Marijuana Legalization: Building a New Tobacco Industry or Learning from the Past? Lessons from California

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Getting it Right from the Start’s Mission

To collaboratively develop and test models of optimal cannabis policy with the goal of reducing harms, youth and problem use. Models are based on the best scientific evidence and protection of public health, social equity and safety.
California’s Prop 64 legalizing recreational cannabis:

- Scant attention to public health concerns
- Failure to learn from tobacco control
- Lack of economic equity focus
- Leeway to local government to regulate and tax
Why legalize?

- Profound Racism in Drug Policy
- Mass Incarceration
- Trafficking Related Violence
- Prohibition didn’t work

Prohibition didn’t work
Profound Injustice in Incarceration

California

Jail Incarceration

<table>
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<th>Rate</th>
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Disparity

- All
- Pretrial

Race/Ethnicity

- Asian/Pacific Islander
- Black/African American
- Latino
- Native American
- White

Per 100,000 residents age 15-64
Marijuana is not
But also not
Why Worry? Some Proven Evidence of Benefit

Chemotherapy induced nausea

Recently approved pharmaceutical Epidiolex (cannabidiol) for rare difficult to control form of epilepsy

Certain forms of chronic pain

Source NASEM 2017; FDA 2018
But

Substantial Evidence of Harm

- Low birth weight
- Schizophrenia and psychoses
- Increased motor vehicle crashes
- Respiratory illness
- Problem use associated with early onset of use and frequency

Source: National Academies of Science, Engineering, and Medicine, 2017
Emerging evidence

COGNITIVE, ACADEMIC AND SOCIAL EFFECTS

ACCIDENTAL INGESTION AND OVERDOSE

CARDIOVASCULAR DISEASE
Cannabis can exacerbate existing disparities for the black community – not just incarceration: Ex: Black infant health

Newborns at Low Birth Weight by Race US and California 2017

- Non-Hispanic White
- Non-Hispanic Black
- Hispanic
- All

California % Low Birth Weight babies vs US % Low Birth Weight Babies
Existing Disparities for African Americans potentially exacerbated by cannabis

- 2-3 times more likely to be diagnosed with schizophrenia
- Worse health outcomes from mental health issues, for example less likely to be employed after schizophrenia hospitalization
- 30% more likely to die from heart disease
- Twice as likely to die from stroke
- 40% more high blood pressure
- More heart attacks
- Twice as likely to be diagnosed with diabetes
Like Tobacco: Cannabis Addiction is Real – About 1 in 10 users

- Approximately 4.0 million Americans met criteria for cannabis use disorders in 2015.
- 1.2 million of first time users in 2016 were between the ages of 12 and 17

Source: S. Weiss, NIDA and 2016 National Survey on Drug Use and Health, SAMHSA
Marijuana and Brain Development: the most vulnerable periods are pregnancy and adolescence.
Use Rising in Pregnant California Women

• From 2009 to 2016, cannabis use among pregnant women increased from 4% to 7%

• 22% of pregnant females younger than 18 years and 19% of pregnant females aged 18 to 24 years screened positive for cannabis use in 2016

• Declining perception of risk for use during pregnancy - and in general

Source: Young-Wolff et al, JAMA 2017
Frequency of Cannabis Use Before Age 17 and Adverse Outcomes at 30 years (n=2500-3700)

Consistent dose-response associations between frequency of adolescent cannabis use and adverse outcomes

Source: Silins E et al., The Lancet September 2014
Changing Landscape of Increasing Potency and New Routes of Administration
Three Dangerous Areas Where the Cannabis Industry is Borrowing from Big Tobacco’s Playbook

- Manipulating Potency thereby Increasing the Risk of Addiction
- Creating flavored and other products aimed at attracting youth
- Shameless and misleading marketing
Vastly Increasing Potency

- Flower ~4% THC in 1995 to ~12% in 2014
- Now 16% to 30% in dispensaries
- Cannabidiol content decreased from ~.28% in 2001 to <.15% in 2014
- Change in the ratio of Δ⁹-tetrahydrocannabinol to cannabidiol from 14 times in 1995 to ~80 times in 2014

Source: El Sohly, 2016, Biological Psychiatry
Use of High Potency Products Associated with Risk of Psychosis

Source: Smart et al, Addiction, 2017
"Defendants have long known that nicotine creates and sustains an addiction to smoking and that cigarette sales, and ultimately tobacco company profits, depend on creating and sustaining that addiction...... .......Defendants have designed their cigarettes to precisely control nicotine delivery levels and provide doses of nicotine sufficient to create and sustain addiction."

Flavors are used to attract youth: Why on earth when we are trying to ban flavored tobacco are we introducing legal flavored marijuana (and wrappers)?
Misleading Therapeutic Claims & Framing as “Wellness” or “Lifestyle” product

“Fortunately, cannabis has been shown to improve depression (no matter how severe), and it can do so quickly and affordably.”

“With a sour citrus and floral aroma, Ghost Train Haze delivers a potent dose of THC to knock out pain, depression, and appetite loss....

Figure 4. Trends in median price per gram and price variation for cannabis flower. Dashed lines represent the 25th and 75th percentiles. [Colour figure can be viewed at wileyonlinelibrary.com]
The cannabis industry wants us to believe that quality control, testing and pesticide residues will determine health impacts.
The biggest determinants of health impact of legalization in our state will be:

• How many people the industry gets to use cannabis, how intensely, and at what age – just like tobacco

• How many people still go to jail for cannabis
The Marijuana Regulatory Spectrum

Our Approach

Source: Slide adapted from Jonathan Caulkins, 2017
Cannabis Common Sense 101

Legalizing

Does Not Have to Mean

Letting the Industry Make and Say Anything They Want To
<table>
<thead>
<tr>
<th>Failing to learn from tobacco control or racist enforcement in California’s state rules</th>
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<tbody>
<tr>
<td>No provisions for economic equity</td>
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<tr>
<td>No limit on # retailers</td>
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<tr>
<td>Inadequate limits on product types and potency and attractiveness to youth</td>
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<tr>
<td>Weak and invisible health warnings (6 point font)</td>
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<td>Advertising restrictions weaker than other states</td>
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<td>Delayed investment in prevention</td>
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In this setting, what does a social justice & equity approach mean?

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<th>Action</th>
<th>Details</th>
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<tbody>
<tr>
<td>Efficiently expunging past criminal records (AB 1793)</td>
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<tr>
<td>Prioritizing equity applicants for business (100%, 50%?)</td>
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<td>Making sure enforcement does not lead to a new wave of incarceration</td>
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<td>Discouraging big outside investors</td>
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<tr>
<td>Subsidizing marijuana business incubation for equity applicants? NO</td>
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<td>Collecting and investing tax revenue to reduce health disparities and mitigate negative effects of the war on drugs</td>
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<tr>
<td>Protecting children and youth</td>
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<tr>
<td>Reducing the risk of addiction and other negative health effects</td>
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<td>Don't exacerbate existing health disparities</td>
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Local Authority

• Local governments can prohibit or further regulate retail sales beyond state law
Local Control: Option to Prohibit or Regulate

- Cities and counties can prohibit the retail sale of adult use marijuana
- State must verify local license before issuing state license
- Local control threatened by proposed state BCC delivery regulations (illegally?)
- Personal growing and possession still allowed
Policy Ideas for Another Way – Seeking Greater Equity and Public Health
Local Option – Regulate Like Tobacco Retail License

Cities and counties can allow retail sales with *restrictions*, such as:

- Location, density, proximity
- Hours
- Types of products
- Serving sizes
- Etc.
Limit the density of retail operations

• Caps on Retail Dispensaries:
  • San Diego: max 36 or 1:37,000
  • Pasadena: max 6 or 1:24,000
  • Sacramento: max 30 (1:16,500)

• Buffer Zones:
  • San Diego (city): 1000 ft from parks, schools, daycares, libraries, playgrounds, youth-centered facilities, residential care facilities
  • Santa Ana: 1000 ft from schools, parks, existing residential areas

• Avoid concentration in low-income neighborhoods
Promote economic justice

- Prioritize and support equity applicants such as those most affected by drug related incarceration and other criteria (see Oakland, LA City or Sacramento rules)
- Require 50% or more (why not 100%?) of new licenses go to equity applicants
- Defer fees and adjust schedule to support equity applicants
- Require employment of vulnerable workers
- Avoid creating a new Big Cannabis
Retail: use specialized cannabis store only

- Most other states
- Contra Costa County (no food sales)
- Mammoth Lakes (no food sales)
- Mono County (no food sales & no share entrance)
- Pasadena (no food sales)
- In new regulations
Reduce drug related incarceration

- Enforcement of the new rules should not lead to more incarceration
- Develop programs, policies & funding to ensure this
Local and State Government Should Prohibit Certain Products

**Banning flavored products & menthol**
- FDA banned flavored cigarettes and jurisdictions across CA are still struggling to ban flavored tobacco
- Contra Costa County prohibited all flavored cannabis intended for inhalation or vaporization

**Prohibit strain names that sound like flavors attractive to youth e.g. Bubble Gum, Girl Scout Cookie, Cherry Pie**

**Prohibit Products “Attractive to youth”**
- Mono County and Mammoth Lakes prohibited products that would be attractive to youth or children or that resemble commercially sold candy or foods
Ban “Cannapops”

*Cannabis Infused Beverages:*

- Pasadena and Mono County prohibited cannabis-infused beverages
- Modeled after “alcopops” used to initiate teen drinking
Products: Restrict Potency

- Consider limits on flower (>15-20% THC?) and concentrate potency (>50% THC?) in cultivation, manufacturing and sales
- **New Mexico limits concentrates**
- Act cautiously, learn more
- Assess how THC:CBD ratios should be best regulated
- Optimal limits unclear but current trends are too dangerous too permit
Retail Pricing

- Price will be a major determinant of youth use in spite of <21 prohibition
- Vast evidence from tobacco and alcohol
- With higher potency and falling prices a “high” is getting cheaper
Prohibit discounting

- Adopt bans on discounting/coupons/happy hour or 2 for 1’s etc.
- Already used for tobacco (RI, NYC, others) and in Sonoma for medical marijuana
- OH Bans some discounting/promotional approaches
- Minimize price laws should be considered in the future
Taxation

- Highly effective in tobacco control, part of the Global Framework Convention for Tobacco Control
- Raises money
- How do we balance promoting the shift to the legal market with not making cannabis so cheap it increases use and harm?
- Rapid price falls suggest higher taxes may be needed
• Support both state and local taxes
• Additional tax per mg THC equivalent over certain thresholds
• Higher taxes on other undesirable products if they are not prohibited – like cannapops
• Dedicate most resources to prevention efforts, and healthier communities, treatment should be secondary
• Be strategically dedicated to undoing the complex web of social and health factors that perpetuate substance abuse, exacerbate its consequences in people’s lives, or diminish freedom, safety, health, well-being, ability to find jobs or to live a dignified life from youth to old age
Use money to invest early in life

- Nurse Family Partnership or home visiting with high risk mothers
- Prevents adverse childhood experiences, like unemployment or addiction that lead to poor health and social outcomes
Fund youth programs
Prevent going back to jail
Help expunge criminal records
Restrict advertising to the maximum extent possible under the law
Prohibit health and therapeutic claims on recreational marijuana

“Top Shelf Bubble Gum Galaxy Joint...enjoy this expertly rolled joint for its natural healing effects...perfect for those experiencing stress, pain and depression.”
Inform people of risks by requiring prominent in-store warnings and graphic package warnings

i) Are you pregnant of breastfeeding? According to the U.S. Centers for Disease Control (CDC), marijuana use during pregnancy can be harmful to your baby’s health, including causing low birth weight and developmental problems.

ii) Driving while high is a DUI. Marijuana use increases your risk of motor vehicle crashes.

iii) Not for Kids! Starting marijuana use young or using frequently can lead to problem use, and according to the CDC may harm the developing teen brain.

iv) Marijuana use may be associated with greater risk of developing schizophrenia or other psychoses. Risk is highest for frequent users.

v) Smoking marijuana long term can make breathing problems worse.

This message is provided as public service by the City/County of XXX

Using or possessing marijuana or working in the marijuana industry is legally risky for any noncitizen. This includes lawful permanent residents, undocumented persons, students, and others. Marijuana is illegal under federal law, and federal law controls immigration. If you need to take medical marijuana, see an immigration attorney for advice.

This information is provided as a public service by the City/County of XXXXX
Warning from the [County/City]
The National Academies of Science have found that smoking marijuana during pregnancy is associated with low birth weight in babies.
Uncertainty

• Best practices for cannabis regulation are still uncertain
• But we know a lot from alcohol & tobacco
• The body of evidence of harm grows daily
• These regulatory ideas are starting to be adopted
• We should start far more cautiously
• It will be much harder to tighten up later
Mobilize, Align & Engage Partners to Avoid a New Big Tobacco

- CBOs, churches, PTAs, LHDs, need to “butt in” to the cannabis regulatory process
- Bring a needed public health focus to regulation and taxation
- Mobilize existing partners and build coalitions just as we do for tobacco
- Call out conflicts of interest in process
Control conflicts of interest

- Keep industry off advisory and regulatory bodies
- No prescribers on premises or benefitting (Berkeley, Blythe, Hayward LA City, San Diego, Mono, SF, Pasadena)
Model Ordinance
Regulating Local Cannabis Retail Sales and Marketing in California

Getting it Right from the Start:
Local Regulation of Recreational Marijuana
Local Taxation Model Including High THC and Beverage Tax
Available to help
Thank you

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Thanks also to Alisa Padon, PhD, Amanda Naprawa, JD, Ted Mermin, JD, Leslie Zellers, JD, Michael Colantuono, JD, Jim Mosher, JD, Susan Weiss PhD and many others

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Regulation of Recreational Marijuana