



Michigan Prevention Association White Paper on the Impact of Commercialized Marijuana on Youth and Communities

November 20, 2019

In the fall of 2018 Michigan voters approved “Recreational Marijuana”, otherwise referred to as “Adult Use Marijuana”. The Michigan Prevention Association (MPA) has reviewed the research and data on the effects of marijuana use on youth and local communities. The following represent key areas of concerns and recommendations to *limit harm* related to the health and safety of our youth and our communities.

AREAS OF CONCERN

There has been a significant increase in marijuana potency over time.

- Marijuana is a MUCH more potent drug now than in years past - today averaging 3 to 7 (or more) times stronger than in the 1980s. Some samples of marijuana extracts have an 80% - 90% THC level. (*National Institute on Drug Abuse*)

Negative Effects of High Potency THC

- The risks of physical dependence, addiction, and other negative consequences increase with exposure to high concentrations of THC and the younger the age of initiation. Higher doses of THC are more likely to produce anxiety, agitation, paranoia, and psychosis. Edible marijuana takes time to absorb and to produce its effects, increasing the risk of unintentional overdose, as well as accidental ingestion by children and adolescents. (*US Surgeon General’s Advisory Report 2019*)

Youth are more susceptible to marijuana addiction.

- The human brain continues to develop from before birth into the mid-20s and is vulnerable to the effects of addictive substances. (*National Institute on Drug Abuse*)
- Frequent marijuana use during adolescence is associated with changes in the areas of the brain involved in attention, memory, decision-making, and motivation. Deficits in attention and memory have been detected in marijuana-using teens even after a month of abstinence. (*National Institute on Drug Abuse*)
- Marijuana can also impair learning in adolescents. Chronic use is linked to declines in IQ, school performance that jeopardizes professional and social achievements, and life satisfaction. (*National Institute on Drug Abuse*)

Legalized marijuana leads to increased youth marijuana use.

- Since Colorado, Washington, Oregon, Alaska, and the District of Columbia (Washington, DC) legalized marijuana, use of the drug in all five jurisdictions has continued to rise above the national average among youth aged 12–17. (*National Survey on Drug Use and Health [NSDUH] 2006-2017*)
- Colorado currently has the highest ranking for first-time marijuana use among youth, with a 65% increase in the years since legalization. (*NSDUH, 2006-2017*)

- Alaska and Oregon now lead the nation in past-year marijuana use among youth aged 12–17. (NSDUH, 2006-2017)

Regular marijuana use is linked to academic underperformance.

- Regular use of marijuana in adolescence is linked to increased rates of school absence and drop-out, as well as suicide attempts. (National Institute on Drug Abuse)

Legalized marijuana results in increased drug violations at school.

- The last available Colorado drug violation data (2015-16 school year) indicates that marijuana violations were involved in 63% of suspensions, 73% of referrals to law enforcement, and 58% of expulsions. (Rocky Mountain HIDTA, 2018)
- In Anchorage, Alaska school suspensions for marijuana increased more than 141% (2015 to 2017) after legalization was implemented. (Anchorage Daily News, Wohlforth, 2018)

Commercialized marijuana and public safety.

- Michigan State Police data indicates that Drivers Tested Positive of Cannabinoid Drugs from 2012 to 2016 more than doubled for Total Crashes (2.14), and Fatalities (2.03). (Michigan State Police)
- Five Southeast Michigan Trinity Hospitals, from 2017 to August of 2019, treated 14,846 patients for marijuana related issues. Of those 1,422 (close to 10%) were under age 21. (Trinity Hospitals)

RECOMMENDATIONS TO LIMIT HARM

1) *Placing limits on THC potency as a cornerstone of Harm Reduction strategies.*

After years of an ‘open use’ policies with café style businesses, the Dutch placed limits on THC potency to 15% in any product. (reported by the BBC)

2) *Placing stringent rules, fines, penalties and legal action against those businesses and/or individuals who sell, give, or otherwise participate; either knowingly or through responsible practices, should have known their participation; in providing cannabis to youth under 21 years of age.*

The fat-soluble properties of THC and its affinity for building up in the fat cells of the brain – affects learning and life success, including employability. (Safeguarding Michigan’s Future: Prosecuting Attorneys Association of Michigan. Medical and Recreational Marijuana from a Public Health Perspective: Michigan Association for Local Public Health, et.al.. National Institute on Drug Abuse. Fergusson and Boden. Addiction pp 969-976, 2008)

3) *Standards for concluding impairment under cannabis should be broad and not limited to a specific level of THC markers in the blood.*

There is a significantly limited time frame in which a THC marker stays in the blood. At the same time, being fat soluble, there is an accumulation of THC in the brain, affecting

brain functions on an ongoing basis. (*Kristin E. Maple, University of Wisconsin-Milwaukee. Centers for Disease Control Prevention, Marijuana and Public Health.*)

- 4) A dedication of resources to three public service campaigns dedicated to**
A) preventing and reducing youth cannabis use,
B) health concerns of cannabis use during pregnancy & breast feeding, and C) risks of driving under the influence of cannabis.

The earlier a youth begins using marijuana the higher the potential of negative cognitive and developmental effects including negative consequences for public education of academic underperformance and drug incidents at school. (*Safeguard Michigan's Future; Prosecuting Attorneys Association of Michigan. Fergusson and Boden. Addiction. 103pp 969-976 2008*)

Additionally, a women's use during pregnancy may be associated with heart defects and/or stillbirths and/or developmental challenges – decreased growth, impaired cognitive function, decreased academic ability, etc., – for the child. (*Medical and Recreational Marijuana from a Public Health Perspective: Michigan Association for Local Public Health, et.al.*)

Thirdly, traffic crashes and fatalities all significantly increase with the establishment of cannabis businesses in a State. (*Michigan State Police, Traffic Crash Data. Fatality Analysis Reporting System, Colorado Department of Transportation.*)

- 5) Smoking and vaping or other use of combustible delivery systems of cannabis be prohibited in public places, including bars and restaurants.**

Regarding Second Hand Smoke, in that the artery recovery time for exposure to 1 minute of tobacco smoke is 30 minutes and exposure to 1 minute of marijuana smoke is 90 minutes, protecting the public and workers in public places is a public health necessity. (*Journal of American Heart Association; July 2016; Springer, et.al*)

- 6) Strong prohibitions on a business selling, providing, and/or allowing consumption of both cannabis products and alcohol on the business premises.**

The combination of alcohol and marijuana use has been shown to increase the likelihood of two vehicle fatal crashes by up to five times. (*Columbia University's Mailman School of Public Health*)

- 7) Persons in violation of cannabis laws, to an extent to be identified as reasonable, be subject to mental health evaluations, intervention education and other alternative opportunities yet to be identified.**

Several studies have linked marijuana use to increased risk for mental illnesses, including psychosis (Schizophrenia), depression and anxiety. (*National Institute on Drug Abuse*) Further, a study of over 9,000 adolescents found marijuana use doubled domestic violence. Also, a study of 6,000 men found a five-fold increase in violence. (*Marijuana, Mental Illness, and Violence; Alex Berenson*)

- 8) The number of cannabis-based businesses in any given community be restricted.**

A relationship has been identified between the existence of a cannabis business in a community and the increase in use by young people. "Living near a marijuana

dispensary relates to a 4-6 fold increase in past 30 day use among young people, 18-22 years of age.” (*The journal – Addiction – as reported by Smart Approaches to Marijuana.*)

9) *Accurate labeling of cannabis products, including levels of both THC and CBD components as well as risks related to their use, are important to support public health and safety, while reducing harm of using these substances.*

There is significant inaccurate information and public perceptions of safe use of cannabis based on anecdotal and faulty sources referred to as science. Actual scientific-based information related to cannabis use, printed on the product labels, can provide an important service to the public’s safety and overall well-being.

These recommendations are put forth with a desire to protect the public health by reducing expected harms as found in other States that have moved ahead with the establishment of marijuana based businesses.