MDDCSAM is the Maryland state chapter of the American Society of Addiction Medicine whose members are physicians and other health providers who treat people with substance use disorders.

SB 516 Cannabis Reform Senate Finance Committee, Senate Budget & Tax Committee
March 9 2023.

LETTER OF INFORMATION

This testimony is on behalf of the Maryland-DC Society of Addiction Medicine (MDDCSAM), the Maryland Public Health Association (MdPHA), and the National Council on Alcoholism and Drug Dependence, Maryland chapter (NCADD). Some of these groups are submitting identical testimony under their own letterhead. We commend Maryland lawmakers' efforts to thoughtfully balance the considerable benefits of cannabis legalization against the foreseeable public health harms. We recognize and appreciate that cannabis legalization will result in a profound reduction in serious harms related to over-criminalization. We are writing to ensure that the foreseeable public health harms are understood and to suggest ways to minimize them.

Experience in other states suggests that legalization will increase cannabis use,[1,2,3] daily cannabis use,[4] and the use of high-potency (i.e., high THC content) cannabis products,[5,6] and will increase the prevalence of cannabis-related harms among some individuals.

Most people who use cannabis do not experience problems. However, cannabis-related harms are not rare and will become more common after legalization. The most significant potential harms are an increased prevalence of cannabis use disorder (CUD, sometimes called cannabis addiction) and of cannabis-related mental health conditions.
At the end, we suggest several amendments that are informed by the information below.

CANNABIS USE DISORDER (CUD)

Approximately 22% of those who use cannabis develop CUD.[7] The risk is quite low (on the order of 2-4%) for those using less than monthly, but is much higher (on the order of 30-50%) for those using daily.[8] The risk is greater the younger the age at starting cannabis use.[7] About one-in-ten of all people seeking treatment for any substance use disorder are seeking treatment for CUD.[9] About 20% of adolescents develop CUD within four years of beginning cannabis use.[10]

CUD can be broadly defined as the loss of control over cannabis use even when it causes significant and sustained impairment in functioning. Specific criteria for diagnosis are found in the American Psychiatric Association's Diagnostic and Statistical Manual, 5th Edition (DSM-5). Like other substance use disorders, CUD significantly impairs a person's ability to function in psychological, behavioral, social, educational, and/or vocational domains.
Cannabis legalization laws are associated with a 20% increase in the rate of cannabis use by adults[3] and with a 25% increase in the prevalence of CUD in adults.[11] This is consistent with the association of legalization laws with an increase in potential CUD "risk factors," such as electronic drug delivery methods ("vaping," "e-cigarettes"), marketing & promotion, and increased THC content.[12] Legal dispensary products often contain up to 85% THC.

Higher THC concentrations are associated with increased risk of CUD, psychosis, and other negative outcomes.[13,14,15,16,17,18]

Even without CUD, regular cannabis use can potentially result in a host of ongoing impairments that are not always recognized as cannabis-related. Withdrawal symptoms, which can cause significant distress or impairment, can make it difficult to stop using cannabis even in those without CUD. There is reason to believe that practices that make cannabis more easily accessible (e. g., delivery services) will increase cannabis use and the attendant risk of unhealthy use.[19]

MENTAL HEALTH EFFECTS

Acute cannabis use is associated with impaired learning, memory, and motor coordination, as well as decreased ability to plan, organize, solve problems, and make decisions (which are called executive functions). These impairments can lead users of cannabis to make risky decisions.[20] Cannabis intoxication is associated with anxiety, panic attacks, and paranoia, as well as psychosis (delusions, hallucinations), especially in those with a history of psychosis from any cause or who are vulnerable to psychosis.[21] Legalization of cannabis for adult use is associated with increased prevalence of hospitalization for cannabis-associated psychosis.[22]

Long-term regular cannabis use is associated with a number of mental health effects, primarily in those who use at least weekly. A common adverse effect is impaired cognitive performance, including impairments in attention and working memory, information processing speed, and executive functioning,[23] especially in adolescents.[24] Cognitive performance may take months to normalize after cannabis cessation. Regular cannabis use is associated with worsening of anxiety, depression, and bipolar disorder symptoms and increases the likelihood of developing a depressive disorder.[25,26,27] It is also associated with a greatly increased risk of developing first-episode psychosis. The risk is even higher with use of high-potency cannabis (i.e., high THC content).[17] Cannabis use is also associated with a significantly increased risk of suicidal ideation, suicide planning, and suicide attempts.[28]

Long-term regular cannabis use beginning in adolescence is associated with educational, occupational, and social & interpersonal impairments.[24]

EFFECTS ON PREGNANCY

Cannabis legalization is associated with increased cannabis use by women before getting pregnant, during pregnancy, and after giving birth.[29] Prenatal (*in utero*) exposure of the fetus to cannabis is associated with short-term and long-term adverse effects, including low birth weight and neonates small for gestational age.[30] Prospective longitudinal studies suggest that prenatal cannabis exposure is associated with subtle neurobehavioral effects in childhood. The American College of Obstetricians and Gynecologists recommends against cannabis use during pregnancy or breastfeeding.[31] Cannabis legalization is associated with increased rates of hospitalization with cannabis-involved pregnancy.[32]

CANNABIS USE WILL LIKELY INCREASE OVER YEARS OR DECADES:

It is too early to fully assess health effects of legalization laws. Most experts predict that legalization and commercialization will continue to reduce the cost of cannabis products substantially over time.[12,33,34] Since it will take many years for commercial markets to mature, it may not be possible to fully assess their health effects until the 2030s.[35] The removal of cannabis prohibition has already led to a price collapse in multiple states (e.g., at least a 70% drop in wholesale prices in Colorado, Oregon, and Washington).[36] Rates of cannabis use are expected to be price-sensitive, as rates of alcohol and tobacco use are known to be.

GUARDRAILS NEEDED AGAINST INDUSTRY'S POTENTIAL INFLUENCE ON PUBLIC HEALTH

Over time, one can expect the burgeoning cannabis industry to engage in practices designed to maximize profits by enlarging the user base and promoting regular and heavy use. Most sales and profits come from those who use heavily or have CUD.[12,35] Heavy, daily, or near daily consumers of cannabis (10-20% of all consumers) are responsible for approximately 60-80% of total cannabis consumption; this incentivizes the cannabis industry to encourage heavy, daily cannabis consumption.[19] Sound public health policies are likely more effective when enacted early, "before a large and profitable cannabis industry has developed with the financial and political resources to resist public health regulation, as the alcohol industry has effectively done in most developed countries."[33] A public health framework for legalized cannabis should be based on best public health practices established for tobacco control.[37] The World Health Organization's Framework Convention on Tobacco Control states that "[Governments] should not allow any person employed by the tobacco industry or any entity working to further its interests to be a member of any government body, committee or advisory group that sets or implements tobacco control or public health policy."[37]

AMENDMENTS FOR CONSIDERATION

Article—Alcoholic Beverages

1-101: Makeup of the new Alcohol, Tobacco and Cannabis Commission

- Only one new position with knowledge and expertise in the cannabis industry
- Amend the public health position to require expertise in alcohol, tobacco, or cannabis

1-309.2: Makeup of Advisory Board on Medical and Adult-Use Cannabis

- To avoid swaying this Board to industry (see section above on Guardrails Against Industry Influence), have no industry positions, include a member from all five topics under 4b, and include a conflict of interest clause, as with the ATC and Medical Cannabis Commission Commissioners

Division III. Cannabis

Subtitle 1. Definitions

- Authorization to certify for medical cannabis should not be expanded to providers who are not entitled to prescribe controlled substances (i.e., registered nurses)

Subtitle 2. Cannabis Regulation and Enforcement Division
36-203

- Include basic labeling requirements besides child-proof packaging—THC potency, all ingredients, serving size, servings per container, calories (if applicable)

Subtitle 4. Cannabis Licensing

- Eliminate the delivery license
- Remove exemption to the MD Clean Indoor Air Act for on-site consumption establishments
- Eliminate the ability for a food service facility to apply for an on-site consumption license
- Remove preemption of local control for all license types

Subtitle 9. Advertising
36-902

- All advertisements for products containing cannabis, regardless of whether or not they make medical or therapeutic claims, should be labeled with information on the most significant side effects or risks
- Permissible medical or therapeutic claims should be determined by the Public Health Advisory Council. Therapeutic claims should be based on evidence interpreted by unbiased experts without the potential for influence by persons associated with the cannabis industry.

Subtitle 10. Responsible Vendor Training Program

- Training should include risks of cannabis use including CUD, risks of consumption by women considering pregnancy or who are pregnant or breastfeeding, risks of evoking psychosis (especially in those with a history of psychosis), etc.
- Training should include how to identify intoxicated individuals and strategies to prevent overservice

Subtitle 11. Prohibited Acts
36-1103

- Create a reasonable potency cap that is valid across all non-medical license types without exception.

Article Tax—General
2-1302.2

- The proportion of funds allocated to the Cannabis Public Health Advisory Council should be increased to 5%. The Council needs adequate funding and staff to carry out its important mission of developing and enforcing appropriate public health safeguards and monitoring their effectiveness. Minimizing, if not eliminating the exposure of vulnerable groups (adolescents, pregnant and breastfeeding women, individuals with a history of psychosis) to recreational cannabis cannot be successful without strict monitoring and enforcement of public health regulations that carry penalties sufficient to deter violations. This mission requires an adequately funded and staffed CPHAC.
- A portion (5%) of funds should be allocated to fund programs for the prevention and treatment of CUD and other cannabis-related harm

11-104

- Adult use cannabis should be labeled with THC potency, and taxation should be based, at least in part, on THC potency, as in Connecticut, Illinois, and New York

Respectfully submitted by:
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The Maryland Public Health Association (MdPHA)
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