



White Paper on Marijuana Legalization

Compass Mark is aware of the statewide conversation surrounding possible marijuana legalization. Our organization is focused solely on the prevention of addiction. As such, we are carefully assessing the potential impact of this proposed legislation on individuals, families, youth and special populations like pregnant women.

Compass Mark believes that every individual has a unique risk for addiction, some much higher than others. Factors that increase that risk include an *individual's access to a substance, their age of first use and the attitudes and perceptions of an individual about use, misuse, and abuse of substances*. The research from Colorado, Washington, and Oregon states demonstrates that the passage of legislation to legalize marijuana impacts all three risk factors significantly.

Medical marijuana has already increased access to this substance in every community over the past year. The public attitude toward marijuana has shifted from '*marijuana as an illegal substance*' to '*marijuana as medicine*.' This rapid reduction of the public perception of possible harm from use is, in itself, a risk for all communities in Pennsylvania.

Compass Mark believes that the necessary policy, treatment, and public safety infrastructure for marijuana legalization is highly under-developed. As an example, the state has no means to determine intoxication or impairment from marijuana equivalent to that of a BAC for alcohol. The state is projecting revenues associated with legalization without projecting the costs to be absorbed by the criminal justice system, human services, healthcare/treatment providers, and schools.

We know that some research indicates medical marijuana is valuable to those who seek alternative treatment; the benefit of that use may outweigh that individual's risk for harm. Much more research is required on that issue to say this with highest confidence. What we can say with a high confidence is that if a healthy person uses marijuana recreationally it will result in harm. Just as with alcohol or tobacco, there is no safe use of marijuana, recreationally, for anyone.

Our youth, due to their developing brains, don't understand the long-term impact of substances on their body, its development, their relationships, or their future. We are concerned for their understanding of this issue and what they are hearing about it. Any positive attitude toward a substance impacts the likelihood they will use them. If our youth do not feel concerned about the use of marijuana, and their parents or other trusted adults are not either, use will increase. If a youth is naturally at higher risk due to their genetic DNA, family history, or mental health diagnosis, they may move on to other substances after marijuana. In the past, prevention scientist referred to marijuana as a "gateway" drug, though science now informs us that it is more accurate to call the brain change a "pathway". Once that pathway is built in the brain from marijuana, it cannot be undone. We know that 1 in 6 youth who try marijuana become addicted.

Compass Mark advises that we slow down the conversation pertaining to marijuana legalization. We need time to do the required research and planning that a change of this scope will require. A scramble to pass legislation without considering the far-reaching impacts on our community may lead to consequences, especially for our youth and future generations of Pennsylvanians, which are impossible to reverse.

Compass Mark

Fact Sheet on Marijuana Legalization

Overall Prevention Talking Points

- We are moving too fast to know the implications of increases to our society. The errors being made now have been made before (Big Tobacco) and we need to slow down.¹
- Today's marijuana is much more potent than in the past – with cannabis edibles, candies, cookies, ice creams, and waxes being up to 99% THC. Compare that to 5% THC content of the 1960s.²
- We do not need to legalize in order to reform the criminal justice system. We can remove criminal penalties, expunge records, and offer justice without commercializing today's highly pure THC products.³

Major Issue: Cannabis access has gotten too far ahead of regulation

- How do we define intoxication (any equivalent to BAC and how)? (McCance-Katz)
- Should warning labels appear on cannabis products (think cigarette box warnings)?
- Should people be allowed to use in public?
- How do we assure that underage sales are not occurring?
- Should people be allowed to use and drive motor vehicles?
- How is the government been educating the public about risks of use?
- Can pregnant women and nursing Mothers use recreational marijuana legally?

Major Issue: Health Harms and Cannabis as “Gateway” Drug

- Marijuana is Addictive. According to the National Institutes of Health⁴, Mayo Clinic⁵, the Cleveland Clinic⁶, and World Health Organization⁷, marijuana is addictive, and can produce withdrawal and dependence. Today's marijuana is much more potent than in the past.
- Brain Changes: The NIH states that regular marijuana use can reduce IQ by 8 points and may be irreversible; it also impairs memory and learning.⁸

¹ Smart Approaches to Marijuana. (2018, February 13). *Smart Approaches to Marijuana*. Retrieved from www.learnaboutsam.org: <https://learnaboutsam.org/wp-content/uploads/2018/09/7-Sept-2018-General-TPs-v2.pdf>

² McCance-Katz, E. F. (n.d.). Urgent and Emerging Issues in Prevention: Marijuana, Kratom, and E-Cigarettes. Retrieved from cadca.org

³ *National Institutes of Health*. (2018, June). Retrieved from <https://www.drugabuse.gov/publications/research-reports/marijuana> on 2018, July 2.

⁴ See NIDA. (2018, June 2015). Marijuana. Retrieved from <https://www.drugabuse.gov/publications/research-reports/marijuana> on 2019, February 15,)

⁵ See Irons, B. M.D., Mayo Clinic. (2015, Feb. 19). Speaking of Health. Retrieved from <https://mayoclinichealthsystem.org/hometown-health/speaking-of-health/the-problem-with-kids-and-cannabis> on 2018, July 2 and Mayo Clinic Staff. (2017, Oct. 24). Marijuana. Retrieved from <https://www.mayoclinic.org/drugs-supplements-marijuana/art-20364974> on 2019, February 15)

⁶ See Cleveland Clinic. (2014, July 29). Marijuana. Retrieved from <https://my.clevelandclinic.org/health/articles/4392-marijuana> on 2019, July 14

⁷ See World Health Organization. (2016). The Health and Social Effects of Nonmedical Cannabis Use. Retrieved from <http://apps.who.int/iris/bitstream/handle/10665/251056/9789241510240-eng.pdf;jsessionid=3EBC6F1B98621EB7690654FDFB631BEB?sequence=1> on 2019, February 13.

Major Issue: Legalization

- According to the Department of Health and Human Services, *Colorado holds the top ranking for first time marijuana use among youth in the country (This is the National Survey on Drug Use and Health, the only population wide, national drug survey for all Americans 12 and older.)*⁹ Other studies showing no increase are not representative of the whole state.
- The top states for marijuana use in the US all have relaxed laws.
- Young adult use has been skyrocketing, especially in legal states (WA/CO/OR).¹⁰
- Studies have shown mental illness is on the rise in legal states.¹¹
- AAA has reported that fatalities among people who have recently used marijuana have doubled since legalization in Washington State.¹²

Major Issue: Colorado as a successful example?

- 70% of CO dispensaries are recommending THC products to pregnant mothers for nausea.¹³
- The crime rate in Colorado has increased 11 times faster than the rest of the nation since legalization, with the Colorado Bureau of Investigation reporting an 8.3% increase in property crimes and 18.6% increase in violent crimes.¹⁴
- A recent study by the Colorado Division of criminal Justice found of the 4,000 drivers tested for marijuana in 2016, 73 percent were found to have the drug in their system.¹⁵
- More minority kids are being arrested in Colorado for pot since legalization, and car crashes related to marijuana, young adult use, and workplace positives are skyrocketing in legal states.¹⁶
- Marijuana-related ER visits by Colorado teens on the rise since legalization.¹⁷

Major Issue: Opioid Epidemic Related Risk

- A large 2018 Lancet study found marijuana users were less likely than non-users to report pain reduction, and did not use opioids less.¹⁸

⁸ See NIDA. (2018, June 25). Marijuana. Retrieved from <https://www.drugabuse.gov/publications/research-reports/marijuana> on 2019, February 15.

⁹ See Center for Behavioral Health Statistics and Quality. (2017). 2016 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD.

¹⁰ See Center for Behavioral Health Statistics and Quality. (2017). 2016 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD.

¹¹ See <https://www.tandfonline.com/doi/full/10.1080/09540261.2018.1467385>

¹² See Johnson, T. (2016, May 10). Fatal Road Crashes Involving Marijuana Double After State Legalizes Drug. Retrieved from <https://newsroom.aaa.com/2016/05/fatal-road-crashes-involving-marijuana-double-state-legalizes-drug/> on 2019, February 15

¹³ See Smart Approaches to Marijuana. (2018 March). Lessons Learned from Marijuana Legalization in Four U.S. States and D.C. Retrieved from <https://learnaboutsam.org/wp-content/uploads/2018/04/SAM-Lessons-Learned-From-Marijuana-Legalization-Digital.pdf> on 2019, February 15

¹⁴ See Mitchell, K. (2017, July 11). Crime rate in Colorado increases much faster than rest of the country. Denver Post. Retrieved from <https://www.denverpost.com/2017/07/11/colorado-sees-big-increase-crime-10-percent-higher-murder-rate/> on 2018, Feb. 3 and Colorado Bureau of Investigation. (2017). National Uniform Crime Reports. Retrieved from <https://www.colorado.gov/pacific/cbi/crime-colorado1> on 2019, 2018 Feb. 14.

¹⁵ See <https://www.denverpost.com/2018/08/09/driving-while-high-colorado/>

¹⁶ See Colorado Department of Public Safety. (2016). Marijuana legalization in Colorado: Early findings. Retrieved from <https://cdpsdocs.state.co.us/ors/docs/>

¹⁷ See <https://www.reuters.com/article/us-health-marijuana-kids/marijuana-related-er-visits-by-colorado-teens-on-the-rise-idUSKBN1HO38A>

¹⁸ See [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(18\)30110-5.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(18)30110-5.pdf)

- Marijuana more than doubles the risk of developing opioid use disorder or initiating nonmedical prescription opioid use.¹⁹
- Studies in Europe have found that “adolescent THC exposure in rats seemed to affect the rodents’ brain maturation, as they subsequently displayed “heroin-seeking” behavior²⁰.
- We are learning that brain cross-talk between the endocannabinoid and endogenous opioid systems may cause, if there has been early brain exposure to marijuana, changes in the sensitivity to other drugs of abuse such as heroin.
- New science supports the plausibility that a person who uses marijuana as a teenager may be increasing his/her risk of opiate addiction later in life.²¹
- Opioid-cannabinoid brain connection is being rigorously studied. Early science indicates that if it takes 50 years to determine the impact (like it did with tobacco to confirm smoking cigarettes causes lung cancer) our species may be facing a profound and permanent decline in cognitive functioning.²²

¹⁹ See NIDA. (2017, Sept. 26). Marijuana Use is Associated with an Increased Risk of Prescription Opioid Misuse and Use Disorders. Retrieved from <https://www.drugabuse.gov/news-events/news-releases/2017/09/marijuana-use-associated-increased-risk-prescription-opioid-misuse-use-disorders> on 2019, February 15.

²⁰ See Secades-Villa, R., Garcia-Rodriguez, O., Jin, C.J., Wang S., & Blanco, C. (2014, Aug. 2). Probability and Predictors of the Cannabis Gateway Effect: A National Study. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25168081> on 2018, July 2.

²¹ Ellgren M, Spano SM, Hurd YL. Adolescent cannabis exposure alters opiate intake and opioid limbic neuronal populations in adult rats. *Neuropsychopharmacology*. 2007 Mar;32(3):607-15

²² Spano MS, Ellgren M, Wang X, Hurd YL. Prenatal cannabis exposure increases heroin seeking with allostatic changes in limbic enkephalin systems in adulthood. *Biol Psychiatry*. 2007 Feb 15;61(4):554-63.