

Highway Safety Concerns in Cannabis Hospitality Programs

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- Intro / Background
- OUI Basics
- Cannabis impairs, but differently than alcohol
- Suggestions for harm reduction

Intro

- From a Highway Safety perspective, we are concerned about any product development model that includes driving a motor vehicle after consumption of an impairing substance.
- From a Cannabis Hospitality Perspective, a strong regulatory program that reasonably addresses traffic safety concerns adds credibility to the entire industry.
- Cannabis impairs
- Maine is rural
 - Significant customer base that will drive after consumption.

OUI Basics

- (1) the person operated a motor vehicle, and
- (2) at the time of operation, the person was under the influence of an intoxicant—alcohol, drugs, or another intoxicant—or a combination of intoxicants.
- A person is under the influence if the person's physical or mental faculties are impaired, **however slightly or to any extent**, by the substance or substances that the person consumed; *State v. Worster*, 611 A.2d 979, 980-81 (Me. 1992). A person may consume a substance by eating, drinking, inhaling, or injecting it. *State v. Atkins*, 2015 ME 162 ¶1.

Unlike alcohol, there is no scientifically accepted blood measured level of impairment for drugs

- 0.08 BAC for alcohol
- However, unlike alcohol
 - blood levels of THC *do not* correspond with measured levels of impairment.
 - Furthermore, blood levels of THC do not correspond with self-reported perceptions of impairment.

OUI Summary

- No measure of blood needed, it's all based upon impairment
- "If you feel different, you drive different" (NHTSA)
- Cannabis is a drug that makes people "feel different"
 - Isn't this the whole point of cannabis consumption facilities?
- People should not be driving until the duration of effects of the drug have concluded.

There has been an increase in fatalities since the legalization of recreational cannabis in the US

Kusum Adhikari, et. al., *Revisiting the effect of recreational marijuana on traffic fatalities*, INTERNATIONAL JOURNAL OF DRUG POLICY VOL. 115 (May 2023)

Conclusion

Traffic fatalities increase by 2.2 per billion miles driven after retail legalization, which may account for as many as 1400 traffic fatalities annually. States who legalized earlier experienced larger traffic fatality increases. TWFE methods are inadequate for policy evaluation and do not capture heterogeneous effects across time.

There has not been an increase in the public perception that Cannabis use before driving is dangerous

- In one survey of 2,000 cannabis users, “49% drive high but wouldn’t drive drunk, with 64% saying they feel safer driving high than drunk.” Lee Johnson, *Survey: How Cannabis is Taking Over Christmas*, Oracle (December 9, 2021).
- In another, “48% of current cannabis users in the United State think it’s safe to drive on cannabis — 17% of current users said it’s “very safe” and 31% said it is “somewhat safe” to drive high.” Dominic Holden, *Half of Marijuana Users in the US Think They’re Fine to Drive Stoned*, BuzzFeed (April 23, 2019).
- “Almost 60% of drivers who use marijuana in legal states admit to driving under the influence.” The Zebra, *Study: 60% of drivers who use marijuana in legal states drive under the influence* (August 24, 2022).

Cannabis impairs, but differently than alcohol

- Cannabis Contains THC which is indisputably an impairing substance
 - This includes impairing the ability to gauge one's own driving ability
 - The common perception is that cannabis is not impairing, or people drive better while under the influence.
 - Absolutely ZERO scientific evidence of that, in fact, just the opposite.

- Andrew Fares, et al, Combined effect of alcohol and cannabis on simulated driving, *PSYCHOPHARMACOLOGY*, Vol. 239: 1263-1277 (2021)
- Ashley Schnakenberg Martin, et. Al, *Preliminary study of the interactive effects of THC and ethanol on self-reported ability and simulated driving, subjective effects, and cardiovascular responses*, *PSYCHOPHARMACOLOGY*, Vol. 240: 1235-1246 (April 12, 2023)
- F.R.J. Vinckenbosch, et. Al., *Validating lane drifts as a predictive measure of drug or sleepiness induced driving impairment*, *PSYCHOPHARMACOLOGY* 237: 877-886 (2020)
- Ryan Miller, et. Al, *Influence of cannabis use history on the impact of acute cannabis smoking on simulated driving performance during a distraction task*, *TRAFFIC INJ. PREV.*, Vol. 23, Sup. 1: S1-S7 (2022)
- Thomas Marcotte, et. Al, *Driving Performance and Cannabis Users' Perception of Safety: A Randomized Clinical Trial*, *JAMA PSYCHIATRY* 79(3): 201-209 (March 1, 2022)

Alcohol and Cannabis are Different

Alcohol (one product)

- Onset
 - Predictable
- Duration
 - Predictable
- Measurement of Impairment
 - Precise Objective indicator
- Tolerance
 - Narrow scope
- Scientific Knowledge
 - 80+ years of traffic safety studies

Cannabis (multiple products)

- Onset
 - Variable
- Duration
 - Variable
- Measurement of Impairment
 - Less precise
- Tolerance
 - Wider Scope
- Scientific Knowledge
 - 10 years of traffic safety studies

Harm Reduction Suggestions (1)

- **Mandatory Impairment Training for Cannabis or Cannabis Product Servers**
 - The training available to cannabis servers for detecting cannabis impairment is minimal and lacks standardization.
 - **Legislate Creation of a training program by the Maine Criminal Justice Academy Drug Recognition Expert Program**
 - This will ensure high standards of effectiveness in recognizing and managing impairment.
 - Cannabis is available in a variety of forms, and it affects individuals differently depending on the specific compound used. Its impact varies widely based on the dosage and individual tolerance. Unlike alcohol, cannabis dosages are not standardized, and there are no established legal limits for its use.
 - Individual range of tolerance can vary greatly, with some people remaining unimpaired after consuming large amounts of cannabis, while others may become significantly impaired after consuming only small amounts. This complicates reasonable regulation efforts being both effective yet fair.

Harm Reduction Suggestions (2)

▪ **Serving Size and Wait Time Regulations**

- Implement strict limits on cannabis serving sizes within specific time frames and enforce mandatory waiting periods before customers are permitted to drive home.
- These guidelines should be established by a committee of independent toxicologists to ensure they are scientifically valid and effective.
- Studies conducted by the Center for Medicinal Cannabis Research at the University of California, San Diego and published by JAMA Psychiatry, showed that people should wait about 4.5 hours after smoking one joint to get behind the wheel of a vehicle. A wait time for recreational use, whether consumed by smoking, vaping, or eating, should also be considered.

Harm Reduction Suggestions (3)

- **Introduce a “Cannabis Liability Act”**
- Similar to the “Maine Liquor Liability Act.” This legislation would promote responsible cannabis service and provide a clear legal recourse for victims harmed by drivers impaired by cannabis, ensuring accountability for establishments and justice for victims.

Harm Reduction Suggestions (4)

- **Do not allow the licensing of establishments to serve both cannabis and alcohol**
- *Crossfading*, the practice of consuming both cannabis and alcohol, is popular for some users.
 - Contrary to the misconception that combining these substances results in a predictable doubling of their effects, mixing them can lead to exponentially unpredictable impairment
 - Today's cannabis is genetically modified and cultivated under controlled conditions, resulting in a potency and purity that surpasses earlier strains. Consequently, existing data on cannabis impairment is based on less potent strains and may not accurately reflect the risks associated with current products.

Science News

from research organizations

Any dose of alcohol combined with cannabis significantly increases levels of THC in blood

Date: May 27, 2015

Source: American Association for Clinical Chemistry (AACC)

Summary: Cannabis plus alcohol is one of the most frequently detected drug combinations in car accidents, yet the interaction of these two compounds is still poorly understood. A study shows for the first time that the simultaneous use of alcohol and cannabis produces significantly higher blood concentrations of cannabis's main psychoactive constituent, THC, as well as THC's primary active metabolite than cannabis use alone.

Conclusion

- Keeping cannabis impaired drivers off the road to protect both cannabis and non-cannabis consumers is in the best interest of both the Bureau of Highway Safety & the cannabis industry.
- Strong regulations that assist in accomplishing these goals help keep drivers safe and the market healthy.