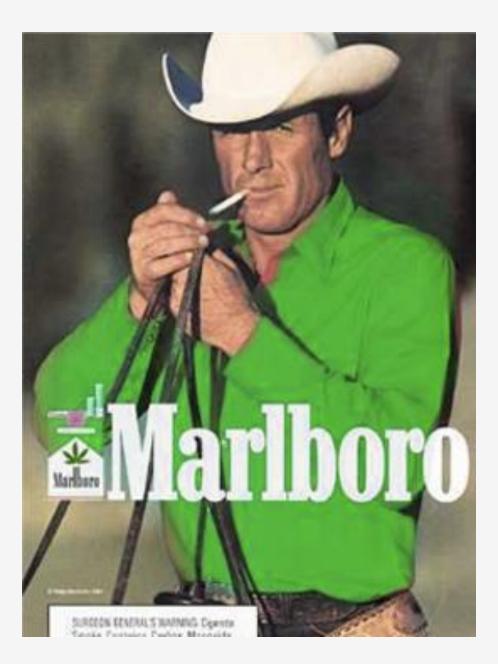


Big Tobacco is Big Marijuana same players, slightly different marketing











"like it or not Big Tobacco is invading cannabis."

Forbes

Dec 4, 2018, 09:40am EST

Potential Big Tobacco Acquisition Causes Cannabis Company's Stock to Soar



Sara Brittany Somerset Former Contributor ^① Vices

I cover marijuana, global affairs and the intersection of the two.

Smart Approaches to Marijuana (SAM)'s legalization opponent Kevin Sabet may be right: like it or not Big Tobacco is invading cannabis. Altria, the company that invited unwitting consumers for decades to come to where the cancer is –Marlboro Country– may be looking to shore up stagnant cigarette sales by purchasing Canadian cannabis company Cronos Group.

4th Largest Tobacco Company on Earth Invests in Big Marijuana



©CBCNEWS July 25, 2019 **Auxly Cannabis** signs \$123M deal with tobacco giant **Imperial Brands**

https://www.cbc.ca/news/business/auxly-cannabis-deal-with-tobacco-giant-imperial-brands-1.5224955



essons learned?









Coming Soon From Molson Coors: Marijuana Beer



essons learned?

Beverage Beveragedaily.com, April 15, 2021

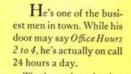




Molson Coors reveals Truss' cannabis-infused beverage line-up



Tobacco Playbook: #1 It's medicine



The doctor is a scientist a diplomat, and a friendly sympathetic human being all in one, no matter how long and hard his schedule.

According to a recent Nationwide survey:

MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE

DOCTORS in every branch of medicine-113,597 in all-were queried in this nationwide study of cigarette preference. Three leading research organizations made the survey. The gist of the query was-What cigarette do you smoke, Doctor? The brand named most was Camel!

The rich, full flavor and cool mildness of Camel's superb blend of costlier tobaccos seem to have the same appeal to the smoking tastes of doctors as to millions of other smokers. If you are a Camel smoker, this preference among doctors will hardly surprise you. If you're not-well, try Camels now.

ELS Costlier Tobaccos

for Taste . . . T for Throat . . . that's your proving ground for any cigarette See if Camels don't suit your T-Zone" to a "T."

Your "T-Zone" Will Tell You ...



As your Dentist, I would recommend

NOT ONE SINGLE CASE OF THROAT IRRITATION due to smoking CAMELS!

Noted throat specialists report on 30-day test of Camel smokers ...



were the findings of noted throat specialist after a total of 2,470 weekly examinations of the throats of hundreds of men and women who smoked Camelsand only Camels-for 30 consecutive days.





... AND THOUSANDS MORE AGREE









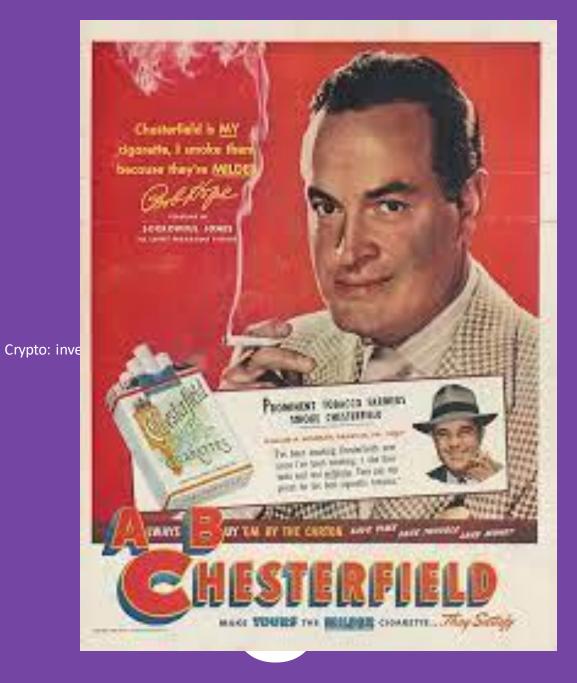


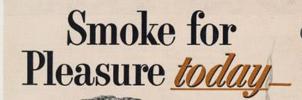
Why Physicians Call Our New Brand **"A HEALTH CIGAR"**

"I recommend Thompson's MELL-O-WELL cigars to any who are interested in regaining or keeping physical fitness."

"I am convinced that irritants, such as nicotines, glycerides, albuminoids and carbons—dangerous when used to excess by those who are physically below par are largely removed from Thompson's MELL-O-WELL cigars."

"Many former patients, friends and others who have consulted me, and who, ordinarily, would be obliged to greatly curtail smoking, are now enjoying their usual allotment of cigars in Thompson's MELL-O-WELLS—with no loss of satisfaction or good health." (Signed) G. Edward Roehrig, M. D. 715 South Bonnie Brae, Los Angeles, Calif.





No Cigarette Hangover <u>tomorrow</u>!

"I LOVE LUCY" storring Lucille Ball and Dasi Arnaz is America's most popular TV show. Back early in Sept. over CBS.

att

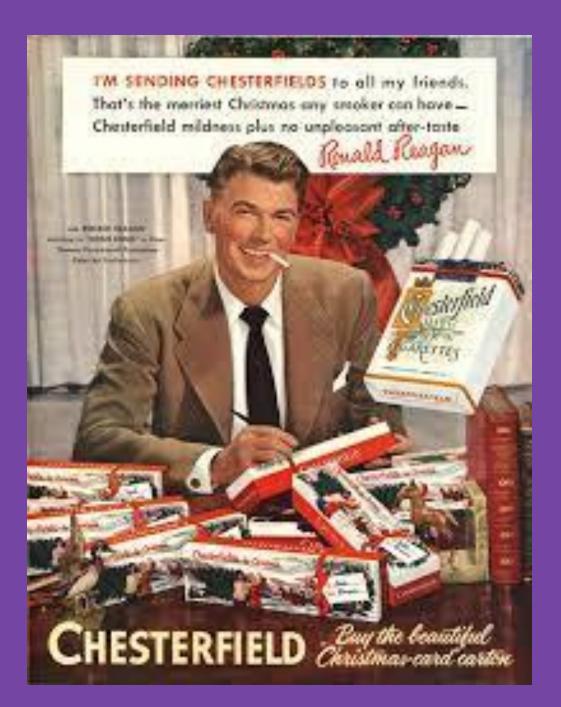
RRIS & Co

Remember: PHILIP MORRIS is made differently from any other leading brand. And that difference is your guarantee of everything you've ever wanted in a cigarette... tasty mildness, rich flavor, pleasant aroma ... a clean, refreshing smoke ... and NO CIGARETTE HANGOVER!

Try PHILIP MORRIS yourself. Your throat will note the difference !

You'll be glad tomorrow...you smoked PHILIP MORRIS today!

Call PHI





Why don't you settle back and have a full-flavored smoke?

Marlboro the filter cigarette with the unfiltered taste

Paul Hornung: Green Bay halfback and 1961 National Football League Player of the Year. Paul's a Marlboro man all the way.

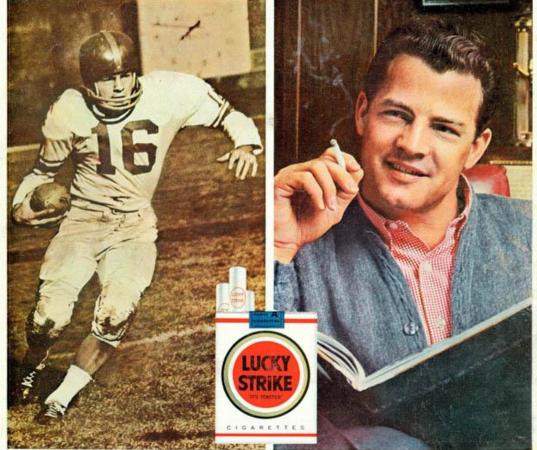
You get a lot to like-

Filter, Flavor, Pack or Box

Crypto: inves



Get Lucky the taste to start with...the taste to stay with



FRANK GIFFORD IN ACTION IN 1957. The young N.Y. Giant halfback was already a top star-and a Lucky Strike smoker.

FRANK GIFFORD TODAY. Now one of pro football's all-time greats, Frank's still a satisfied Lucky smoker.

The taste of a Lucky spoils you for other cigarettes. "Taste is the reason I started smoking Luckies," says Frank, "and taste is the reason I'm still a Lucky man." How about you? Get the taste you'll stay with. Get the fine-tobacco taste of Lucky Strike.

OAT C.

Product of The American Tobacco Company - "Tobacco is our middle name"

Tobacco playbook:

"Take my tip – smoke Chesterfield –<u>much</u> Milder."

Sackie Robinson SENSATIONAL STAR BALLPLAYER BROOKLYN DODGERS

BEST CIGARETTE FOR YOU TO SMOKE

MILDER much MILDER

Crypto: inve

I can talk about enjoyment. I've tasted it.

Revery, 1% Iscore Lines I has Second

Coperity Denking St. Dangerous on San Heads.

In loss of places. In less of ways salem's one of them. The rich tobacco rate, the less's manuful and the box. That's enjoyment you can loss.

Salem Box.

No. 21 In case of program in factors and



CIGARETTE

When you change to Chestophile THE PURSY TOTAL VAL WILL NUMERS IN THESE VAL WILL NUMERS IN THESE OF CONTRACTS Martin Internet of these District Contracts Martin Deer Distance Martin Deer Distance Martin Contracts Territe Theory of Contracts

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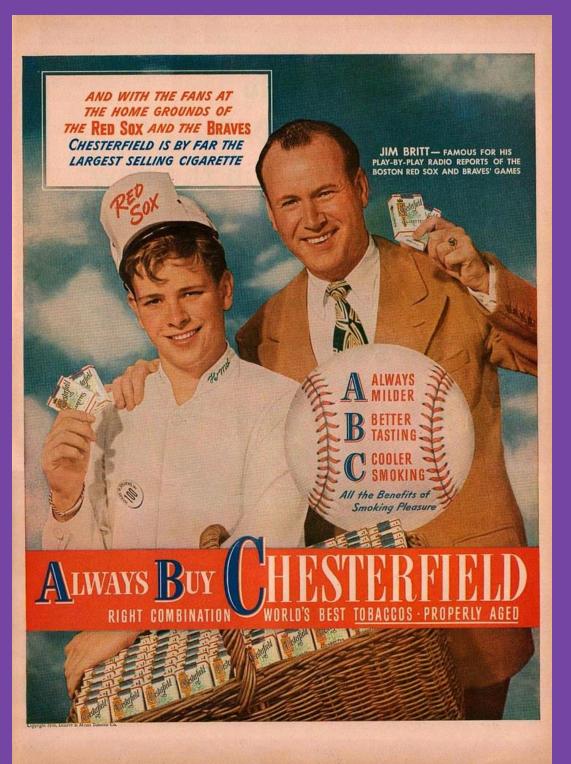












Crypto: i

When he offers you a low tar cigarette, tell him you've got one of your own. 20 VIRGINIASLIMS ighti GINIA SH Only 9 mg tar

Tobacco Playbook:

"My Throat Had to *Take 9t* More Than My Chin"

Smith Girl Leads the Cheers (for Viceroy)...

<complex-block>

Double the Filtering Action





A Real Price Trape of Soliton Rectored A Francisco Real Price Price and Price Real Price Pri



a reserving the two added to an Collegation without HUTSEE

New King-Size Filter Tip ICEROY

1.000.044





Have You Heard The Chant of The Tobacco Auctioneer?

Crypt

solution, 1964



You've got what it takes Salem Spir

Call in card the series \$25.5 spectrum

Warning The Surgert Entern Ant Sectional The Separate Sensing & Sergeron in Northeast

Nicotine Playbook:





No woman ever says no to Winchester.

Take a puff. Blow in her ear. And she'll follow



Give her your Tipalet and watch her smoke.



Tobacco Industry Playbook: #4 Free giveaways

It Pays To Be Smooth

If you're smooth enough to collect Camel Cash C-Notes, they'll pay off in Camel mugs, lighters, jackets, t-shirts and other stuff in our Limited Edition Catalog. Get C-Notes on all filtered packs. Get catalogs where you buy Camels. But get 'em now, 'cause this stuff is too smooth to last forever. C-Notes run out April, 1992.

Offer good while supplies last. Supplies are limited, so act quickly.

ULTRA LIGHTS HARD PACK: 6 mg. "tar", 0.5 mg. nicotine, ULTRA LIGHTS, ULTRA LIGHTS 100'S HARD PACK: 6 mg. "tar", 0.6 mg. nicotine, LIGHTS HARD PACK: 9 mg. "tar", 0.6 mg. nicotine, LIGHTS 100'S: 10 mg. "tar", 0.8 mg. nicotine, LIGHTS: 11 mg. "tar", 0.8 mg. nicotine, FILTERS: 14 mg. "tar", 1.0 mg. nicotine, FILTERS 100'S: 16 mg. "tar", 1.0 mg. nicotine, FILTERS HARD PACK: 17 mg. "tar", 1.2 mg. nicotine, REGULAR: 22 mg. "tar", 1.4 mg. nicotine, av. per cigarette by FTC method.

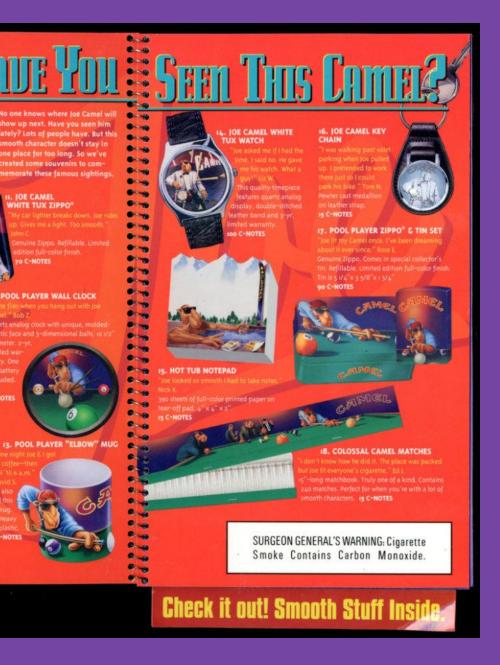
SURGEON GENERAL'S WARNING: Quitting Smoking Now Greatly Reduces Serious Risks to Your Health.



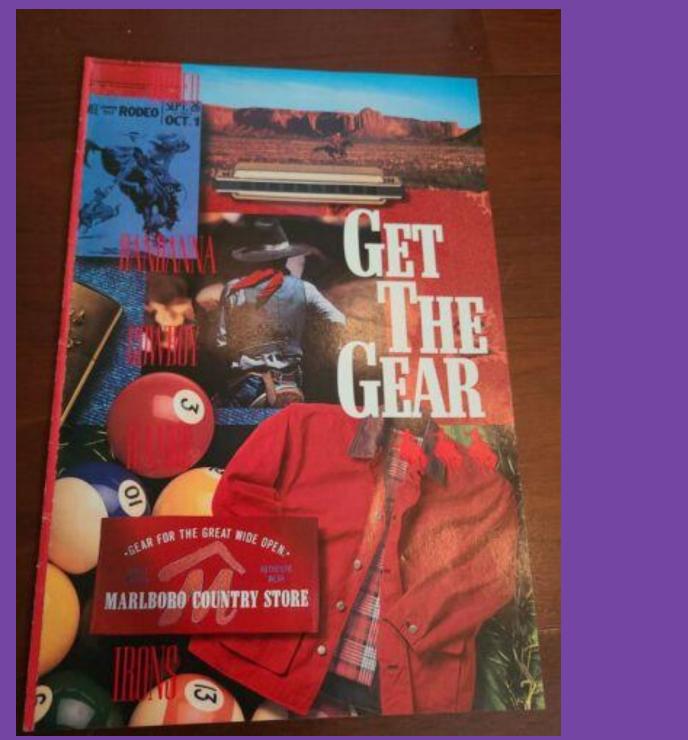
i realized he was a shark, not a camel," Ned L. Embroidered graphics. Solid twi Adult size: Fully adjustable: 53 C-NOTES 10. IOE POP-ART T-SHIPT

"I didn't know joe was an artist. What subject coul be smooth enough for him to paint?" Mary A. Camel logo on front pocket. Adult XL. **30 C-NOTES**





Tobacco Industry Playbook: #4 Free giveaways











SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

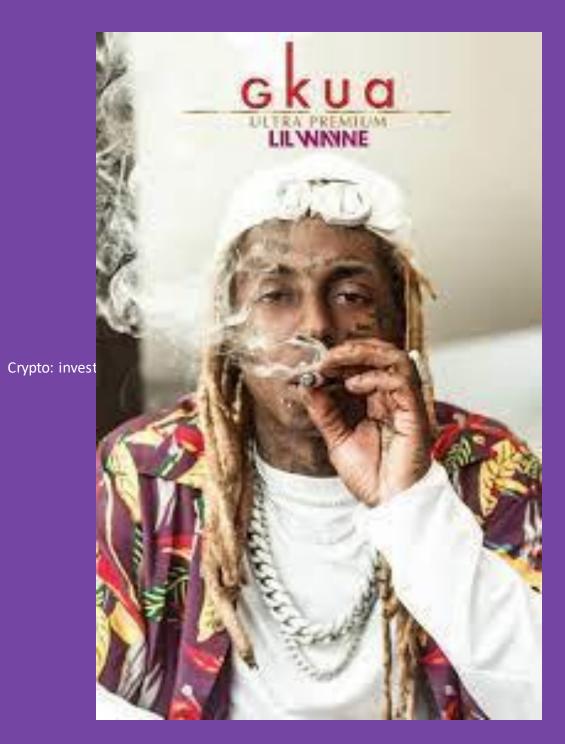




THE MARIJUANA DOCTOR AZMMIDICOM

Crypto: investing & trading





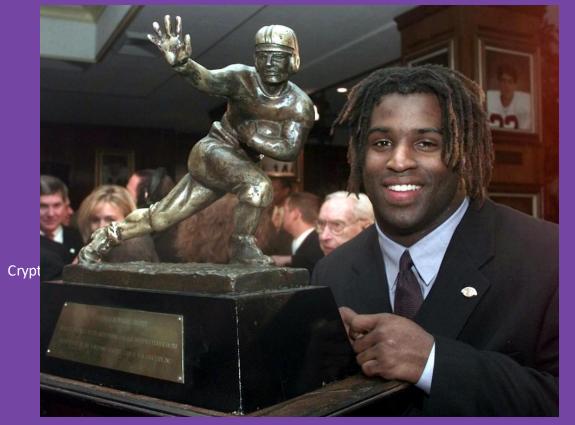














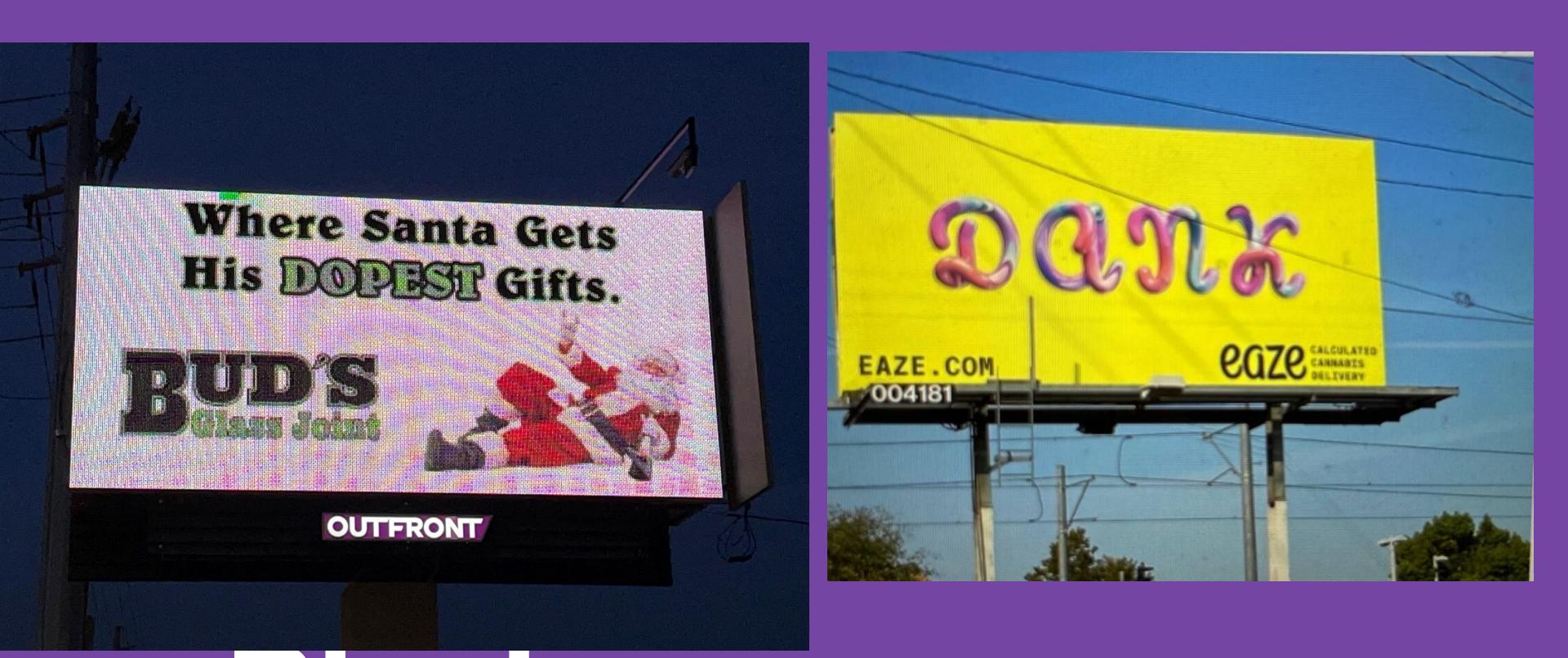


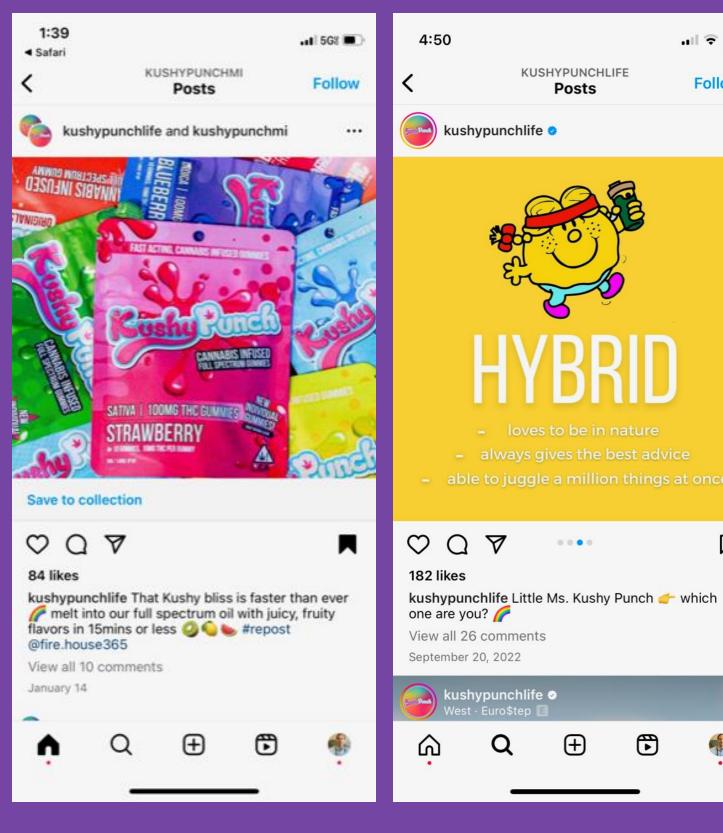
Snoop: "He's got a blossoming cannabis line called Khalifa Kush, which I use personally."

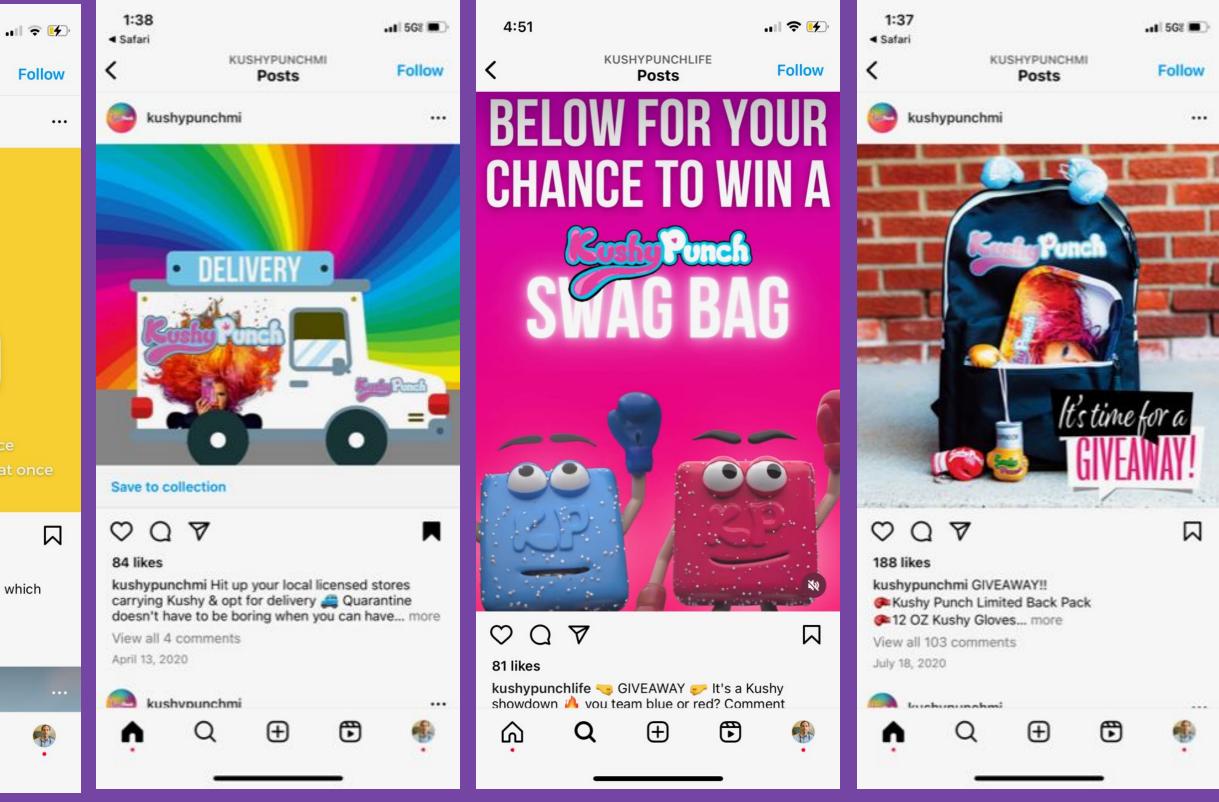




Crypto: investing & trading



























ignite Disposable vape back in new sizes. Link in bio View all 1,857 comments

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Cannabis Playbook: #4 free Giveaways





View all 9 comments

September 19, 2022



Liked by jlarskinsman and others themintcannabis_az You read that right. @ziggvsmagicpizza x @themintcannabis az teamed

(+)

...











47 likes themintcannabis az Just a reminder 😬 😁 🖤 FREE CAR GIVEAWAY 🧡 🦂 ... more

April 18, 2021



 \square

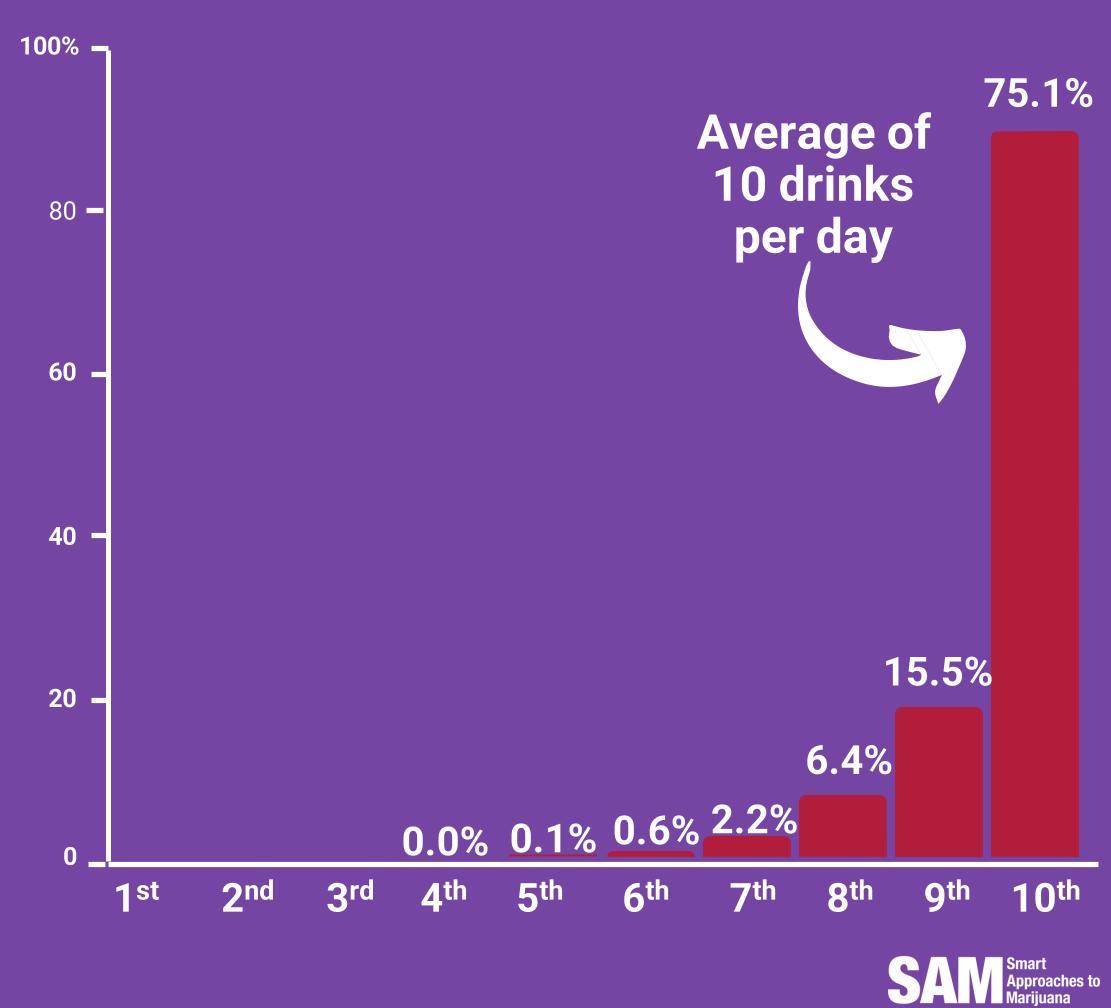
Cannabis Playbook: #4 free Give awavs

Crypto: investing & trading



Top 10% of the population make up 75% of the Alcohol Industry's U.S. Sales

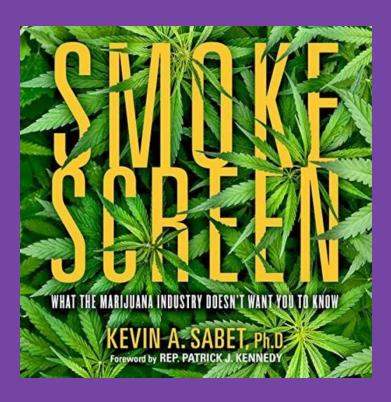




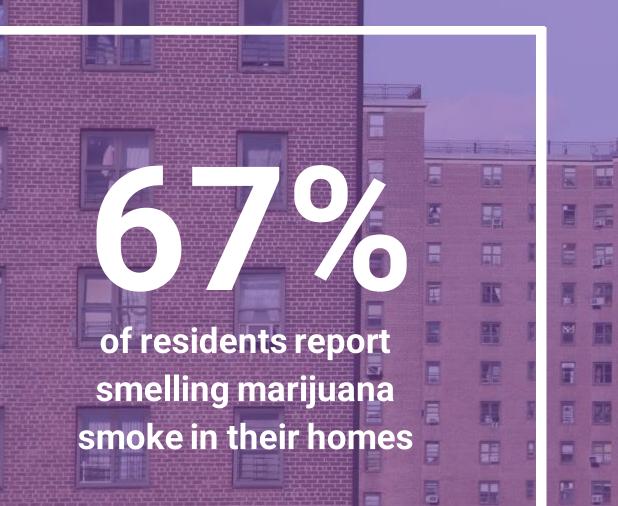
Source: Cook, P. J. (2007). Paying the tab: The economics of alcohol policy. Princeton, NJ: Princeton University Press



Perpetuating Social Injustice Chapter 9







of residents report smelling cigarette smoke in their homes

E

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https://nyuscholars.nyu.edu/en/publications/self-reported-secondhand-marijuana-smoke-shms-exposure-in-twonew



Pot arrest rates are still disproportionately biased against people of color



American Civil Liberties Union. (2020, April 20). A Tale of Two Countries: Racially Targeted Arrests in the Era of Marijuana Reform (Rep.), Retrieved April 9, 2021, from https://www.aclu.org/report/tale-two-countries-racially ed-arrests-era-mariiuana-reform

The racial disparity in marijuanarelated arrests still exists in every state that has legalized or decriminalized

Hispanic and Asian arrest rates have also increased within the same period.







A Black person is almost 4x as likely to be arrested for marijuana possession than a white person

American Civil Liberties Union. (2020, April 20). A Tale of Two Countries: Racially Targeted Arrests in the Era of Marijuana Reform (Rep.). Retrieved April 9, 2021, from https://www.aclu.org/report/tale-two-countries-racially-targeted-arrests-era-marijuana-reform



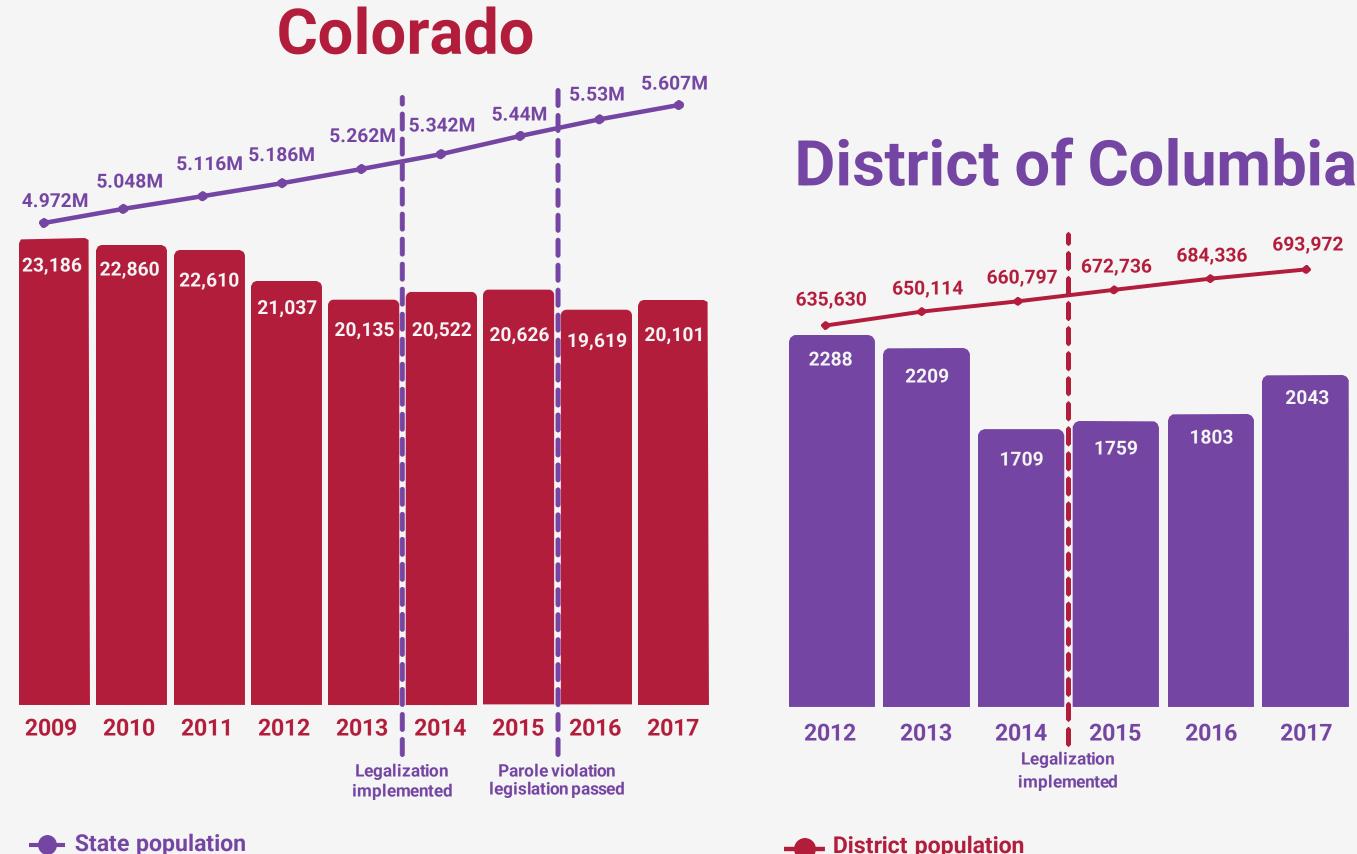


In Colorado, the Black marijuana possession arrest rate is twice the white arrest rate



Legalization has not reduced the prison population





Prison population



District of Columbia







In Colorado, African-**Americans were** disproportionately arrested without a warrant or previous incident report in 2017.



Black on-view arrests were 21% more likely than white on-view arrests in 2017





OBSERVER

February 10, 2020

Why Isn't Marijuana Legalization **Doing Any Good for People of Color?**

The Boston Blobe

February 14, 2020

A law said pot taxes should help communities harmed by the war on drugs. That hasn't happened

White Weed Entrepreneurs Are **Gaming Programs Meant to Help People of Color**

June 8, 2020

By the numbers: How legalized cannabis fails Black America



January 30, 2020



Black-Owned Pot Businesses Remain Rare Despite **Diversity Efforts**

> pewtrusts.org January 15, 2021



successful social equity licensing program yet.

Bonita Money, founder and executive director of the National Diversity & Inclusion Cannabis Alliance



2.000 Black owned

3.9%

Asian owned

Despite
inclusion efforts,
marijuanadispensary owners
in Colorado are still
predominately
white and
predominately
male



Latino/a owned

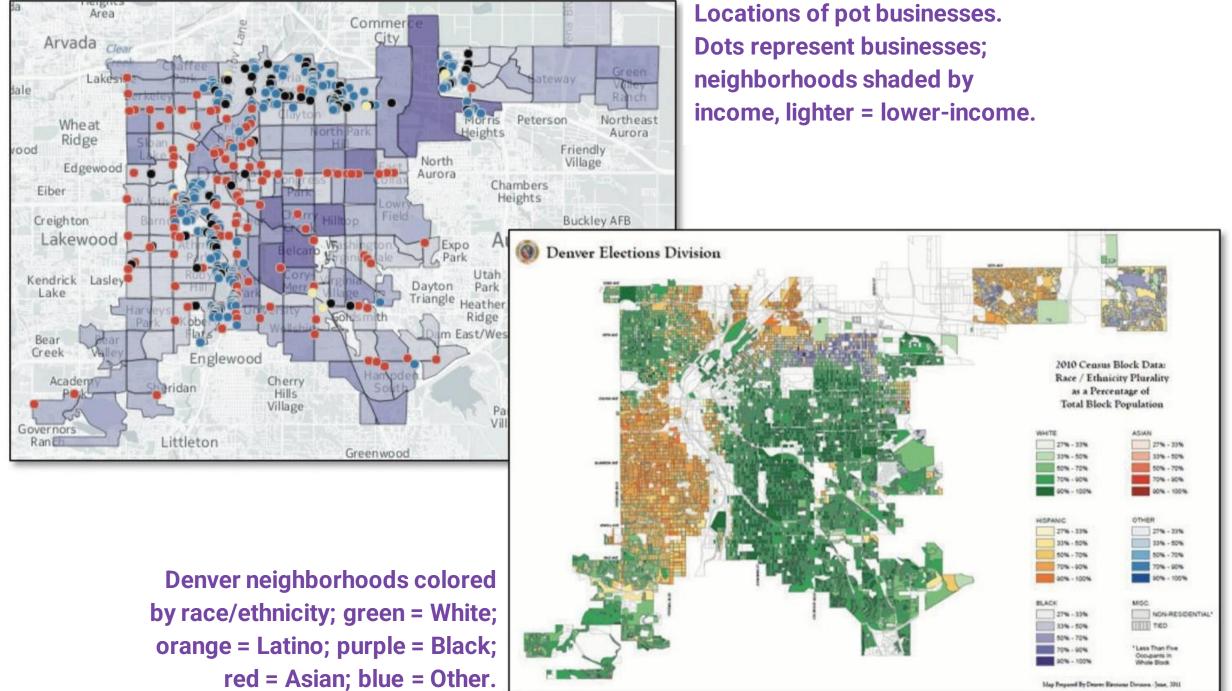
7.7%

Female owned

10%

Colorado Marijuana Enforcement Division 2021 Licensee Demographic Study





Marijuana businesses in **Denver are** concentrated in communities of color





llegally grown marijuana is often grown of trespass grows go undetected

https://www.cropproject.org/resource



of trespass grows in California are controlled by drug trafficking organizations

plants grown on trespass grows are eradicated

1005

https://www.cropproject.org/resource

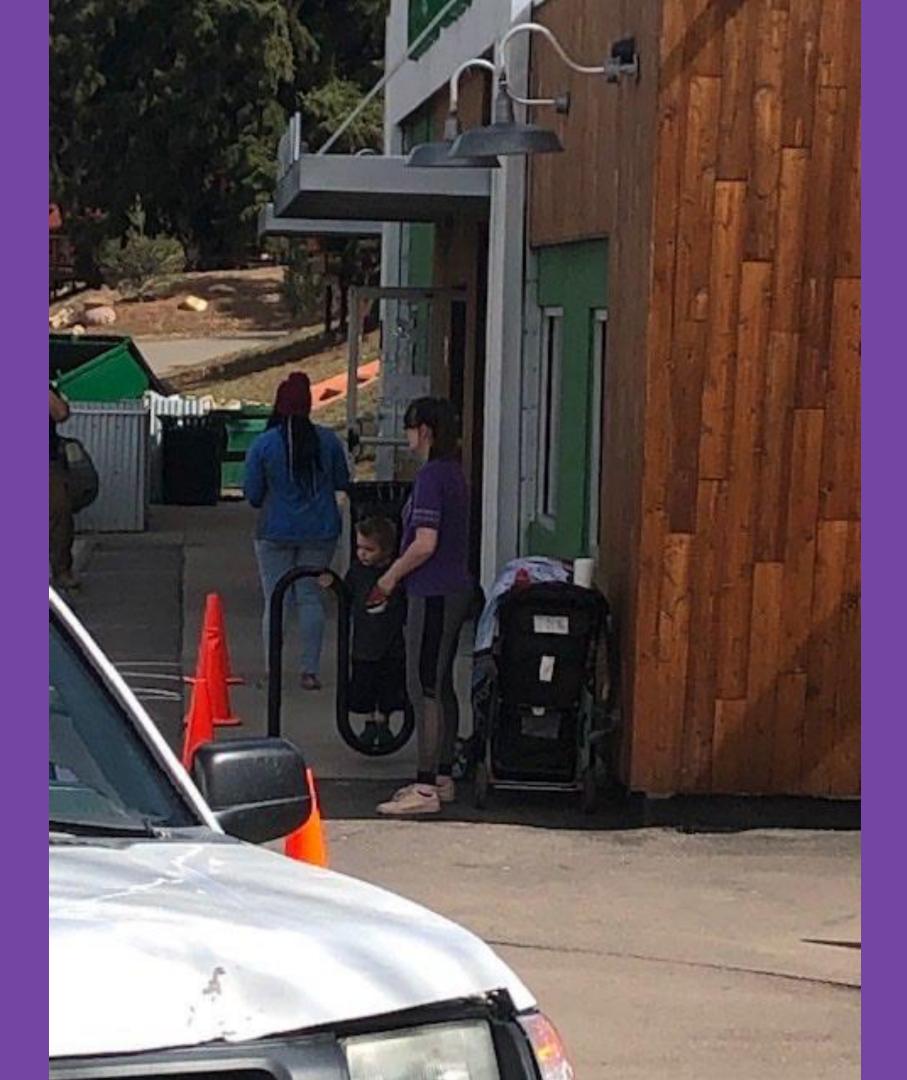


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Lessons Learned in Colorado

Luke Niforatos Executive Vice President, SAM













2021 & 2019 Colorado Health Department Reports 14.8% increase in youth under age 15 using marijuana over the past 2 years

23,009 homes with children are not storing marijuana products safely.

Marijuana vaping and dabbing up 40+% among youth

CDPHE, 2019

400% increase in marijuana poisonings of children 0-9 years of age

32,800 homes where children 1-14 years of age are exposed to second-hand marijuana smoke.



Marijuana related hospitalizations have increased since legalization

Colorado

101%

<u>C</u>olorado Department of Public Health and Environment, 2013-2017; Alaska Department of Health and Social Services, 2020

Alaska

45%



Colorado 112.8%↑

Massachusetts 140%

Washington 103.2%↑

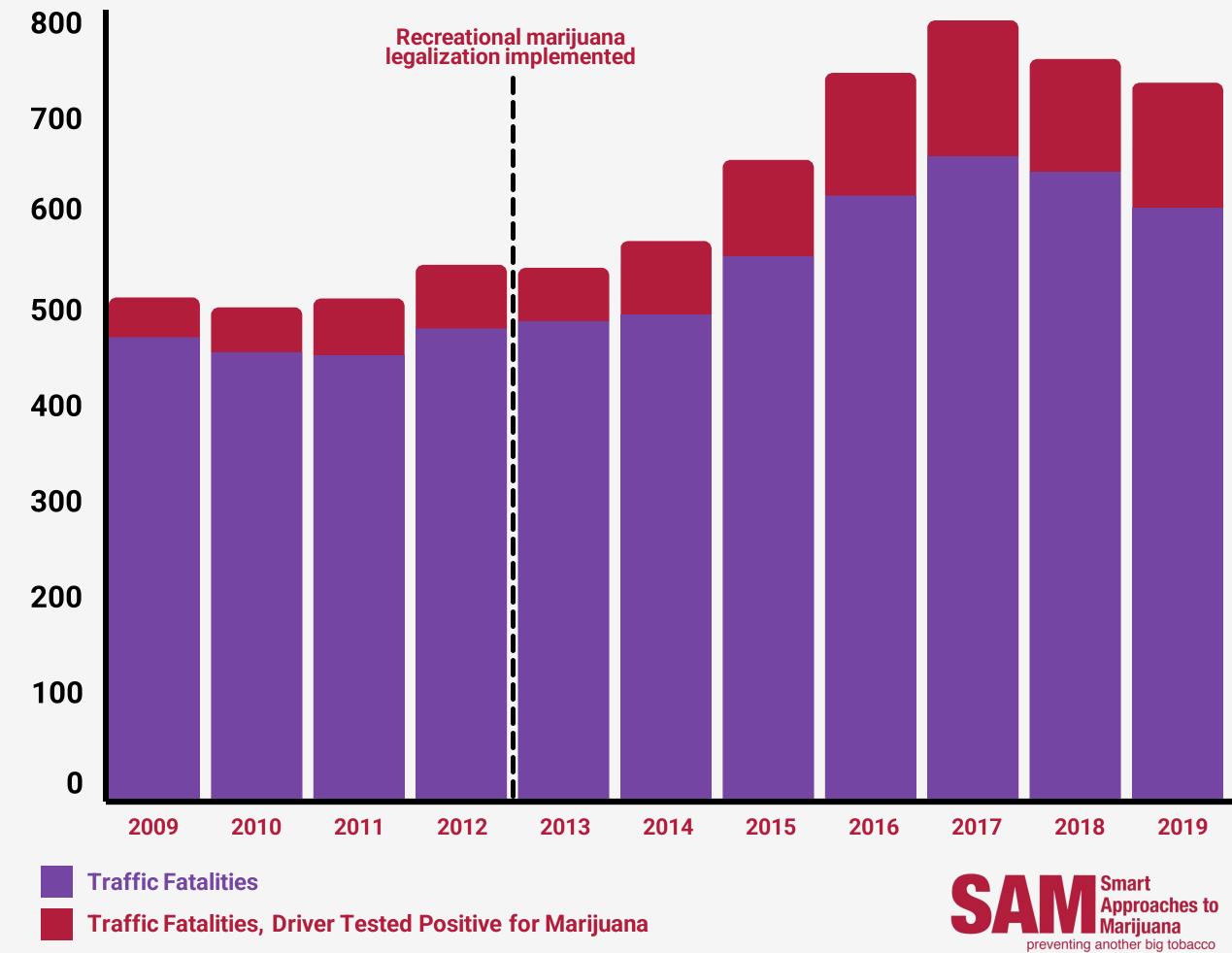
Calls to poison control for marijuana exposures in Colorado, Massachusetts, and Washington more than doubled after legalization.

 \rightarrow

Rocky Mountain HIDTA, 2019; Whitehill et. al., 2019; Washington Poison Center, 2018



Colorado Traffic Fatalities where the Driver Tested **Positive for** Marijuana



Colorado Department of Transportation, 2020

Massachusetts 113%↑since 2016

Marijuana Workplace Positivity

California **45%**↑ since 2016

Nevada **142%**↑ since 2016

https://learnaboutsam.org/marijuana-workforce-positivity-rates-skyrocketing-in-legal-states/

Oregon **136%**↑ since 2014

Michigan 44%↑ since 2017

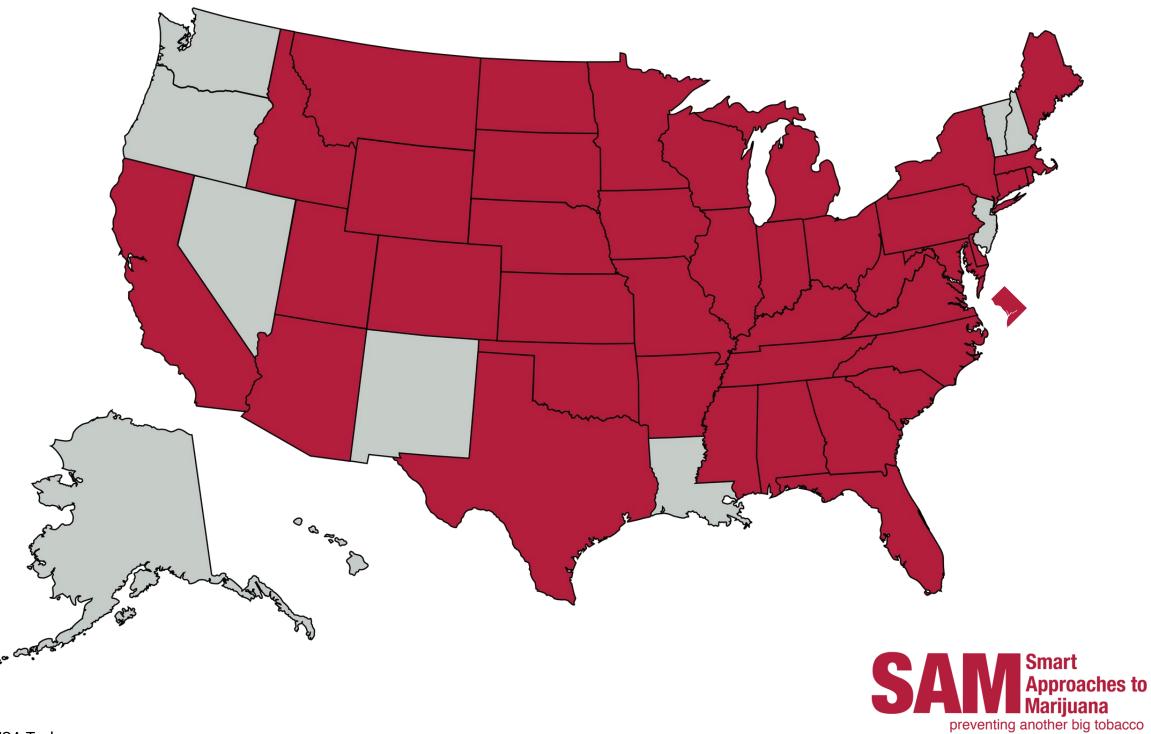
Washington **86.3%**↑ since 2014

Colorado **63%**↑ since 2013



Colorado Marijuana Smuggling

of marijuana leaving Colorado, destined for sale on the black market in other states.

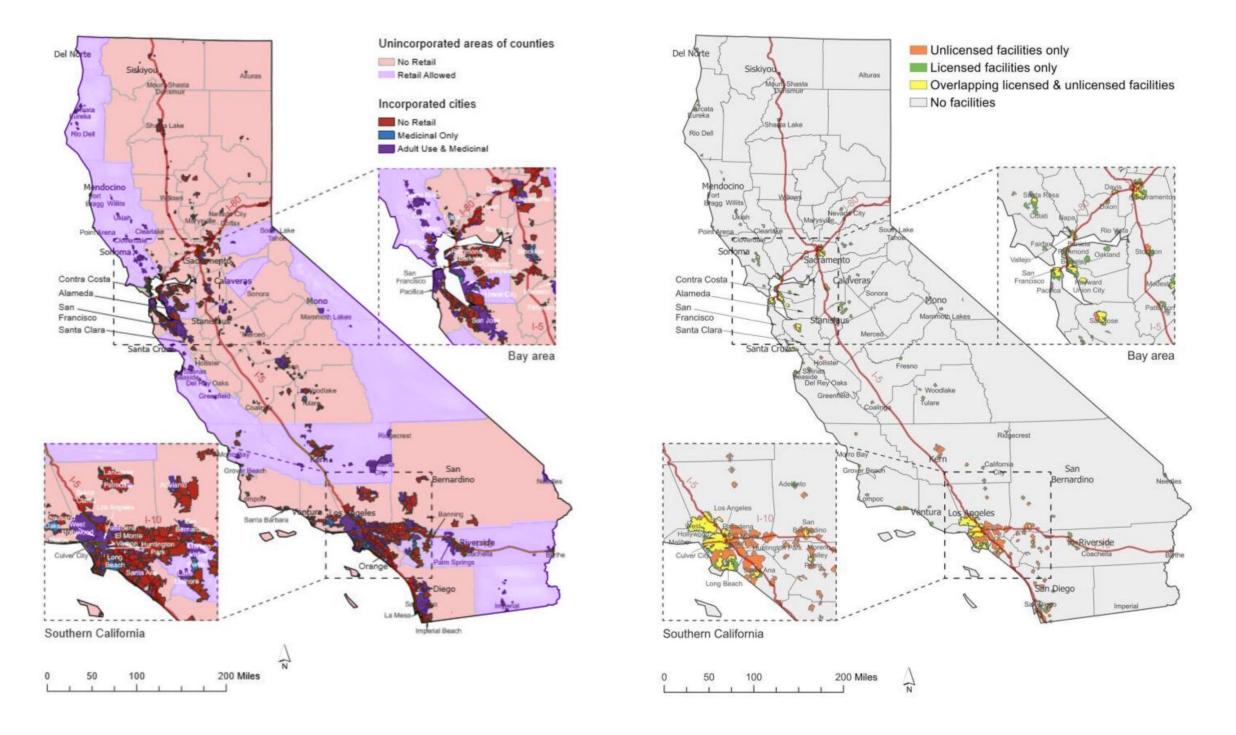


USA Today, 2015

Authorities say they've intercepted thousands of shipments

States with Colorado Marijuana

Minority populations in California are disproportionately exposed to both licensed and unlicensed marijuana stores



Density of marijuana stores in areas of low income and communities of color in California



https://pubmed.ncbi.nlm.nih.gov/32714779/



"Getting worse

Illegal Pot Market Booming in California Despite Legalization

Despite legalization, the illicit THC market has grown



Photo: NBC News

Ele Xerv Jork Eimes April 27, 2019

Smart Approaches to Marijuana preventing another big tobacco

5

Cartels are 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

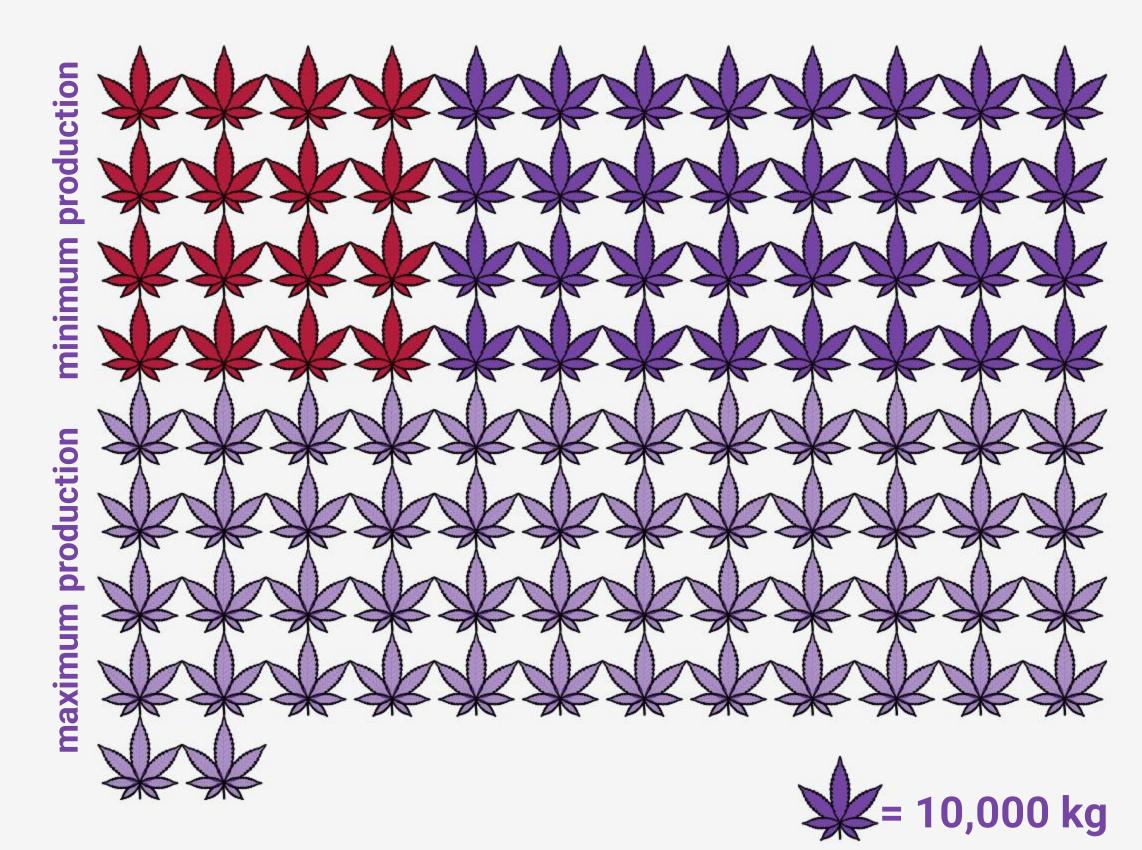
> In 2014, iron mining was the #1 source of revenue for the former Knights Templar cartel



Source: Kilmer, B., et al., 2010; USA Today (Mar. 17, 2014; Zinsmeister, J., 2015; Center for Public Integrity, 2009

Legalization is **Unlikely to Diminish the Power of Drug Cartels and the** Illicit Market





Source: Oregon State Police

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



Marijuana Taxes as a **Percent of** State Budgets

Oregon 0.24%

California 0.2%

Colorado 0.78%

Washington 0.3%

Alaska 0.12%



"Marijuana Tourism and Emergency Department Visits in Colorado" **New England Journal of Medicine, 2016**

- Rate of ED visits possibly related to cannabis use among out-of-state residents doubled from 85 per 10,000 visits in 2013 to 168 per 10,000 visits in 2014, which was the first year of retail marijuana sales

- ED visits related to cannabis use appear to be increasing more rapidly among out-of-state residents than among Colorado residents

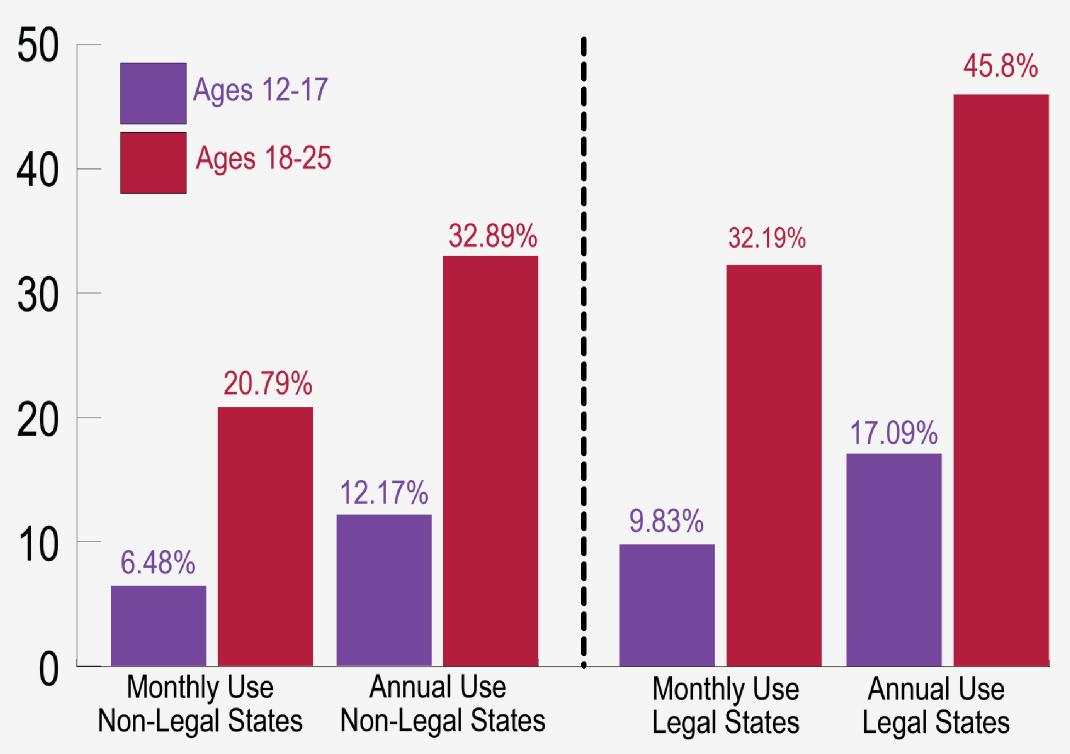
https://www.nejm.org/doi/10.1056/NEJMc1515009

"Cannabis Tourism and the Community: Resident Attitudes in Humboldt County, California" Humboldt State University Survey When asked whether "Some family-oriented travelers will not visit due to cannabis tourism," 50.0% of residents agreed or strongly agreed, compared to 26.7% that disagreed or strongly disagreed

Only 29.9% of residents agreed or strongly agreed that "The image of my community will be positively affected by cannabis tourism"

https://digitalcommons.humboldt.edu/cgi/viewcon tent.cgi?article=1097&context=ideafest

NSDUH State Estimates, 2020





Past-Month and Past-Year Youth Use in "Legal" **States Outpaces Such** Use in Non-Legal States



of high school seniors reported using marijuana last year

of high school sophomores reported using marijuana last year

]https://nida.nih.gov/news-events/news-releases/2022/12/most-reported-substance-use-among-adolescents-held-steady-in-2022

of eighth graders reported using marijuana last year



30%

of marijuana users have some form of marijuana use disorder

use before the age of 18 increases the likelihood of CUD seven times



legalization is associated with a 25% increase in cannabis use disorder among 12-17 year olds

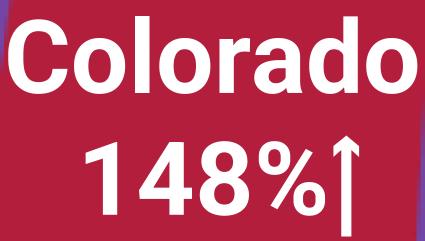
National Institute on Drug Abuse, 2021



Arizona 267%

Marijuana related hospitalizations and ER visits have increased since legalization

California 89%





Marijuana users are

25% by the second state of the second state of

Vozoris et al., 2022



United States 1,375%个

https://publications.aap.org/pediatrics/article/151/2/e2022057761/190427/Pediatric-Edible-Cannabis-Exposures-and-Acute?autologincheck=redirected

Calls to poison control for edible marijuana exposures in children under 6 rose 1,375% from 2017-2021



Calls to poison control for edible marijuana exposures in legal states continues to rise



72%

Illinois

Emerson, 2022; Washington Poison Center, 2019; Colorado Department of Public Safety, 2021



586% Colorado

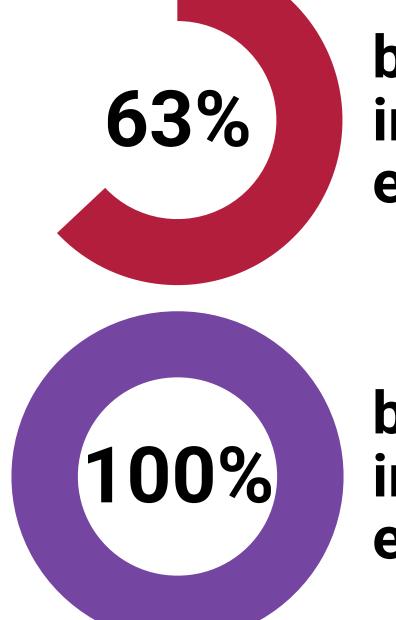


road deaths in Colorado involve marijuana

Colorado Division of Criminal Justice, 2020



Drivers 19-24



Perception of the dangers of driving while high is misaligned with reality and misaligned with perceptions on drinking and driving

believed that driving under the influence of marijuana was extremely or very dangerous

believed that driving under the influence of alcohol was extremely or very dangerous

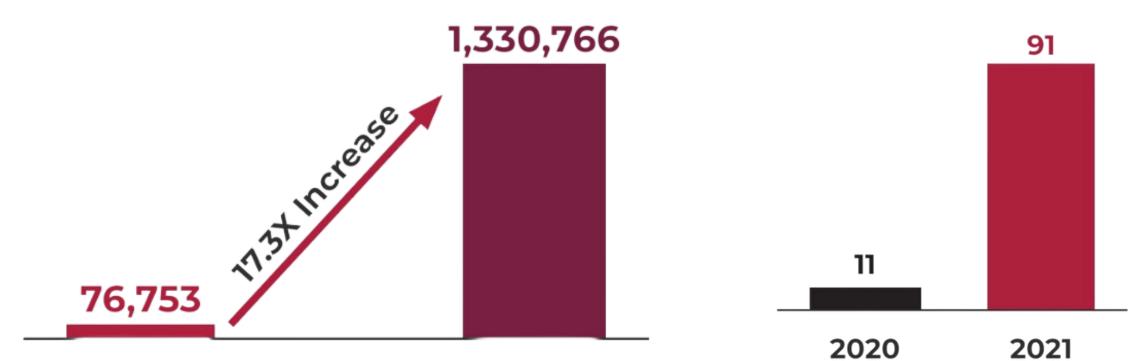


of teen drivers who use marijuana report driving under the influence

ColoradoLi et al., 2020 Division of Criminal Justice, 2020.



Legalization has far from eliminated the black market



2021

2020 THE NUMBER OF CLANDESTINE LABORATORIES SEIZED IN THE HIDTA THE OREGON-IDAHO HIDTA SEIZED **REGION INCREASED FROM 11 IN 2020 TO 91 IN 2021, WITH THE MAJORITY (90)** 1,330,766 ILLICIT MARIJUANA PLANTS IN **RELATED TO CANNABIS EXTRACTION 2021.** THAT'S COMPARED TO 76,753 FOR THE PURPOSE OF PRODUCING IN 2020 (17.3X INCREASE) AND 5,260 IN **'BHO/HONEY OIL'**" 2018 (253.0X INCREASE). OREGON-IDAHO HIGH INTENSITY DRUG TRAFFICKING AREA. 2022A, P. 11

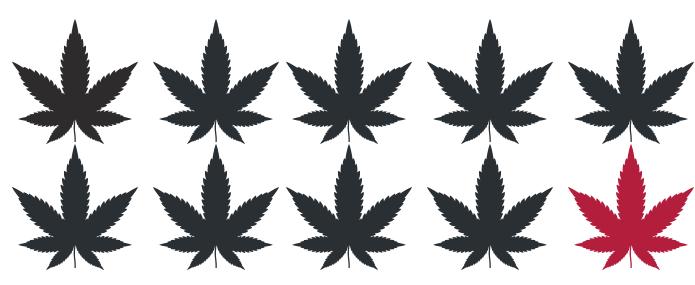
OREGON-IDAHO HIGH INTENSITY DRUG TRAFFICKING AREA, 2022B, P. 17



Legalization has far from eliminated the black market



85of California-produced marije of exported Oller, 2019



70of marijuana sold in state-legal dispensaries in California was percured and grown illegally NBC News, 2022

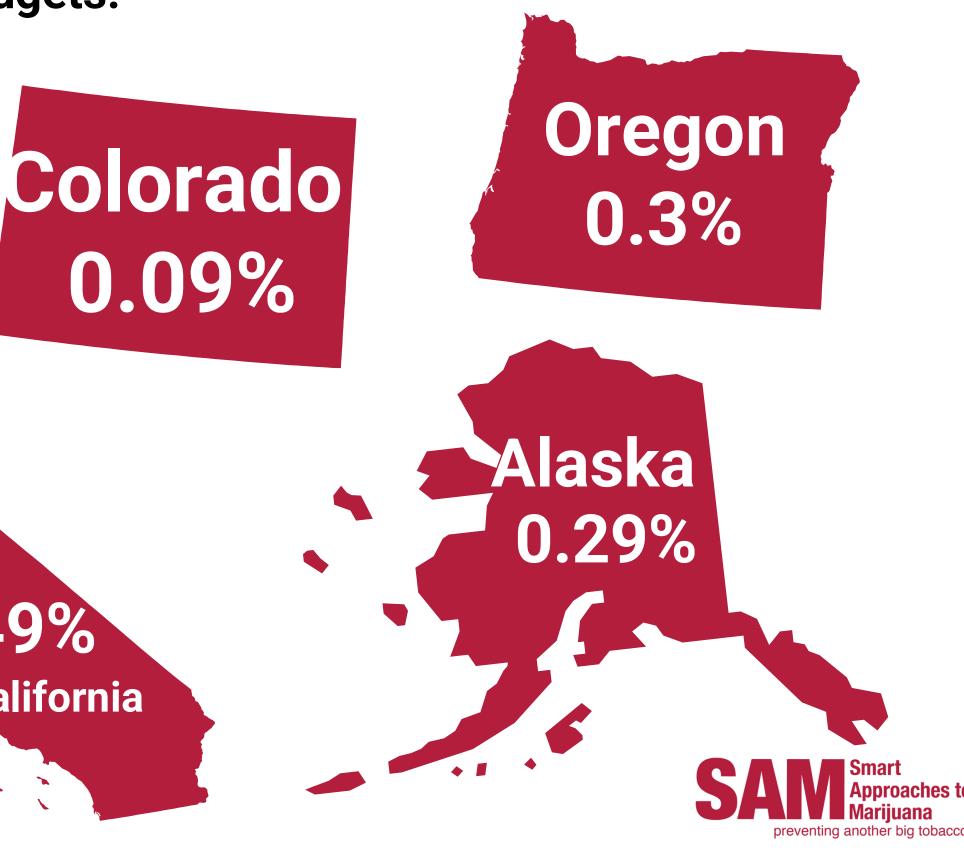


Marijuana Taxes as a Percent of FY21-22 **State Budgets:**

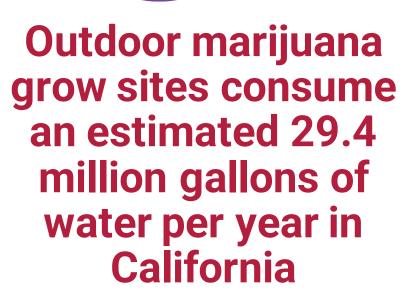
.49%

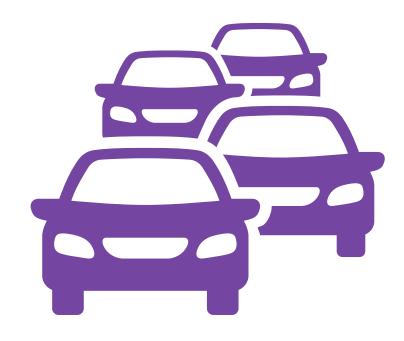
California

Marijuana tax revenue projections are still massively over-estimating net marijuana taxes



Marijuana is also harmful for the environment





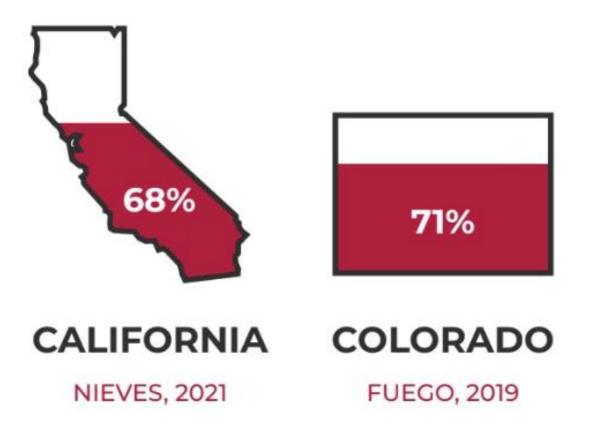
Indoor marijuana grows emit as much CO2 as 3.3 million cars



Marijuana production is nearly four times more energy intensive than coal or oil production









NEW YORK

ROCKEFELLER INSTITUTE OF GOVERNMENT, 2022

NEW JERSEY

71%

MJBIZDAILY, 2021





increased 204.2%

increased 10.3%

In the safetysensitive workforce, marijuana positivity increased:



Post-accident workforce drug positivity for marijuana reached a 25year high in 2022

From 2012 to 2022, postaccidental marijuana positivity

Positivity for marijuana in the general U.S. workforce

2022 DEA Domestic Cannabis **Eradication**/ **Suppression** Program

actively participate in the program

\$44.9 million cultivator assets seized

1,245,980 indoor marijuana plants eradicated

4,435,859 outdoor marijuana plants eradicated

87% of marijuana seized was in California

https://www.dea.gov/sites/default/files/2023-04/FY2022%20DCE-SP%20Stats%20%28004%29.pdf

In 2022, DEA provided resources to support the 115 state and local law enforcement agencies that



2,840 weapons seized



of cases of schizophrenia among men aged 21-30 might have been prevented by averting cannabis use disorder

https://www.cambridge.org/core/journals/psychological-medicine/article/association-between-cannabis-usedisorder-and-schizophrenia-stronger-in-young-males-than-in-females/E1F8F0E09C6541CB8529A326C3641A68



Although several states legalized medical marijuana as an "alternative" to opioids, research shows: Marijuana is not a substitute for opioids

Marijuana users need more anesthesia during surgery and 58% more opioids following surgery

Legal medical marijuana sold through dispensaries is associated with higher opioid mortality

https://www.sciencedirect.com/science/article/pii/S016762962300005X?via=ihub#sec0013 https://www.asahq.org/about-asa/newsroom/news-releases/2020/10/cannabis-and-postoperative-pain



Compared with non-users, adolescents (12-17) who used marijuana but did not meet the criteria for Cannabis Use Disorder had:

greater odds of adverse psychosocial events, including major depression, suicidal ideation, slower thoughts, difficulty concentrating, truancy, low grade point average, arrest, fighting, and aggression.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2804450?



An increased availation was linked to:

Increased use

Worse health-related outcomes, including vomiting, psychosis, or cannabis-involved pregnancies

This was true regardless of the indicator employed to measure availability (proximity or density of dispensaries) among both adults and adolescents

https://www.sciencedirect.com/science/article/pii/S0955395923000804

More availability through dispensaries means higher rates of use and worse health outcomes for adults and teens

An increased availability of legal marijuana



Legislation to Watch SAFE Banking Act · Cannabis Administration and Opportunity Act



SAFE Banking Act

Provides a "safe harbor" from banking regulators for banks who choose to accept federally illegal proceeds from production & sale of marijuana. However, banks would still be vulnerable to prosecution under CSA for talking illegal funds.



Sets a dangerous precedent to allow banking access for a Schedule I drug, giving money laundering access to international drug cartels already using legalization as cover for illicit drug trafficking.

Access to banks would radically increase institutional investment into the industry, rapidly accelerating its transformation into the next Big Tobacco.



Debate over legalization should come first, bill provides no guardrails for public health & safety.





Cannabis Administration and **Opportunity** Act (CAOA)

Fully legalizes marijuana products at the federal level by removing marijuana from the Controlled Substances Act.

Gives marijuana businesses and corporate holding companies full access to Institutional Investors and capital markets, including Altria (Phillip Morris).

Contrary to the recommendations of public health experts, allows marijuana businesses to deduct the cost of advertising, by exempting them from 280E of the IRS Code (CBO has scored this as a revenue loss of \$5 billion over 10 years).



Allows marijuana businesses to access loans from the Small Business Administration.



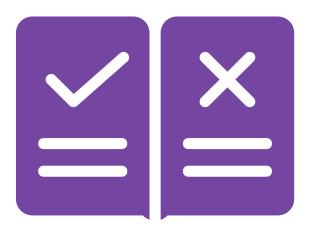


Policy Solutions



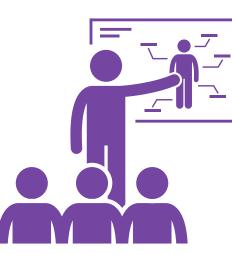
In States **That Have** Legalized

Edibles and high THC concentrates should be outlawed or severely restricted.



The marijuana industry should not serve on rule-making bodies to determine regulations.

Pot advertising and promotions should be prohibited.

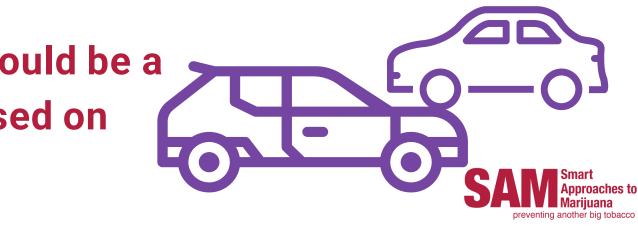


A science-based public awareness campaign should be implemented across multiple media.

Drugged driving prevention should be a priority, with tough laws imposed on those who drive stoned.





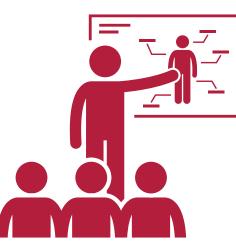


In States That Have Not Legalized:



Remove criminal penalties and arrest records for personal possession of pot.

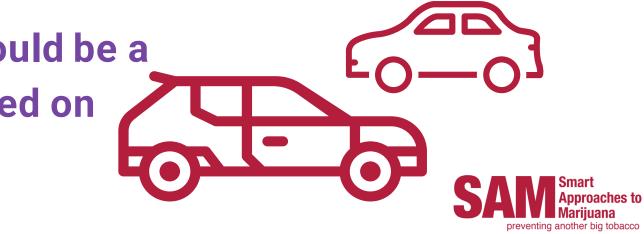
Pot use should be discouraged, and people caught repeatedly with marijuana should be directed to early interventions and/or treatment.



A science-based public awareness campaign should be implemented across multiple media.

Drugged driving prevention should be a priority, with tough laws imposed on those who drive stoned.









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Training Events

SAM State Affiliate Program

Donate

Volunteer Opportunities



Thank you for joining us today!

learnaboutsam.org



Smart Approaches to Marijuana preventing another big tobacco

Your Voice on Marijuana Issues in the United States

While laboratory animals are an expensive way of understanding the risks of cannabis use, North Americans come free.

The Economist (2019)







Thank you for joining today! kevin@learnaboutsam.org luke@learnaboutsam.org www.learnaboutsam.org