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**CANNABIS IN CALIFORNIA’S CITIES AND COUNTIES: THE STATE OF CANNABIS**

**SCORECARD METHODOLOGY**

**INTRODUCTION**

Legalization of cannabis has potential social benefits as well as significant harms, this **State of Cannabis Scorecard** summarizes how California cities and counties that have opted to legalize cannabis retail sales have navigated this challenge. As the transition to a legal market moves forward in California, communities have a collective responsibility to act to protect youth and keep this emerging market from boiling over in harmful ways. Recognition and prevention of risks to public health due to cannabis use and to the characteristics of the emerging market is needed. Sensible and effective regulatory measures are essential to reduce these resultant harms. Of particular concern, is the impact of legalization on youth below age 25, because research suggests that use among youth carries special risks to the developing brain.[[1]](#footnote-1) Perception of risk from cannabis consumption has been falling steadily, dropping from 58.3% to 31.1% among youth nationally between 2000 and 2016, while simultaneously youth use has significantly increased. The 2019 Monitoring the Future survey demonstrated a that cannabis use is at a 35 year high among college age youth, and found marked increases in daily use in that age range, a doubling of cannabis vaping between 2017 and 2018 in college students, and dramatic increases in tetrahydrocannabinol (THC) vaping in 8th, 10th and 12th graders. In 2015-2017 surveys, over 30 percent of 11th grade students in California stated they had ever used cannabis, a number far exceeding that for tobacco use, and one that should be concerning to all of us. In our own 2019 research with high school age youth we found 27% reported going to school high or getting high at school. Those who start young and use frequently are at highest risk for addiction and ill effects, therefore minimizing use by this group should be a key policy objective for communities. Pregnant women, and individuals with existing substance abuse and mental health issues also have specific risks of great concern.

While legal purchase should be reasonably accessible in communities that have opted to legalize, cannabis should still be managed from a public health perspective as an addictive substance[[2]](#footnote-2) rather than as an ordinary commodity on the marketplace. Further, while retail outlets should be available to serve all types of communities, precautions to prevent undue concentration and oversaturation should be in place to prevent community level effects as has been shown to happen for other addictive and commercially available substances, such as alcohol and tobacco. High concentrations of alcohol and tobacco retail facilities exacerbate health and social disparities and greater exposure is linked with greater rates of youth use.[[3]](#footnote-3) [[4]](#footnote-4) [[5]](#footnote-5) These findings are being repeated for cannabis.

There are many risks associated with cannabis exposure and use. The National Academies of Science, Engineering and Medicine note that the growing acceptance, accessibility, and use of cannabis and its derivatives have raised important public health concerns, while the lack of research on cannabis-related health effects, and the striking transformations in the products themselves have led to uncertainty about the impact of its use.[[6]](#footnote-6) We know from tobacco and alcohol that restrictions on products, especially those designed to attract youth, number of retail outlets, marketing and undue concentration are important protective factors, as are providing prominent and accurate health warning information to consumers and minimizing the social normalization of use. These approaches should be part of any cannabis regulatory scheme. Furthermore, any regulatory scheme should include equity provisions aimed at keeping the financial benefits of legalization in communities hardest hit by the war on drugs and ensure that cannabis tax dollars go to improving communities, via prevention, equity programs, and youth programs, rather than additional law enforcement expenditures.

Under California’s state law and regulations implementing cannabis legalization, the state has opted to set minimum criteria for public health and safety in cannabis legalization. Local cities and counties are authorized, under state law, to enact stricter rules on retail practices and to impose local cannabis taxes. This State of Cannabis Scorecard provides a look at how the state of California and the 263 cities and counties that have opted to legalize cannabis some form of retail sales have approached this new landscape. A higher score reflects that the jurisdiction has gone beyond state law by enacting stronger public health and youth protective requirements on cannabis businesses. Most of the provisions suggested have been adopted by one or more California jurisdiction.

**RESEARCH AND SCORECARD DEVELOPMENT**

**Getting it Right from the Start: Regulation of Recreational Marijuana** is a project of the Public Health Institute, an independent non-profit organization which has worked throughout the State of California for over 50 years to promote health, strengthen public health and health systems and advance greater equity. The Project has worked with experts from across the nation and within the state to identify potential best regulatory practices and develop stronger local regulatory and taxation frameworks to protect youth, public health and social equity. As part of this effort, the project created model local ordinances for retail and marketing as well as taxation for California jurisdictions.[[7]](#footnote-7)

These model ordinances were produced after review of the literature and over 50 in-depth interviews with dozens of stakeholders from local jurisdictions, community members, academic and research experts, regulators from other states, legal experts, community coalitions, dispensary owners, laboratory experts, manufacturers, clinicians working with addiction, and others. The models use best available evidence from the fields of alcohol and tobacco control, the experience of states which legalized earlier than California, the massive scientific review recently completed by the National Academy of Sciences to identify key evidence-based risks of cannabis consumption, and the advice received on best practices or needed best practices from experts interviewed. Drafts of our model laws were reviewed by attorneys with public health and tobacco control experience, a constitutional law expert, and an alcohol control expert. We shared the drafts at a convening of individuals from different backgrounds and expertise and representatives from a number of jurisdictions, and revised our drafts to incorporate their input. Our model tax laws were developed by the project with the advice of attorney Michael Colantuono, an experienced appellate attorney and leading expert on the law of local government revenues. In December 2017, the model retail ordinance was disseminated statewide to city managers, administrative officers, and public health officials in all of California’s jurisdictions, and the tax ordinances were disseminated in January 2018.

This Scorecard builds on the extensive interviews and research that went into developing the model ordinances. Serious risks (early youth use, addiction, mental health effects) can be reduced by restricting certain products that are highly attractive to youth, restricting excessively potent products, reducing overconcentration of retail outlets, limiting marketing and advertising attractive to youth, and limiting the social normalization of cannabis use. Following the theme of limiting youth exposure and access, cannabis commerce should be taxed and tax dollars that are earned through cannabis legalization are best directed towards youth and prevention programs as well as programs that promote social justice and equity.

Based on our own research as well as the rich literature available on tobacco and alcohol, we identified **six primary categories** of public health concern in any cannabis legalization scheme. These are: 1) Retailer Requirements, 2) Taxes & Prices 3) Product Limitations, 4) Marketing, 5) Smoke-Free Air, and 6) Conflicts of Interest & Equity. Within each primary category are criteria that can be used to analyze how well a jurisdiction has embraced public health principles in their cannabis ordinances. We assigned higher points to those criteria that have the greatest known impact on limiting youth use and exposure based on strong evidence from tobacco and alcohol literature.

In order to determine how a jurisdiction performed on our scorecard, we studied local laws and regulations in cities and counties in California and the State to understand the extent to which tobacco and alcohol control best practices had been incorporated into cannabis policy. Local laws were verified using the *CannaRegs* commercial database, complemented by verification on jurisdictions’ websites and databases of municipal law when needed. When status remained unclear, city or county clerks or managers were contacted directly. Laws passed through January 31, 2019 were included. State law and regulation was verified through the state cannabis portal. Random samples of cities (5%) and counties (10%) were iteratively coded by two independent coders and tested for inter-rater reliability, which reached 97% agreement. The remainder of jurisdictions were then coded by a single public health lawyer.

As local jurisdictions must comply with State requirements, the State’s score comprised the baseline score for all local jurisdictions, upon which those jurisdictions could build by implementing additional public health and social equity measures, or from which jurisdictions could subtract if they chose to enact policies that weakened the State’s requirements where allowed.

As of January 31, 2019, 51% of California’s cities and counties had not legalized any form of retail cannabis sale (medical or adult-use; storefront or delivery). As such, they will not receive progress reports. 116 opted only to allow delivery models. This first round of scorecards addresses only those which legalized storefront commerce. **Because, as yet, it is unclear whether legalization will bring net benefit or harm, we do not wish to judge these jurisdictions where legalization of commerce did not occur, but rather to answer the question – if you legalized, did you take steps to protect public health and social equity within that process?**

**SCORECARD**

**CATEGORY ONE: RETAILER REQUIREMENTS**

Based on the peer-reviewed evidence, placing strategic limits on cannabis retailers can have a positive impact on youth use and exposure to cannabis. A review of 33 California communities with strong tobacco retailer licensing ordinances showed that the youth sales rate declined in 31 of these communities after the ordinances were enacted, with an average decrease of 26 percent in the youth sales rate.[[8]](#footnote-8) Furthermore, the density of tobacco retailers, particularly in neighborhoods surrounding schools, has been associated with increased youth smoking rates,[[9]](#footnote-9) and a California study found that the density of tobacco retailers near schools was positively associated with the prevalence of students reporting experimental smoking.[[10]](#footnote-10) Cannabis policy research is providing similar results.

There are six subcategories under Retailer Requirements: 1) Caps on retail dispensaries, 2) Required distance from schools greater than state law, 3) Additional location restrictions (parks, libraries, universities, residential area), 4) Required distances between retail dispensaries, 5) Required posted health warnings in dispensaries, 6) Required health warnings handed out to consumers. Each subcategory is worth different points with more points awarded to those subcategories with the greatest impact on youth and public health protection.

**Caps on Retailers (Max 10 points)**

**Description:** Limiting the number of licensed retailers to a specified number of inhabitants. We recommend that retailers should not exceed 1:15,000 inhabitants.

**State Law:** Does not provide any limit to the number of retailers. Score: 0.

**Rationale & Points:** A recent study found that higher dispensary density in states with legal cannabis laws was associated with higher likelihood of youth ages 14-18 experimenting with cannabis vaping and edibles.[[11]](#footnote-11) Even density of legal cannabis dispensaries as low as 1/100,000 residents were associated with increases.[[12]](#footnote-12) In a Health Impact Assessment by Los Angeles County, each additional dispensary per square mile in a zip code was cross-sectionally associated with a 7.1% increase in the number of cannabis-related emergency department visits.[[13]](#footnote-13) Similarly, a review of studies of tobacco retailer density and adolescent smoking found that tobacco retailer density and proximity were correlated with adolescent lifetime smoking, past 12-month smoking, past 30-day smoking, and susceptibility to smoking.[[14]](#footnote-14) Studies have consistently found a relationship between greater alcohol outlet density with increased alcohol consumption and related harms, including medical harms, injury, crime, and violence.[[15]](#footnote-15) Our research found that for California jurisdictions which capped the number of dispensaries, the average was at 1:19,000 inhabitants. [[16]](#footnote-16)

While there is significant data from alcohol and tobacco that higher outlet density results in worse outcomes for vulnerable populations, a balance between providing legal access and protection of youth should be sought where commerce is allowed. Based on other state experiences and the Health Impact Assessment of LA County Public Health, we recommend dispensaries not exceed 1:15,000 residents. However, we also recognize that rural areas and smaller cities may have unique needs and or small populations that impact their ability to limit their ratios to 1:15,000. Rural areas, for example, may have populations that are more spaced out making it more reasonable to have two retailers even though that exceeds our 1:15,000 cut off. As such, we created the following scoring method. Scoring is non-linear to give fewer points for greater density, and more points for smaller incremental changes that decrease density.

For a population > 20,000

1:5,000 to 1:7, 499 inhabitants = 1 point

1:7,500 to 1:9,999 inhabitants = 2 points

1.10,000 to 1:12,4999 inhabitants = 3 points

1:12,500 to 1:14,999 inhabitants= 4 point

1:15,000 to 1:15,999 inhabitants = 5 points

1:16,000 to 1:16,999 inhabitants = 6 points

1:17,000 to 1:17,999 inhabitants = 7 points

1:18,000 to 1:18,999 inhabitants = 8 points

1:19,000 to 1:19,000 inhabitants = 9 points

1:20,000 or greater inhabitants = 10 points

For a population 10,000 to 20,000

1:5,000 to 1:7,499 inhabitants = 1 point

1:7,500 to 1:9,999 = 2 points

1 dispensary = 10 points

For a population <10,000

3 or more dispensaries = 0 points

2 dispensaries = 1 point

1 dispensary = 10 points

**Distance from Schools (Max 5 points)**

**Description**: Mandating a distance greater than 600 feet between K-12 schools and retailers.

**State Law:** Retail dispensaries are not licensed to operate within 600 feet of K-12 schools, daycares, or youth centers, unless the local government issuing the license agrees to a smaller distance requirement.[[17]](#footnote-17) Score: 5.

**Rationale & Points:** Based on the literature on tobacco and alcohol, the close proximity of cannabis stores to schools may increase the risks of cannabis use among adolescents who are at a particularly high risk of developing cannabis use disorders and other negative health consequences.[[18]](#footnote-18) We recommend a minimum distance of 1,000 feet. Jurisdictions that enact school distance requirements in excess of 600 feet are awarded 5 points. However, localities that go below the 600 foot requirement set forth in the state regulations will receive negative five points.

**Additional Location Restrictions (3 points)**

**Description**: Mandating additional restrictions on retailer locations such as parks, playgrounds universities, colleges or residential zones.

**State Law:** Retailers are only prohibited from locating with 600 feet of daycares, K-12 schools, and youth centers (defined as a facility primarily used to host recreational or social activities for minors such as clubs, video arcades or “similar amusement park facilities”).[[19]](#footnote-19) Score: 0

**Rationale & Points:** Many cities and counties have other locations, such as teen centers, which may not be readily identifiable, in which youth congregate and which should be free of cannabis retailers. We have strongly encouraged the inclusion of community colleges, colleges and universities as sensitive use sites that should be free from cannabis retailers, given roughly half or more of the college population are likely to be under age 21, the rapid increases in use by college age youth in recent years and the evidence of greater susceptibility to negative impact through the mid 20s.[[20]](#footnote-20),[[21]](#footnote-21) Some jurisdictions have also included libraries, public parks and playgrounds, and substance abuse centers in the list of sensitive areas that should not have cannabis retailers. If a community chooses to increase the number of sensitive use sites where retailers cannot locate over that required by state law, they are awarded 3 points. However, if a community also then removes or lessens the requirements placed by state law, they lose one point for each change (example: a community adopts restrictions on locating retailers near substance abuse treatment centers but removes the location requirement for youth centers. They would get 3 points minus 1 point for a total of 2 points).

**Retail Buffers (2 points)**

**Description:** Mandating a required distance between retail stores. We recommend 1,000 feet.

**State Law:** None. Score: 0.

**Rationale & Points:** As with caps on retail stores, we are concerned with overconcentration and oversaturation of cannabis retailers particularly in health-disadvantaged neighborhoods. We know from tobacco literature that tobacco retailers tend to cluster in neighborhoods with a higher percentage of low-income residents or residents of color.[[22]](#footnote-22) To avoid repeating this pattern of clustering in disadvantaged neighborhoods, we recommend a required distance of 1,000 feet between retailers. However, because state law does not require *any* distance between retailers, we award 2 points if a jurisdiction places any minimum distance between retailers.

 **Health Warnings Posted in Stores OR Handed Out to Consumers (4 points for each)**

**Description:** Mandating that retail stores either post health warnings visible to consumers or hand out health warning information sheets at point of sale. Health warnings that local jurisdictions are encouraged to require include information about the health risks of use: during pregnancy and breastfeeding, before driving a motor vehicle, to youth and adolescent brain development, exacerbating or initiating new mental illness, and on respiratory health.

**State Law:** No health warnings are required to be posted in retail stores or handed out to consumers. Warnings are required on packaging, however these are required only in 6 point font, which is extremely unlikely to be seen. A December 2019 Proposition 65 decision will require warnings on dangers of use during pregnancy in the future. Score: 0.

**Rationale & Points:** Public perception of the risks of cannabis consumption has fallen dramatically from 58.3% to 31.1% of youth nationally between 2000 and 2016, even as the composition of cannabis products has grown more dangerous.[[23]](#footnote-23) Consumption during pregnancy, for example, has increased,[[24]](#footnote-24) and in one recent study in Colorado with a simulated pregnant woman calling dispensaries nearly two-thirds of dispensary budtenders recommended cannabis to treat morning sickness.[[25]](#footnote-25) It is therefore extremely important that retailers be obligated to provide accurate information to the public of the health risks they may face. A simple and low cost way to do this is through prominent point-of sale information to consumers. The tobacco and alcohol industry have long invested heavily in point of sale advertising, and that effectiveness is the same reason we must use it to inform consumers. In this way we can provide a basic public health message to every consumer who enters a retail outlet with little or no ongoing cost. An alternative and one needed for delivery, is to hand the same warnings to all consumers. A local jurisdiction that includes one or more of these types of health warnings (beyond the minimum required by state law) will be awarded 4 points for required posting, and 4 points for required handing out of information to consumers.

**CATEGORY TWO: TAXES AND PRICES**

Research demonstrates that youth are particularly price sensitive and responsive to changes in price and low prices are known to facilitate use of tobacco by underage minors. When cigarettes cost more, fewer adolescents start smoking[[26]](#footnote-26) and similar findings are expected for cannabis. In a recent report by the California Legislative Analyst’s Office, the LAO noted that higher taxes on cannabis products are likely to reduce youth use, even without completely eradicating the illicit market.[[27]](#footnote-27) Local taxes on cannabis businesses and products can be used to both make cannabis products less price attractive to youth while also raising valuable revenue for local communities. Programs funded by cannabis taxes can help to prevent excessive use of cannabis, opiate addiction and other substance abuse, prevent the leading causes of illness, injury and premature death, promote wellness and more equitable health conditions and reduced incarceration rates in our community.

The category of taxes and prices is subdivided into five sub-categories: 1) Local Cannabis Tax, 2) Dedicated Tax Revenue, 3) Tax on High-Potency Products, 4) Ban on Discounting, and 5) Mandated Minimum Price.

**Local Cannabis Tax (6 points)**

**Description**: Local jurisdictions have the authority to impose cannabis business taxes at all levels of business including retail, manufacturing, cultivation, testing, distribution and delivery.

**State Law:** State law imposes a 15% cannabis excise tax on purchasers of cannabis products[[28]](#footnote-28) as well as a tax on harvested cannabis flower and leaves.[[29]](#footnote-29) State law also allows a local jurisdiction to “impose a tax on the privilege of cultivating, manufacturing, producing, processing, preparing, storing, providing, donating, selling, or distributing cannabis or cannabis products by a licensee.”[[30]](#footnote-30) Score: 6.

**Rationale & Points:** By imposing a local tax on cannabis businesses, a local jurisdiction can better control pricing of products as well as ensure that tax revenue is kept and spent locally. Local taxes may also play a role in decreasing youth use by making price-conscious youth less likely to purchase and use cannabis products. A jurisdiction that imposes a cannabis tax on any type of cannabis business or product is awarded six points.

**Dedicated Tax Revenue (6 points)**

**Description:** Cannabis-related tax revenue should be reinvested in communities at greatest risk of substance abuse and poor health outcomes. The benefits of any tax revenue should also be kept and utilized within those communities that were most negatively impacted by the war on drugs and cannabis-related incarcerations. For example, revenues can be dedicated to substance abuse prevention or youth development. We recommend that local tax revenue not be used to further expand law enforcement budgets as has occurred widely.[[31]](#footnote-31)

**State Law:** State law mandates that state cannabis tax revenue go first to pay for reasonable costs associated with implementing the cannabis program. After costs, portions of remaining funds are allotted for university-based public health related research ($10,000,000), highway safety research related to cannabis impairment ($3,000,000), community reinvestments grant program ($10,000,000 progressing to $50,000,000 in 2022-2023), and medical cannabis research ($2,000,000). Of any remaining funds, sixty percent of those remaining funds go to a Youth education, prevention, early intervention and treatment fund.[[32]](#footnote-32) Score: 6.

**Rationale & Points:** Cannabis businesses may bring economic benefits to a community but not without attendant harms and risks. Cannabis tax revenue should seek to improve health, reduce social inequity, save health-care and other costs from substance abuse and other preventable illness, injury and premature death, and mitigate other social harms from substance abuse and incarceration. A jurisdiction that enacts a tax ordinance with revenue dedicated to prevention, health, social equity, or other programs that mitigate the negative effects of cannabis is awarded six points.

**Higher Potency Products Tax (4 points)**

**Description:** We discourage the sale of any high potency (high THC) products but if their sale is allowed, then we recommend adopting higher tax rates for high potency products to discourage their cultivation, manufacturing and consumption.

**State Law:** None, although the Legislative Analyst’s Office recommended a potency based tax in December 2019[[33]](#footnote-33) this has not been implemented. Score: 0.

**Rationale & Points:** In the 1960s and 70s, cannabis flower had about 3- 4% THC, but potency has greatly increased and today flower is between about 16 and 28% in stores. Higher potency flower is associated with more negative health effects.[[34]](#footnote-34) Cannabis concentrates such as vaping products are far more potent, often 60-90% THC, and some very high potency products, such as shatter for “dabbing” (vaporizing highly concentrated cannabis by placing it on a heated “nail” and inhaling intensely) can be over 90% THC. High potency products increase risks for psychosis, dependence, tolerance, and withdrawal[[35]](#footnote-35) and other adverse physiological and psychological effects -- paranoia, anxiety, and hallucinations have all been observed in those administered high doses of THC. Risk of psychosis increases five fold with daily use of cannabis above 10% THC.[[36]](#footnote-36) Recently, the LAO released its report on the state of California’s state cannabis tax scheme. In its report, the LAO notes that “a tax should impose higher costs on more harmful purchases and lower costs on less harmful purchases.”[[37]](#footnote-37) Because a potency tax is an effective way to discourage harmful use,[[38]](#footnote-38) a jurisdiction that taxes high potency products is awarded four points.

**Ban on Discounting (2 points)**

**Description:** Prohibiting discounting on cannabis products such as coupons or discount days.

**State Law:** Cannabis businesses may not advertise free products or giveaways of any type including Buy One, Get One Free, free products with donations, contests, sweepstakes or raffles.[[39]](#footnote-39) Cannabis retailers may not offer free cannabis goods, except for in limited circumstances involving medical cannabis[[40]](#footnote-40) However a variety of other forms of price discounts are allowed. Score: 2.

**Rationale & Points:** Prohibiting discounting at the cannabis retail level is an important way to prohibit measures that encourage consumers to purchase more products than they might otherwise choose, such as 50% off, time-limited coupons, or discount days. Tobacco research has shown that cigarette companies are strategic with their discounts, often targeting young adults, heavy smokers, and women. Additionally, smokers who use price discounts are less likely to attempt to quit smoking or to successfully quit at some point in the future.[[41]](#footnote-41) Thus, jurisdictions that include bans on discounting beyond that required by state law are awarded two points.

**Minimum Price (1 point)**

**Description:** Mandating minimum prices on cannabis products to discourage consumption.

**State Law:** None. Score: 0.

**Rationale & Points:** Minimum price measures have been used to discourage tobacco consumption by assuring higher prices. From tobacco, we know that when cigarettes cost more, fewer adolescents start smoking. For every 10 percent increase in the real price of cigarettes, the number of kids who consume is reduced by six or seven percent and overall cigarette consumption is reduced by approximately 3 to 5 percent.[[42]](#footnote-42) Similar price and correlated use relationship is expected in cannabis as well. Minimum price laws can maintain price floors even when a tax has not been passed by the voters. They can also prevent a large retailer undercutting a smaller competitor. Jurisdictions that set a minimum price on cannabis products, even if only an authorization to do so in the future, are awarded 1 point.

**CATEGORY THREE: PRODUCT LIMITS**

There is a significant and rapidly expanding group of products that are not traditional cannabis, and which represent the recent effort by the industry to diversify its supply and expand its market in ways which will inevitably attract youth as well as adults, increase risk of dependency, and/or increase risk of adverse effects. Legalization of cannabis does not require legalization of every conceivable formulation of cannabis. It is well-known that products with characterizing flavors (such as strawberry-banana or grape) are used to attract and addict youth and should be restricted. There are four subcategories under Product Limits: 1) Restrictions on high potency products; 2) Ban on flavored non-edibles; 3) Ban on cannabis-infused beverages, 4) Ban on other products attractive to youth (greater than state law requires).

**Restriction on High Potency Products (7 points)**

**Description:** Prohibiting the sale of cannabis flower and products that are considered high potency in terms of concentration of THC, by establishing ceiling limits.

**State Law:** None. The state allows the sale of products of any potency. Score: 0.

**Rationale & Points:** In the landmark decision in *US v Philip Morris*, 449 F.Supp.2d 1 (D.D.C. 2006),[[43]](#footnote-43) Judge Kessler held tobacco companies liable for violating the Racketeer Influenced and Corrupt Organizations Act (RICO) finding that *”tobacco company profits, depend on creating and sustaining that addiction…..[and that] Defendants have designed their cigarettes to precisely control nicotine delivery levels and provide doses of nicotine sufficient to create and sustain addiction.”* Sadly, but not surprisingly, the cannabis industry is following suit. Over the past quarter century, the concentration of THC, the main psychoactive component of cannabis, has been systematically increased from approximately 3% to levels as high as 28% or more in flower. In addition, the market has now been flooded with a large number of ultra-high potency concentrates of 50-90+% THC whose safety is of deep concern. Some varieties of high potency cannabis concentrate include “oil,” “wax,” and “dabs” typically created by butane or other extraction or distillation.[[44]](#footnote-44) Published case reports have shown that high potency products are associated, for example, with “significant psychosis, neurotoxicity, and cardiotoxicity associated with dabs.”[[45]](#footnote-45) Concentrates are also known to cause psychotic reactions in some and severe unpleasant highs in others.[[46]](#footnote-46) Consumption of higher potency products also corresponds over time to major upsurges in care seeking behavior for cannabis dependency, now the leading substance of abuse for seeking care in Europe.[[47]](#footnote-47) Because the dangers of high potency products are becoming more clear, jurisdictions that place limits on potency in flower and in cannabis products are awarded seven points. Quebec, for example, limited products to 30% THC.

**Ban on Flavors (Non-Edibles) (6 points)**

**Description:** Prohibiting the retail sale of flavored inhalable (non-edible) products.

**State Law:** None. Score: 0.

**Rationale & Points:** Flavored products are a key tool for attracting young smokers to tobacco,[[48]](#footnote-48),[[49]](#footnote-49),[[50]](#footnote-50) and e-cigarettes.[[51]](#footnote-51),[[52]](#footnote-52) Most adolescent tobacco and e-cigarette users currently use and initiated with flavored products.[[53]](#footnote-53) Disguising unpleasant tastes with flavors to attract young users is a tobacco industry strategy that could easily repeat for manufactured cannabis products absent strong regulations. The FDA’s 2009 ban on cigarettes with characterizing flavors (authorized by the Family Smoking Prevention and Tobacco Control Act) was followed by a decrease in adolescent tobacco use and substantial reductions in the probability of being a cigarette smoker and in cigarettes smoked among adolescents.[[54]](#footnote-54) Because the final 2009 ban controversially failed to include menthol cigarettes or flavored non-cigarette tobacco, increased use of cigars, pipes, and menthol cigarettes limited the impact on adolescent tobacco use. In December 2019, in the midst of the national vaping epidemic the FDA issued new guidance prioritizing enforcement against flavored nicotine vaping products with the exception of menthol, but it did not act on THC products, which are all illegal under federal law. Several states also acted to prohibit flavored cannabis products for inhalation, including Montana and Washington. The existing medical cannabis market has adopted this key strategy of the tobacco industry to attract youth. While flavored flower is not widely present, a wide range of other flavored products including flavored pre-rolls, flavored beverages such as cannabis-infused orange soda, and vaping products are sold.. A separate problem, not addressed here, is the widespread use of strain or product names that mislead the consumer into thinking the product is flavored (e.g. Girl Scout Cookie, Grape Ape, Pax Mango), when it is not**.** Local jurisdictions that prohibit the retail sale of flavored non-edible products are awarded six points.

**Ban on cannabis-infused beverages (4pts)**

**Description:** Prohibition on the retail sale of cannabis-infused beverages, whether pre-made or available to mix.

**State Law:** None. Score: 0.

**Rationale & Points:** By mimicking common beverages like iced tea and soda, cannabis-infused beverages will both attract youth and normalize cannabis consumption. Sugar-sweetened beverage consumption has been clearly linked in a massive body of research to obesity, diabetes, heart disease and other health problems, and even artificially sweetened beverage consumption has growing evidence of associated harm.[[55]](#footnote-55) “Alcopops,” the model for many of these infused beverages, are mostly heavily used by adolescents, have been marketed in a way known to initiate youth drinking, and are associated with adolescent binge drinking.[[56]](#footnote-56) [[57]](#footnote-57) [[58]](#footnote-58)Cannabis-infused beverages are an example of unfettered product expansion that is unnecessary and likely to attract youth. Jurisdictions that prohibit cannabis-infused beverages (either pre-made or available for mixing in a liquid) are awarded four points.

**Ban on other products attractive to youth (2pts)**

**Description:** Prohibiting any products that are considered attractive to youth, such as products that resemble common foods, or bear images of toys or candy.

**State Law:** Prohibits cannabis products that the California Department of Public Health “determines, on a case-by-case basis, is easily confused with commercially available foods that do not contain cannabis” (§40300(l)); and prohibits “any cannabis product in the shape of, or imprinted with the shape of a human being, either realistic or caricature, animal, insect, or fruit.” (§ 40300(m)). Score: 2.

**Rationale & Points:** State regulations prohibit cannabis products that are determined, on a case-by-case basis, to be “easily confused” with commercially available foods that do not contain cannabis. The terms “easily confused” and “commercially available” are not specificied and as a result the vague wording is open to wide interpretation. While it is likely that something like a cannabis-infused Oreo cookie would be prohibited, it is less clear whether the state meant to prohibit other commercially available items like granola bars, cookies, chocolate candies or brownies. Local jurisdictions have the authority to place greater restrictions and even prohibit products that are attractive to youth. For instance, an ordinance could prohibit products that look like or bear images of toys, robots, candy or other baked goods that are typically marketed to or particularly attractive to youth. Including this provision in local law strengthens the local ability to enforce when such products are identified. A jurisdiction that bans products that are attractive to youth beyond state law requirements is awarded two points.

**CATEGORY FOUR: MARKETING**

It is well known from the extensive literature on tobacco and alcohol that youth exposure to industry marketing is associated with substance use initiation, frequency and quantity of use, more positive attitudes and perceptions of use and the normalizing of consumption.[[59]](#footnote-59),[[60]](#footnote-60),[[61]](#footnote-61),[[62]](#footnote-62)

There are five subcategories under marketing: 1) Prohibition on billboards, 2) Required health warnings on advertisements, 3) Prohibitions on therapeutic or health claims, 4) Other Advertising Restrictions, and 5) Restrictions on Marketing to Youth.

**Restrictions on billboards (6 points)**

**Description**: Restricting or prohibiting the use of billboards to advertise cannabis products, use of products or cannabis businesses.

**State Law**: By its own language, California law prohibits the placement of billboards advertising cannabis on an interstate highway.[[63]](#footnote-63) Despite the clear language of the statute, however, the implementing regulations state that this prohibition only applies to billboard advertisements on state highways that cross the California border or on Interstate highways within a 15 mile radius of the California border.[[64]](#footnote-64) This has resulted in widespread billboard advertising on highways across the state, easily seen by children and youth. Additionally, state law prohibits advertisers from advertising or marketing “cannabis or cannabis products on an advertising sign within 1,000 feet of a day care center, school providing instruction in kindergarten or any grades 1 to 12, inclusive, playground, or youth center.”[[65]](#footnote-65) Because the state does impose some restrictions on billboards we awarded the state half the available points. Score: 3.

**Rationale & Points:** It has been welldocumented that youth exposure to advertising increases youth interest in, use, and positive perceptions of product use.[[66]](#footnote-66),[[67]](#footnote-67) Whereas broadcast, print and digital advertising can utilizing audience composition data to limit advertising placement in media where underage youth are likely to be exposed, there is no relevant corollary for outdoor advertising, and thus no means of allowing outdoor advertising without risking youth exposure. If a local jurisdiction places restrictions in excess of state law, they are awarded 3 points. If the jurisdiction prohibits the use of billboards for advertising cannabis products, use or businesses, they are awarded 6 points.

**Required health warnings on ads (4 points)**

**Description:** Requiring specified health warnings on all cannabis product advertisements.

**State Law:** None. Score: 0.

**Rationale & Points:** Public perception of the risks of cannabis consumption has fallen dramatically from 58.3% to 31.1% of youth nationally between 2000 and 2016.[[68]](#footnote-68) Reported exposure to cannabis advertising is common,[[69]](#footnote-69) and including a health warning on advertisements may inform potential consumers and youth about risks. If a local jurisdiction requires a health warning on advertisements they are awarded 4 points. This is modeled after the Surgeon General’s warning on tobacco advertisements.[[70]](#footnote-70)

**Prohibition on therapeutic or health claims (3 points)**

**Description:** Prohibiting the use of therapeutic or health claims on any adult-use cannabis product, packaging or advertisement.

**State Law:** Provides that “a licensee shall not include on the label of any cannabis or cannabis product or publish or disseminate advertising or marketing containing any health-related statement that is untrue in any particular manner or tends to create a misleading impression as to the effects on health of cannabis consumption.”[[71]](#footnote-71) Score: 3.

**Rationale & Points:** One unique aspect to cannabis that is currently absent from tobacco and alcohol marketing is the potential medicinal use of cannabis products, although it was widely employed in the past. Cannabis has a very limited proven therapeutic uses, although more are likely to emerge. Medicinal cannabis uses should be guided by the medical knowledge of the prescribing physician or health professional based on science. While adult-use cannabis should not be marketed as therapeutic, our research in California dispensaries has identified widespread deceptive marketing of cannabis for both medicinal and adult-use as wellness products intended to cure a vast variety of problems from severe mental health issues to cancer. These types of claims are not based on peer-reviewed evidence and should not be allowed. The state, and evn more so, local government, .lacks the scientific structures such as those at the FDA, to evaluate whether any health claims are evidence-based or deceptive. Just as such statements are not present on alcohol products or cigarettes, they should not be permitted on cannabis products. While the state cannabis advisory commission has agreed that health and therapeutic claims should not be allowed in adult-use cannabis marketing,[[72]](#footnote-72) this recommendation has not yet been adopted by the state. If a local jurisdiction enacts restrictions or bans on therapeutic or health claims beyond state law, they are awarded three points.

**Other advertising restriction (ex: business signage) (3 points)**

**Description:** Restrictions on business advertising such as, but not limited to, prohibitions on street-side arrows or persons holding signs or large wall advertisements.

**State Law:** Bureau of Cannabis Control regulations states that “any advertising or marketing… that is placed in broadcast, cable, radio, print, and digital communications: (4) Shall not advertise free cannabis goods or giveaways of any type of products, including non- cannabis products.”[[73]](#footnote-73) There are no state limitations on business signage, though the state law prohibits delivery vehicles from having indications or markings on the vehicle indicating that it is transporting cannabis for delivery. Score: 0.

**Rationale & Points:** It has been welldocumented that youth exposure to advertising increases youth interest in, use, and positive perceptions of product use.[[74]](#footnote-74),[[75]](#footnote-75) Recent research has shown that exposure to cannabis advertising is associated with youth cannabis use.[[76]](#footnote-76) Limiting youth exposure to cannabis business advertisements can minimize the normalization of the product and use and prevent businesses from marketing and encouraging the use of new and unique product types. A jurisdiction that limits other cannabis advertising is awarded three points.

**Restrictions on marketing to youth (2 points)**

**Description:** Detailed restrictions on advertising attractive to youth.

**State Law:** California state law states “No licensee shall: (e) Advertise or market marijuana or marijuana products in a manner intended to encourage persons under the age of 21 years to consume marijuana or marijuana products; (f) Publish or disseminate advertising or marketing containing symbols, language, music, gestures, cartoon characters or other content elements known to appeal primarily to persons below the legal age of consumption; or (g) Advertise or market marijuana or marijuana products on an advertising sign within 1,000 feet of a day care center, school providing instruction in kindergarten or any grades 1 through 12, playground, or youth center.”[[77]](#footnote-77) Additionally, Bureau of Cannabis Control regulations states that “any advertising or marketing… that is placed in broadcast, cable, radio, print, and digital communications: (1) Shall only be displayed after a licensee has obtained reliable up-to-date audience composition data demonstrating that at least 71.6 percent of the audience viewing the advertising or marketing is reasonably expected to be 21 years of age or older; (2) Shall not use any depictions or images of minors or anyone under 21 years of age; (3) Shall not contain the use of objects, such as toys, inflatables, movie characters, cartoon characters, or include any other display, depiction, or image designed in any manner likely to be appealing to minors or anyone under 21 years of age.[[78]](#footnote-78) Finally, state regulations prohibit any labeling that imitates candy packaging or labeling, and the terms “candy” or “candies” or alternatives like “kandy” and “Kandeez.”(§40410). Score: 2.

**Rationale & Points:** A systematic review of the literature on youth perceptions of advertising for alcohol, tobacco and food, found specific content features to which minors are particularly susceptible due to their unique developmental stage, propensity for high-risk behaviors, and relative inexperience with consumption of alcohol and tobacco.[[79]](#footnote-79),[[80]](#footnote-80),[[81]](#footnote-81),[[82]](#footnote-82),[[83]](#footnote-83)A subsequent analysis found a positive association between the use of such features in alcohol brand advertisements and youth consumption of those brands, and no association with adult alcohol consumption of those brands, suggesting they have particular appeal for youth.[[84]](#footnote-84) Similar advertising tactics by the cannabis industry are expected to have similar results of attracting youth users. The State Cannabis Advisory Committee recommended modifying the audience threshold from 71.6% adult to 85% adult viewers, as recommended by the Institute of Medicine for alcohol,[[85]](#footnote-85) but this has not been adopted by the state Legislature. A jurisdiction that actively restricts marketing aimed at youth beyond state law is awarded two points.

**CATEGORY FIVE: SMOKE-FREE AIR**

Smoke-free air laws protect people from the health effects of exposure to secondhand smoke. Secondhand smoke can contain nearly seventy cancer causing chemicals[[86]](#footnote-86) and there is no safe level of secondhand smoke. Exposure to secondhand smoke causes significant health risks (including cardiovascular disease, lung cancer and SIDS) and is especially dangerous to children, the elderly, the chronically ill, and pregnant women. According to the CDC, 2.5 million adults have died from breathing second hand smoke since 1964.[[87]](#footnote-87) Comprehensive smokefree air policies, such as prohibitions on smoking in restaurants and bars, workplaces, schools, and other public places, has been shown to improve air quality and reduce secondhand smoke exposure.[[88]](#footnote-88) Unfortunately, certain cannabis policies may work to seriously undermine the progress gained on smokefree air in California: 1) temporary cannabis events, and 2) on-site cannabis consumption.

**Ban on Temporary Events (5 points)**

**Description:** Prohibiting temporary cannabis events such as at county fairs, agricultural events, concerts in parks, or other similar venues.

**State Law:** Allows temporary cannabis events with a state license and license from the jurisdiction in which the event is scheduled to take place.[[89]](#footnote-89) Any cannabis consumption at events requires a separate license. Score: 0.

**Rationale & Points:** Temporary cannabis events, such as at a local fair or festival, serve not only to normalize cannabis use but may also work to undermine smoke-free air laws, such as those banning smoking in parks and public places. In the past, “tobacco events” served as excellent avenues for the industry to “reinforce brand visibility, allow the industry to reach specific target groups, and generate names for future marketing efforts.”[[90]](#footnote-90) Tobacco promotions at sporting and social events encourage non-smokers to try smoking, occasional users to become regular users, and discourage current smokers form quitting. By opening fairs, parks or concerts to the presence of cannabis events, children and adolescents are inevitably exposed, even when certain areas are age-limited. Through temporary cannabis events, the cannabis industry can model the same tactics and practices of the tobacco industry – targeting new users to try the products and encouraging current users to continue regular use. A jurisdiction that prohibits temporary events is awarded five points.

**Ban on On-Site Consumption (3 points)**

**Description:** Prohibition on on-site consumption, whether by inhalation, vaporization or consumption of edibles.

**State Law:** A local jurisdiction may allow for smoking, vaporizing and ingesting of cannabis or cannabis products on the premises of a retailer so long as the area is restricted to persons over age 21, consumption is not visible from public spaces and the sale or consumption of alcohol and tobacco is not permitted on premises.[[91]](#footnote-91) Score: 0.

**Rationale & Points:** For years the tobacco industry utilized social gatherings such as at bars and clubs to promote smoking among young adults. Such tobacco events normalized smoking in these places and made it part of the “experience” in these settings.[[92]](#footnote-92) It took hundreds of years to get rid of smoky bars and restaurants and the perception that this was normal and socially desirable. Smoke-Free Air laws have been extremely successful in reducing tobacco exposure and consumption[[93]](#footnote-93),[[94]](#footnote-94),[[95]](#footnote-95) and should not be undermined by allowing cannabis smoke exposure. Going back to permitting on-site smoking or vaping of cannabis products undoes that effort. It also exposes workers to harmful second-hand smoke, even if from vaping. This is because, vaping, like smoking, produces harmful second-hand smoke components. New research shows that vaping smoke exacerbates asthma similarly to regular smoke. Research from San Francisco in a lounge which allowed only vaping and dabbing found average particulate matter was 564 ug/m3. The EPA says it should not be over 35.[[96]](#footnote-96) For this reason, jurisdictions that ban on-site consumption are awarded three points.

**CATEGORY SIX: EQUITY IN BUSINESS OPPORTUNITY AND PREVENTION OF CONFLICTS OF INTEREST**

When Proposition 64 was passed, legalizing adult-use cannabis in California, supporters cited an estimated $1 billion in annual tax revenues from new cannabis businesses.[[97]](#footnote-97) Although actual tax revenue has fallen short of the $1 billion mark, the market has surpassed $ 3 billion. It is undeniable that there is significant financial benefit to be reaped by cannabis businesses in the state of California. Historically, people of color have been disproportionately negatively affected by the war on drugs, yet are seriously underrepresented in industry.[[98]](#footnote-98) A recent analysis of marijuana-related arrests in California through 2016 revealed dramatic disaprities in arrest rates of black and white people. Statewide, black people were arrested four times more often as white people for marijuana offenses, with black arrest rates nearly 30 times higher in some communities.[[99]](#footnote-99) Those neighborhoods and communities that were most negatively affected by discriminatory cannabis-related incarcerations should be benefiting from local cannabis tax revenue through reinvestment, social equity programs, and health prevention and wellness programs. In addition, order to ensure that these communities and individuals reap the benefit of cannabis legalization, the implementation of equity provisions in cannabis licensing programs is imperative. Along with equity considerations, any licensing scheme should also take into consideration the impact of conflicts of interest in ownership.

**Equity Provisions (Hiring, Cost Reduction/Deferral, Licensing) (6 points max)**

**Description**: Ensuring that revenue from cannabis legalization stays in communities most affected by incarcerations for minor drug offenses should be a priority in any legalization scheme. Past cannabis convictions, which have negatively affected so many lives in the black and Latino communities, should not be a barrier to entry in the legal market. Equity provisions that lower costs for applicants and/or prioritize those licenses can provide applicants from these communities the time to obtain investors and locate properties without being pushed aside by outside money and corporate investors. In general, local ordinances will define an equity applicant as either a person who has lived for a specified number of years in a census tract with a high proportion of cannabis-related incarcerations, and/or a person with a cannabis-related conviction and who lives below poverty level, or some similar combination. Best practices are still being developed so we recognize any jurisdiction that makes a clear effort to develop an approach to economic equity in cannabis licensing.

*“Equity in hiring*” (3 points): Refers to an ordinance provision that requires that a certain percentage of a cannabis business’ workforce be comprised of low-income, transitional workers or workers that live in communities that have been most disadvantaged by the war on drugs. Local jurisdictions that adopt equity in hiring provisions are awarded 3 points.

*“Priority in Licensing”* (2 points): Refers to an ordinance provision that gives priority to equity applicants over non-equity applicants when issuing cannabis business licenses. This may include a requirement that all licenses be given to equity applicants or that some percentage of available licenses be reserved for equity applicants. A jurisdiction that gives priority in licensing to equity applicants will be awarded two points.

“*Cost reduction/deferral”* (1 point): Refers to an ordinance provision that reduces or defers the costs of applying for, and maintaining, a cannabis business license for individuals that meet the definition of an equity applicant. A jurisdiction that includes cost deferral or reduction for equity applicants receives 1 point.

**State Law: Promoting social** equity in cannabis-related licensing, hiring, or cost deferral is not a consideration in the State’s cannabis licensing system. . However, the Bureau of Cannabis Control (BCC) has awarded several funding in support of equity programs to the small number of jurisdictions which have adopted such programs, pursuant to the California Cannabis Equity Act of 2018. Under this Act, a local jurisdiction that has created its own equity program can apply for this funding. Score: 0

**Rationale and Points:** The lengthy “war on drugs “ disproportionately and negatively impacted certain communities. Social equity cannabis programs are intended to specifically respond to and assist individuals in those communities that were most disadvantaged by cannabis prohibition.[[100]](#footnote-100) Equity applicants should be given priority in licensing in order to ensure that available licenses are not monopolized by well-resourced cannabis operators, over those who were previously jailed for the same economic activity. The financial benefits of cannabis legalization should be realized by those communities most negatively impacted by prior cannabis policy.

**CONFLICTS OF INTEREST**

***No prescriber on premise or in ownership (2 points max)***

**Description:** Prohibiting medical prescribers or practitioners, including chiropractors, from being on premises of a cannabis retail store for purposes of making cannabis recommendations, advice or otherwise encourage use of cannabis. Further prohibiting physicians or other prescribers/medical professionals from ownership interests in cannabis businesses or from financial relationships with cannabis retailers is advisable.

**State Law:** None. Score: 0.

**Rationale & Points:** We recommend prohibiting any type of arrangement where a physicians or other licensed prescriber can financially benefit from encouraging the use or purchase of cannabis. Prescribers should not be making recommendations for cannabis use while also being either employed by, in a financial relationship with, or an owner of, a cannabis business. Not only does this pose significant conflict of interest concerns, it also may lend unsubstantiated support to the concept that all cannabis has medicinal or therapeutic properties. Conflict of interest provisions are already widely in use in the practice of medicine, often to avoid financial gains at the expense of patient care,[[101]](#footnote-101) and should be extended to apply in the cannabis retail setting. Jurisdictions that prohibit prescribers from being on or in a financial relationship with retail premises are awarded one point. Jurisdictions that prohibit prescribers in ownership or from having any financial incentives (kickbacks) for prescribing or sending patients cannabis businesses of any kind are also awarded one point.

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