

February 22, 2021

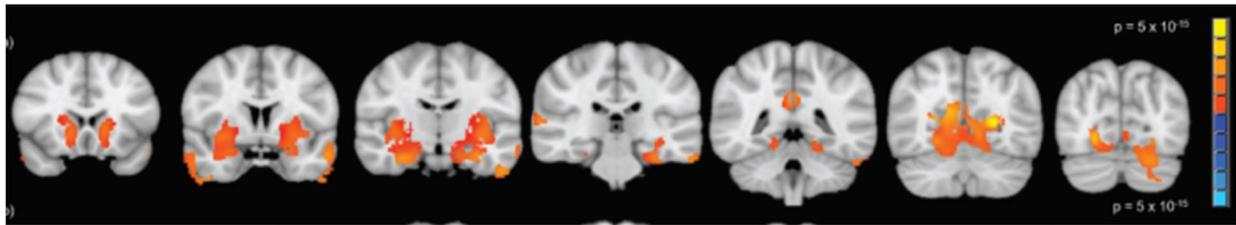
Joint Committee on Judiciary
Legislative Office Building, Room 2500
Hartford, CT 06106

Re: Comments on Senate Bill 388

The Subcommittee on Cannabis Legislation stands in opposition to legalization of recreational cannabis use as proposed in the Governor's Legislation No. 3311. We respectfully submit for reconsideration the letter previously submitted Feb. 22, 2019 by the Connecticut Marijuana Harm Reduction Consortium, representing physicians of the Connecticut Society of Addiction Medicine and the Connecticut Psychiatric Society, and individual physicians and researchers of the Yale community [Attachment 1]. This carefully researched review called for 1) further research before cannabis is legalized because medical evidence was insufficient to understand the risks versus benefits of cannabis legalization and 2) barring a delay in legalization, the letter called for inclusion of measures to reduce risks to Connecticut citizens. It is attached after this letter.

Updated evidence continues to support significant harms that result from cannabis legalization that must be mitigated before legalization legislation can be responsibly and safely moved forward:

- 1) The THC potency of cannabis products being marketed where legal, or illicitly obtained, continues to increase¹. Not only is this reflected in increasing emergency room visits for cannabis intoxication (in CT: 208 in 2016, 938 in 2019)², but in the increasing addictiveness of the substance. The development of cannabis use disorder was considered fairly low among users (under 10%) through the early 2000s, but now appears to be about 3 in 10³. As described below, cannabis use disorder is not a harmless disease, and entails significant personal, societal and financial costs. We cannot understand the potential downside of cannabis legalization without considering the effects of high potency formulations that will be marketed. Unfortunately there is no well supported treatment for cannabis use disorder.
- 2) Harms to adolescent brain development. The 2019 testimony called for limiting cannabis legalization, if it were to occur, to those over 25. Review of the literature would not change this recommendation. Findings from the largest and most costly study ever funded by NIDA suggests that cannabis is harmful to the developing brain, though other factor e.g., poverty and genetics may also contribute⁴. At the very least we advise not proceeding with legalization until the main results of this study are released.
- 3) In a study published by colleagues in the reputable *Journal of Neuroscience*, just 1-2 instances of cannabis use in adolescence was associated with structural brain and cognitive effects in adolescents⁵. Other studies have also demonstrated that exposure to cannabis may be associated with changes in the structure of the brain.



Regions showing greater gray matter volume in 14 year olds reporting 1-2 instances of cannabis use vs. matched controls. Orr et al., *J of Neuroscience* January 2019

The FDA would not proceed with human deployment in light of current data regarding harms. We also note despite whatever legal limit is placed on sales, the increased availability of THC-containing substances, “trickle-down effects” and the “normalization of use” in the eyes of youth will significantly increase use by youth. This in turn will result in increased cannabis use disorder in a sizable percent of those that use cannabis in adolescence.

4) Disproportionate harms to:

- a) Those with mental illnesses including cannabis use disorder. In a large study of over 200,000 youths, cannabis use disorder was associated with elevated all-cause mortality, homicide, and overdose death⁶. The association of cannabis use and cannabis use disorder with earlier onset of psychosis in those with schizophrenia is unrefuted, and is one of the strongest modifiable risk factors for development of a psychotic disorder, which can have devastating and life-long consequences for the individual, his family and society. The association of cannabis use with major depression and anxiety disorders is complex and needs more research before one could rationally accept cannabis use in those with elevated risk of psychiatric disorders of all types. Those with a cannabis use disorder are over six-times more likely than those without to have either an alcohol use disorder or nicotine use disorder, with their risks.
- b) People of color. Despite the expected benefit of decriminalizing cannabis, people of color are still much more frequently arrested for cannabis-related police stops than are whites⁷. The current proposed legislation cannot stop this bias without a more objective field test technology as exists for alcohol. The banning of cannabis dispensaries in many predominantly white areas of states where dispensaries are legal would raise dispensary density in the poorest areas, expose the most underserved to higher cannabis availability, and increase use and harms.
- c) Pregnant females and their offspring. Maternal cannabis use after knowledge of pregnancy results in increased psychopathology in offspring by middle childhood⁸. Despite known medical risks, such as low birth weight, associated with cannabis use during pregnancy, and conflicting but concerning outcome data regarding cognitive function in adulthood of fetal exposure to cannabis, pregnant women increasingly see cannabis as safe to use in pregnancy⁹.

- 5) Negative return on investment. It is argued the increased revenue generated from taxed sales of cannabis products and reduced costs of drug enforcement efforts against cannabis use will benefit society. However, a true cost analysis must weigh the gains accrued versus many expected costs, including the cost of increased emergency room visits and hospitalizations, increased motor vehicle stops and accidents, increased costs to law enforcement due to criminal and disruptive activity, as well as costs of lost employment and/or function in society in those suffering adverse effects of cannabis use. For example, the Rocky Mountain High Intensity Drug Trafficking Area data¹⁰ report in Colorado indicate since recreational cannabis was legalized, cannabis related traffic deaths rose 151% (up to 2018) while overall traffic deaths rose 35%. These data extrapolate to approximately 25 excess deaths attributed to cannabis use, or in CT, 16 excess deaths. Given the peak age of cannabis use disorders is in those 18-25, the National Review of the value of a human life at \$9 million¹¹ would place total loss in CT per year at \$144 million, far exceeding potential gains. While logic would clearly support cannabis use leading to impaired driving, many argue we do not yet have convincing data that motor vehicle crashes will increase. But lack of data on effect does not equal data that there is lack of effect. In other words, it defies logic that we will not ultimately see increases in impaired driving as use of cannabis rises. We note the proposed legislation includes 64 extra positions with the DCP, additional funding to DMHAS, DPH and the state's poison control center, "drastically" increasing training of police officers, addition to DMV staff, initial \$2 million for conviction erasures, etc. without clear tally of these costs which will detract from any capital gain.

In summary, we ask members of the Judiciary Committee to carefully weigh the public health costs of legalizing recreational cannabis against potential gains. If legalization is the path, to incorporate the harm reduction policies described in the accompanying testimony from the Connecticut Marijuana Harm Reduction Consortium.

Respectfully,



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Governors Advisor Board,
CT Dept. of Mental Health and Addiction Services

John Hamilton
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1. <https://ctmirror.org/2021/02/15/cts-legal-cannabis-trade-is-ready-to-bloom/>
2. Used with permission, Mike Makowski, MPH, Epidemiologist, Injury and Violence Surveillance Unit, Connecticut Department of Public Health

3. Hasin DS (2018) *Neuropsychopharmacology* 43: 195-212.
4. <https://abcdstudy.org/news/>
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6. Fontanella CA, Steelesmith DL, Brock G et al. (2021) Association of cannabis use with self-harm and mortality risk among youths with mood disorders. *JAMA Pediatr.* Published online January 19, 2021; doi:10.1001/jamapediatrics.2020.5494).
7. Pierson, E., Simoiu, C., Overgoor, J. et al. A large-scale analysis of racial disparities in police stops across the United States. *Nat Hum Behav* **4**, 736–745 (2020).
<https://doi.org/10.1038/s41562-020-0858-1>
8. Paul SE, Hatoum AS, Fine JD, et al. Associations between prenatal cannabis exposure and childhood outcomes: Results from the ABCD Study [published online September 23, 2020]. *JAMA Psychiatry.* doi: 10.1001/jamapsychiatry.2020.2902).
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10. <https://www.thenmi.org/wp-content/uploads/2020/10/RMHIDTA-Marijuana-Report-2020-2.pdf>
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