Kevin Sabet, PhD

Marijuana Issues: Where Do We Go From Here?

www.sam-ny.org
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

- **Groups we have worked with** include:
  - American Society of Addiction Medicine
  - American Academy of Pediatrics
  - American Academy of Child and Adolescent Psychiatry
  - Over 30 state affiliates
We are living in 1918...
Repeating History?
The false dichotomy: "Legalization OR incarceration?"
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
Not This…
...But This
Pot use is strongly correlated with psychosis

**More Marijuana use correlates with higher rates of schizophrenia**

Cases of schizophrenia per 1,000 people

<table>
<thead>
<tr>
<th>Number of times cannabis used (lifetime)</th>
<th>Study of Swedish Conscripts (n=45570)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>&lt; 50</td>
<td>15</td>
</tr>
<tr>
<td>&gt; 50</td>
<td>28</td>
</tr>
</tbody>
</table>

**Earlier age of use correlates with increased schizophrenia risk**

Risk multiple for schizophrenia-like psychosis at age 26

<table>
<thead>
<tr>
<th>Year of first use</th>
<th>Longitudinal prospective Dunedin study (n=1037)</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 15 years</td>
<td>4.5</td>
</tr>
<tr>
<td>By 18 years</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Andréasson et al Lancet, 1987 (left graphic); Arseneault et al BMJ 2002 (right graphic)
Causal Relationship between marijuana and mental illness

Case Reports in Medicine
Volume 2009, Article ID 321456, 2 pages
http://dx.doi.org/10.1155/2009/321456

Case Report

Suicidal Ideation Induced by Episodic Cannabis Use

Michele Raja¹,² and Antonella Azzoni²

3. Discussion

In patient’s life, suicidal ideation presented in two different occasions, only immediately after acute cannabis intoxication. This strongly suggests the causal relationship between intoxication and suicidal ideation.

There is a convincing relationship between suicidal behavior and cannabis use, the latter awakening depressive experiences [3]. Rates of cannabis abuse are elevated among those being treated for depression [4, 5] and among those making a suicidal attempt [6]. In a sample of Italian students, the use of cannabis was associated with suicide risk [7]. In a population of French adolescents, cannabis use appeared to be an independent predictor of suicidal ideation after controlling the depressive symptoms [8]. In a cohort study of young Norwegians, cannabis by itself seemed not to lead to depression but was associated with later suicidal thoughts and attempts [9].
Cannabis Use May Be Causally Related to Depression and Suicidal Ideation

Peter Roy-Byrne, MD reviewing Agrawal A et al. Lancet Psychiatry 2017 Sep

In an analysis of twins discordant for frequent cannabis use, common predisposing factors did not fully explain these associations.

Epidemiologic studies have found associations between cannabis use and both depression and suicidality (thoughts or behaviors) but have not determined whether the associations are causal or attributable to confounding factors or common genetic vulnerabilities. To control for common genetic and family environmental factors, researchers examined the associations in 13,986 Australian twins (6181 monozygotic and 7805 dizygotic twins) drawn from three registry studies between 1992 and 2009. Within twin pairs discordant for cannabis use, persistence of the association in the cannabis-using twin would suggest that use is causally related to depression and suicidality.

In the entire sample, early cannabis use and frequent use were associated with major depression and suicidal ideation and attempt. Analyses of twin pairs who were discordant for early versus later or no use did not yield consistent findings. However, within monozygotic twin pairs discordant for frequent versus limited or no use, frequent use was associated with depression (odds ratios: compared with no or limited use, 1.68; compared with lighter use, 1.98) and suicidal ideation (ORs, 2.35 and 2.47, respectively).

COMMENT

This study suggests a causal relationship between frequent cannabis use and both major depression and suicidal ideation. This relationship may be mediated both via effects of the cannabinoid system on mood and via environmental factors related to cannabis use itself (e.g., increased trauma exposure, diminished life opportunities, other associated drug use). The analysis is limited by the possibility that not all confounders were accounted for and by arbitrary thresholds used to define early use and frequency of use. The results provide a counterpoint of caution against the increasing promotion of cannabis use as a therapeutic tool for various medical conditions.
Causal links between cannabis, schizophrenia: New evidence

Date: December 19, 2016

Source: University of Bristol

Summary: People who have a greater risk of developing schizophrenia are more likely to try cannabis, according to new research, which also found a causal link between trying the drug and an increased risk of the condition.
"What do you want?"

-Rob Kampa, on soliciting money from the tobacco industry

Source: Marijuana Business Daily, 4/28/178  Photo: ReasonTV
Coming Soon From Molson Coors: Marijuana Beer

Molson Coors’ new venture is targeting the Canadian cannabis market.

Corona Owner’s Marijuana Investment Reaps $700 Million

By Willian Bedico
June 23, 2018, 1:05 PM
Bloomberg

“I’m ready to introduce another high-impact brand to the industry again, this time with a new line of custom cannabis-infused craft beers.”
-Creator of Blue Moon

Constellation Brands: $4B into Canopy
Outline

1. The Current Landscape
2. Marijuana and Opioids
3. Current Regulatory Failures
4. A Way Forward
5. Conclusions
Is Legalization Inevitable?

States with medical marijuana laws
States that have removed jail time for possessing small amounts of marijuana
States that have both a medical marijuana law and have removed jail time for possessing small amounts of marijuana
Marijuana is legal for adults and is taxed and regulated similarly to alcohol; state also has a medical marijuana law
Record-High Support for Legalizing Marijuana

by Justin McCarthy

STORY HIGHLIGHTS

- **Poll:** Americans say marijuana use should be made legal, with a 8-1 majority.
- **Poll:** U.S. voters say 3-1 that they support legalizing marijuana.
- **Poll:** The divide between Congress and the American public over pot couldn't be more pronounced.

January 11, 2018 - Dreamers Should Stay, American Voters Say 8-1, Quinnipiac University National Poll Finds; Do Not Enforce Federal Pot Laws, U.S. Voters Say 3-1

Marijuana Polls With 1 Overwhelming Consensus: Legalize

Sean Williams (TMFUltraLong)
Jan 14, 2018 at 11:41AM
How You Ask the Question Is Key

- Most polls pose a binary question: legalization or criminalization

- The public equates decrim and legalization

- But there is a difference

- When you introduce additional options, the polling changes significantly
Example: Marijuana Replacement Guidance

National Poll, 1000 Registered Voters, Mason Dixon, Jan 10-13, 2018

Question: Would you support or oppose enforcement of federal marijuana laws if it did not involve penalties for possession and use of small amounts of marijuana?

Support: 50%  Oppose: 42%  Undecided: 8%
NEW FDU POLL SHOWS MAJORITY OF NEW JERSEYANS OPPOSE LEGALIZING RECREATIONAL MARIJUANA

"Anyone who expected legalization to happen quickly and easily might reconsider given these findings," said Krista Jenkins to the Star-Ledger, professor of political science and director of the FDU Poll.

Half of Americans support alternatives to full marijuana legalization: poll

BY JOSH DELK - 01/17/18 04:20 PM EST
Example: Support for Legalization Dips Below 50% When Given Other Choices

National Poll, 1000 Registered Voters, Mason Dixon, Jan 10-13, 2018

Question: Currently, possessing and using marijuana is against federal law. Which one of the following best describes your preference on national marijuana policy?

For full legalization: 49%
Prefer some other option: 50%

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep the current policy:</td>
<td>16%</td>
</tr>
<tr>
<td>Keep the current policy, but legalize the use of marijuana for physician supervised medical use:</td>
<td>29%</td>
</tr>
<tr>
<td>Decriminalize marijuana use by removing the possibility of jail time for possession and also allowing for medical marijuana, but keep the sale of marijuana illegal:</td>
<td>5%</td>
</tr>
<tr>
<td>Legalize the commercial production, use and sale of marijuana for recreational use, as they have done recently in several states:</td>
<td>49%</td>
</tr>
</tbody>
</table>
Example: Support for Legalization Drops 20 Points

NY state poll, 600 voted in 2016 election, Emerson College (Nov 30-Dec 2, 2017)

Question: Do you think the use of marijuana should be made legal for adults aged 21 and older?

**Yes:** 60%  
**No:** 29%  
**Unsure:** 11%

Question: Knowing that personal marijuana possession is already decriminalized and medicalized in New York, which one of the following marijuana policies do you prefer?

Keep current policy: 26%  
Keep medical, repeal decriminalization: 22%  
**Legalize marijuana: 40%**  
Repeal both, make marijuana completely illegal: 11%
NEW ILLINOIS MASON-DIXON POLL SHOWS

LARGE MAJORITY OPPOSES LEGALIZING RECREATIONAL MARIJUANA

Poll finds only 23% support the legalization of recreational marijuana; 69% want other options such as maintaining current decriminalization law.
Midterms

- Democratic control of the House of Representatives would put more pressure on banking and anti-enforcement amendments
- Pelosi’s son is on the board of a marijuana company
- Senate can block full descheduling, but there will be pressure for a compromise
Federal Action

• We have our own proposal, shopping for sponsors
• Successfully blocked banking/other amendments
• Rohrabacher still in place, but only broadly applies in 9th Circuit
• President Trump still doesn’t like recreational weed
What’s Happening in States

- No state has successfully commercialized recreational marijuana in 2017 or 2018
- Lawmakers are much more open to hearing the lessons of legalized states
Priority States

- NJ
- Responsible Approaches to Marijuana Policy

- Healthy & Productive Illinois
  In Partnership with SAM Action

- SAM Vermont
- Smart Approaches to Marijuana

- SAM New York
- Smart Approaches to Marijuana

- SAM Michigan
- Healthy and Productive

- SAM Rhode Island
- Marijuana Accountability Coalition
SAM Resources

- Cost Reports
- Science Advisory Board
- Communications Strategy
- Polling
Outline

1. The Current Landscape
2. Marijuana and Opioids
3. Current Regulatory Failures
4. A Way Forward
5. Conclusions
Why talk POT during an opiate epidemic?
The Marijuana Industry Sees a Business Opportunity

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

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

States with ice cream eaters had 25% more drowning deaths.

Lancet Study

1514 patients completed baseline interview
- 71 withdrew at 3-month follow-up
- 26 withdrew at 12-month follow-up
- 21 died

1396 contacted for 1-year follow-up
- 1235 completed follow-up
- 124 could not be contacted
- 37 refused
- 15 withdrew
- 22 died

1301 contacted for 3-year follow-up
- 1211 completed follow-up
- 79 could not be contacted
- 11 refused
- 16 withdrew
- 25 died

1260 contacted for 4-year follow-up
- 1217 completed follow-up
- 29 could not be contacted
- 14 refused
- 19 withdrew
- 39 died
Lancet Conclusions

- No evidence that cannabis use improved patient outcomes;
- Those who used cannabis had greater pain and lower self-efficacy in managing pain;
- No evidence that cannabis use reduced pain interference or exerted an opioid-sparing effect.
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.
OPIOID DEATHS HAVE INCREASED, NOT DECREASED, SINCE COLORADO LEGALIZED MARIJUANA FOR MEDICAL USE IN 2000

Source: Colorado Department of Public Health and Environment (CDPHE)
EXPOSURE
Smoking cannabis during pregnancy is linked to lower birth weight in the offspring.

The relationship between smoking cannabis during pregnancy and other pregnancy and childhood outcomes is unclear.

PROBLEM CANNABIS USE
Greater frequency of cannabis use increases the likelihood of developing problem cannabis use.

Initiating cannabis use at a younger age increases the likelihood of developing problem cannabis use.

CANNABIS USE AND ABUSE OF OTHER SUBSTANCES
Cannabis use is likely to increase the risk for developing substance dependence (other than cannabis use disorder).

MENTAL HEALTH
Cannabis use is likely to increase the risk of developing schizophrenia and other psychoses; the higher the use the greater the risk.

In individuals with schizophrenia and other psychoses, a history of cannabis use may be linked to better performance on learning and memory tasks.

Cannabis use does not appear to increase the likelihood of developing depression, anxiety, and posttraumatic stress disorder.

For individuals diagnosed with bipolar disorders, near daily cannabis use may be linked to greater symptoms of bipolar disorder than non-users.

Heavy cannabis users are more likely to report thoughts of suicide than non-users.

Regular cannabis use is likely to increase the risk for developing social anxiety disorder.

TO READ THE FULL REPORT AND VIEW RELATED RESOURCES, PLEASE VISIT NATIONALACADEMIES.ORG/CANNABISHEALTHEFFECTS
And This…

Former Big Pharma OxyContin CEO Now Selling Medical Cannabis

Published 2 years ago on November 29, 2016

By Maureen Meehan
Outline

1. The Current Landscape
2. Marijuana and Opioids
3. Current Regulatory Failures
4. A Way Forward
5. Conclusions
Current Regulatory Failures

- No Potency Caps
- Black Market (and Cartels)
- Increased Access for Minors
- Pesticides and Contaminants
- Recommended to Pregnant Women
Marijuana is not “just a plant” anymore – derivatives contain up to 99% THC

“Green Crack” wax

“Ear Wax”

Butane Hash Oil (BHO)

Hash Oil Capsules

“Budder”

“Shatter”

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99% THC is already on sale in our country
Product Innovation in Delivery Systems
Old Initiation: free dabs
New Initiation: Sophisticated Marketing Data

Ready-To-Use Products Surpassed Flower For The First Time In History

Product Category Sales Trends

Gen Z highest users of concentrates

CONCENTRATES

Concentrates are highly potent extracts made from cannabis flower that come in many varieties. If flower is like wine, then concentrates would be the fine scotch—potent, with intense flavor and aroma. The highly refined nature of concentrates makes them a favorite among people who are looking for purity, maximum taste, and instant effect.

What percentage of customers ordered them in 2017?

<table>
<thead>
<tr>
<th>Generation</th>
<th>Date Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Z</td>
<td>1996–Later</td>
<td>24%</td>
</tr>
<tr>
<td>Millennial</td>
<td>1985–1995</td>
<td>19%</td>
</tr>
<tr>
<td>Gen X</td>
<td>1965–1984</td>
<td>16%</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>1946–1964</td>
<td>15%</td>
</tr>
</tbody>
</table>
What about edibles/drinkables?

- Delay in effect encourages additional consumption (the first time)
- Additional consumption may result in an expensive visit to the ER
- THC metabolizes into 11-hydroxy THC in the stomach
- CBD metabolizes into THC in the stomach
- Much more psychoactive, much more dangerous mental health impacts
The Black Market Has Gotten Worse

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.

“Legal” growers, illegal activity

“From my side, I have yet to see one (grow) that’s legit. The whole mantra for pro-marijuana legislation was that it would be legal, regulated and taxed. What you’re seeing here is none of that.” – Sheriff’s Deputy Ray Gerhart, El Paso County, CO

"Seed-to-Sale" Tracking Has Many Loopholes

Missing marijuana: Weed disappearing from licensed dispensaries, not all cheaters get caught

POSTED 8:51 PM, MAY 1, 2017, BY CHRIS HALSNE, UPDATED AT 09:52PM, MAY 1, 2017

“One pattern of noncompliance stood out: The much-touted “seed-to-sale” tracking of every marijuana plant has some flaws…

“But plenty of pot still ends up missing. How the METRC system works, by law, is supposed to be a bit of a mystery…

“Within that gray area is where cheaters can list perfectly good marijuana product as too damaged to sell, then sell it anyway.”
Sales to Minors

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

Licensees Across Oregon Fail to Stop Sales to Minors
OLCC Marijuana Retailer Minor Decoy Checks Continue
Increased Availability to Minors

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

Edible marijuana at Hollywood school sends 14-year-old girl to hospital
Hollywood police officer investigates 'Weedos' marijuana incident

One arrested; 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

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

Contaminated marijuana still reaching consumers in Oregon

Updated Jun 18, 2017; Posted Jun 17, 2017

Gallery: Cannabis product testing for pesticides

https://www.wcvb.com/article/5-investigates-what-s-in-your-weed/19581415
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)

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 - Kirko 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 Cannabinoid (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 - CO Foods Voluntarily Recalls Marijuana Products Due to Pesticide Residues
- January 20, 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 Recalls Marijuana Products Due to Possible Pesticide Residues
- September 25, 2015 - Consumer Advisory Issued for Autopilot Capsules Manufactured by Rx Green
- September 19, 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

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)
MARIJUANA BUSINESSES IN DENVER ARE CONCENTRATED IN NEIGHBORHOODS OF COLOR

Locations of pot businesses (dots represent businesses; neighborhoods shaded by income; lighter = lower-income)

Denver neighborhoods colored by race/ethnicity; green = White; orange = Latino; purple = Black; red = Asian; blue = Other

2010 Census Block Data: Race/Ethnicity as a Percentage of Total Block Population
## Chart of the Week

**Location of Recreational Marijuana Stores in Denver & Seattle: Breakdown By Zip Codes' Median Household Income**

<table>
<thead>
<tr>
<th>Category</th>
<th>Denver</th>
<th>Seattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Income in Bottom 25th Percentile of Zip Codes in Each City</td>
<td>44.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Household Income Between 25th and 75th Percentile of Zip Codes in Each City</td>
<td>33.7%</td>
<td>36.7%</td>
</tr>
<tr>
<td>Household Income in Top 75th Percentile of Zip Codes in Each City</td>
<td>21.9%</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

Source: Colorado Department of Revenue, 2011-2015 American Community Survey 5-Year Estimates

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Juvenile Arrest Rate Before and After Legalization

Overall juvenile arrests

- White: 8%
- Hispanic: 29%
- Blacks: 58%

Source: Colorado Department of Public Safety (March 2016)
One hundred three (103) law enforcement agencies reported 6727 qualifying incidents in 554 public schools during the 2015-16 academic year, from August 1, 2015 through July 31, 2016.

<table>
<thead>
<tr>
<th>Offense</th>
<th>N</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana (#1)</td>
<td>1561</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Assault</td>
<td>834</td>
<td>12%</td>
<td>36%</td>
</tr>
<tr>
<td>Disorderly Conduct/Fighting</td>
<td>814</td>
<td>12%</td>
<td>48%</td>
</tr>
<tr>
<td>Public Peace</td>
<td>666</td>
<td>10%</td>
<td>58%</td>
</tr>
<tr>
<td>Dangerous Drugs</td>
<td>420</td>
<td>6%</td>
<td>64%</td>
</tr>
<tr>
<td>Larceny/Theft</td>
<td>341</td>
<td>5%</td>
<td>69%</td>
</tr>
<tr>
<td>Liquor/Alcohol</td>
<td>297</td>
<td>4%</td>
<td>73%</td>
</tr>
<tr>
<td>Trespass</td>
<td>260</td>
<td>4%</td>
<td>77%</td>
</tr>
<tr>
<td>Obstruct</td>
<td>206</td>
<td>3%</td>
<td>80%</td>
</tr>
<tr>
<td>Harassing Communication</td>
<td>203</td>
<td>3%</td>
<td>83%</td>
</tr>
<tr>
<td>Other/Unclear</td>
<td>194</td>
<td>3%</td>
<td>86%</td>
</tr>
<tr>
<td>Weapon Offense</td>
<td>141</td>
<td>2%</td>
<td>88%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>127</td>
<td>2%</td>
<td>90%</td>
</tr>
<tr>
<td>Damage Property</td>
<td>120</td>
<td>2%</td>
<td>92%</td>
</tr>
<tr>
<td>Traffic Offense</td>
<td>91</td>
<td>1%</td>
<td>93%</td>
</tr>
<tr>
<td>Sexual Assault/Offense</td>
<td>76</td>
<td>1%</td>
<td>94%</td>
</tr>
<tr>
<td>Warrant</td>
<td>57</td>
<td>1%</td>
<td>95%</td>
</tr>
<tr>
<td>Criminal Mischief</td>
<td>47</td>
<td>1%</td>
<td>96%</td>
</tr>
<tr>
<td>Runaway/Missing Person</td>
<td>41</td>
<td>1%</td>
<td>97%</td>
</tr>
<tr>
<td>Interference with Educ Inst</td>
<td>39</td>
<td>&lt;1%</td>
<td>97%</td>
</tr>
<tr>
<td>Truancy</td>
<td>36</td>
<td>&lt;1%</td>
<td>98%</td>
</tr>
<tr>
<td>Burglary</td>
<td>33</td>
<td>&lt;1%</td>
<td>98%</td>
</tr>
<tr>
<td>Menacing</td>
<td>26</td>
<td>&lt;1%</td>
<td>99%</td>
</tr>
<tr>
<td>Arson</td>
<td>25</td>
<td>&lt;1%</td>
<td>99%</td>
</tr>
<tr>
<td>Robbery</td>
<td>20</td>
<td>&lt;1%</td>
<td>99%</td>
</tr>
<tr>
<td>Curfew</td>
<td>16</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Family/Child Offense</td>
<td>12</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Vehicle Theft</td>
<td>8</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Fraud/Forgery</td>
<td>5</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>5</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Invasion of Privacy</td>
<td>2</td>
<td>&lt;1%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>6727</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Colorado Department of Public Safety, 2017
Conclusions

• States are not effectively regulating marijuana now.

• No state has successfully put a limit on potency.

• The marijuana industry is actively promoting increased use and access to high potency products.

• Increased marijuana access and use is harming those who need help and hope to recover from opioid addiction.
What is our alternative?
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.
OVERALL OBJECTIVES

An alternative policy to drug legalization that:

1. Minimizes drug use, especially problematic use
2. Resolves underlying substance abuse problems driving criminal behavior (beyond simple possession and use)
3. Reduces recidivism
4. Saves societal resources
## POLICY FRAMEWORK

<table>
<thead>
<tr>
<th>PHASE</th>
<th>Pre-entry</th>
<th>Pre-sentencing</th>
<th>Pre-release</th>
<th>Re-entry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOAL</strong></td>
<td>Prevent people from entering criminal justice system—providing an alternative to “you’re either in trouble or on your own”</td>
<td>Diversion by prosecutors into alternative outcomes</td>
<td>Treatment &amp; recovery options during criminal sentence</td>
<td>Social re-integration and maintenance of recovery process (includes probation/parole)</td>
</tr>
<tr>
<td><strong>MODELS</strong></td>
<td>• Civil fines</td>
<td>• DTCs/therapeutic justice</td>
<td>• State-run, in-prison treatment &amp; recovery programs</td>
<td>• Re-entry services &amp; training</td>
</tr>
<tr>
<td></td>
<td>• Diversion by police</td>
<td>• Post-indictment diversion into treatment/education</td>
<td>• Prison treatment &amp; recovery programs run by civil society or private companies (generally state-funded)</td>
<td>• Expungement &amp; sealing</td>
</tr>
<tr>
<td></td>
<td>• Administrative justice model (e.g., Portugal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Immediate referral to social services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXAMPLES</strong></td>
<td>o NH pot decrim law</td>
<td>o NADCP drug court guidelines</td>
<td>o Federal programs (insufficient supply)</td>
<td>o TASC services: Clinical Pre-Release Program, Supportive Release Center &amp; Jail Discharge Program</td>
</tr>
<tr>
<td></td>
<td>o LEAD programs</td>
<td>o Mont. Cty. MD IPSA program</td>
<td>o TASC services: Prison Substance Abuse Screening &amp; Treatment</td>
<td>o Prison Fellowship life skills program</td>
</tr>
<tr>
<td></td>
<td>o Portuguese model</td>
<td>o Cook &amp; St. Clair Cty Drug School Diversion Program</td>
<td>o Prison Fellowship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Swedish model of obliging police to inform social services of drug cases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Integrating SBIRT w/ police</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TRANSVERSAL PROGRAMS (available to the public)

- **Prevention and education resources** for the public, especially focused on children – ideally nationally coordinated
- **Expanded mental health services**, with free or low-cost options to lower-income individuals
- **State-sponsored activities for kids** (part of Icelandic model)
LESSONS LEARNED FROM MARIJUANA LEGALIZATION IN FOUR U.S. STATES AND D.C.

MARCH 2018

Reviewed by researchers from:
University of Colorado at Denver
Harvard Medical School
Boston Children's Hospital
University of Connecticut
Yale University
University of Kansas
and more

www.learnaboutsam.org
“We were gaining momentum. But now that's flipped and we're more on the defensive.” – Rep. Dina Titus (D-NV), one of the biggest marijuana supporters in Congress.
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.”
Resources

Drugabuse.gov
LearnaboutSAM.org
MarijuanaReport.org
What You Can Do Now

www.sam-ny.org