



Beyond Smoke and Mirrors: Science-Based Marijuana Prevention

The effects of Marijuana in the workplace

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Introductions

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Topics

- 1. Marijuana Overview**
- 2. Workplace Safety – Workers who come to work impaired**
- 3. Transportation Safety**
- 4. Workforce Shortage**
- 5. Increased Costs & Liability**

Marijuana Overview

– Is it safe for the workplace?

- No psychoactive substance is entirely safe. The part of the marijuana that gets you high, THC, is NOT a harmless drug.
- Potency has greatly increased to 15%-20% for weed to 70%-90% for concentrates (compared to 3% - 5% in the 1970s)
- THC can be addictive (between 9% to 30% may develop a cannabis use disorder).
- Cannabis Use Disorder (CUD) is recognized in the DSM V.
- Vaping has become the preferred method of using the drug and the CDC reported 2700 hospitalizations and 60 deaths in 2020
- THC contributes to many health problems (e.g., mental illness, learning and memory impairment and now pregnancy)

Workplace Safety

Cognitive Functioning

The heaviest cannabis users, compared to infrequent users, showed..

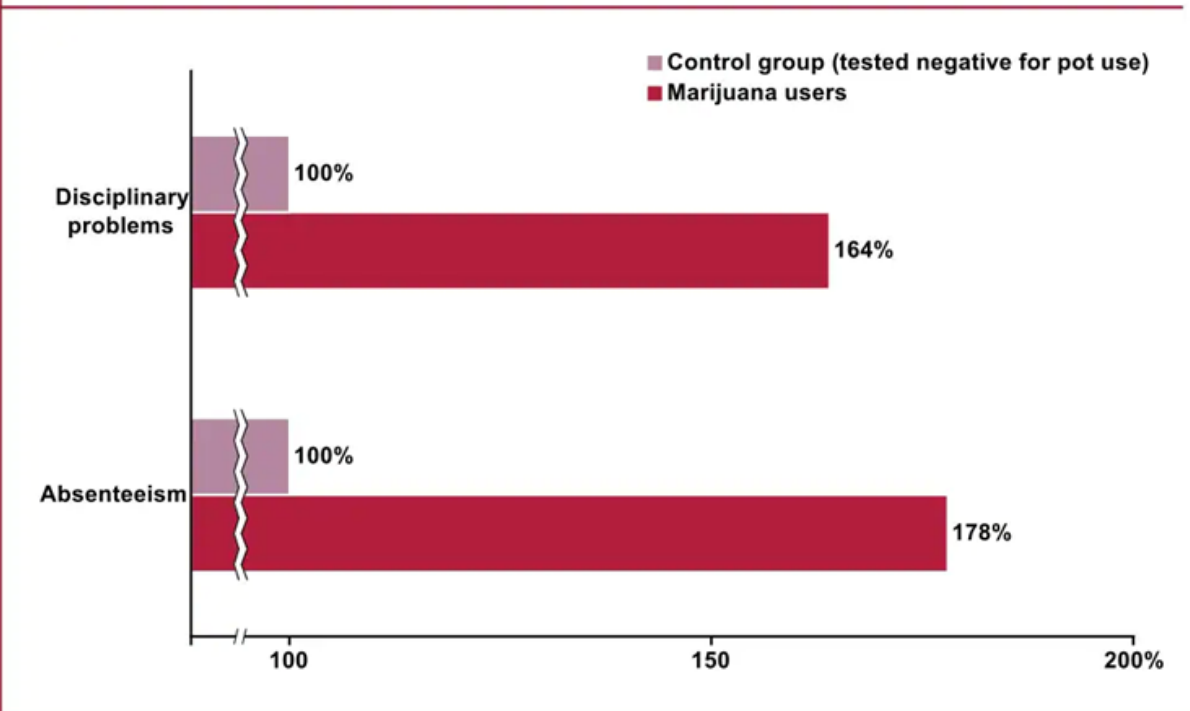
- Greater disrupted connectivity in brain circuit related to motivation and mood
- Lower/diminished learning achievement
- Frequency and quantity of cannabis use were associated with decreased functional connectivity of the brain.
- Earlier age at cannabis initiation and more frequent use was associated with poorer executive control and academic performance.

Ray of hope - Learning and memory impairments may recover, at least to some degree, after a period of abstinence

Workplace Safety

- Higher percentages of work-injury and illness among persons reporting an average of ≤ 6 hours of sleep per night, binge drinking, and recent use of painkillers to get high and marijuana
- Presenteeism/absenteeism
 - Nearly twice as many marijuana users as opposed to alcohol users miss work “because you don’t want to be there”

Pot users miss work more frequently and have more disciplinary problems than their colleagues



Transportation Safety

How long is somebody affected by THC?

Figure 4

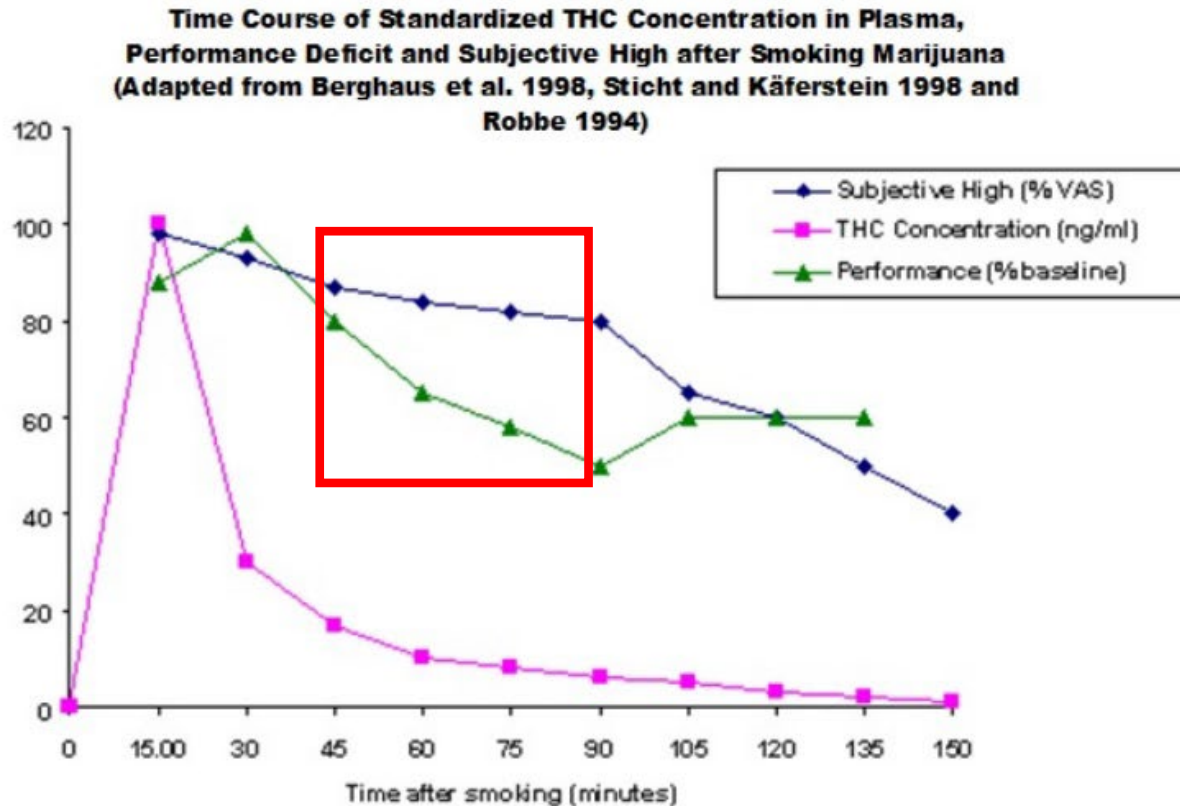


Figure 4:

Violet is THC concentration in blood stream
Blue is the subject's perception of being high
Green is actual driving performance vs baseline
 (Data likely reflects low-level THC)

Transportation Safety

In WA and CO, traffic deaths in which drivers tested positive for THC has dramatically increased since commercialization:

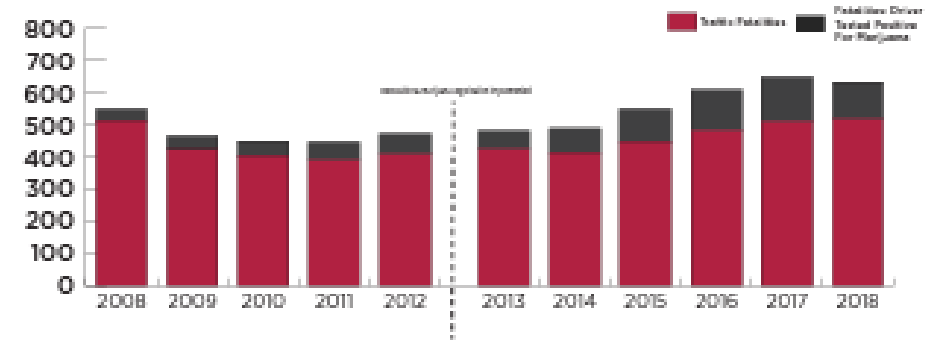
- CO: 12% in 2103, 18% in 2018
- WA: 9% in 2012, 21% in 2017

Data from NHTSA indicates the percent of THC positive cases in fatal crashes appears to be now equivalent to percent of alcohol positive cases in fatal crashes

How does this affect you?

- Other drivers who are impaired putting your employees at risk
- Your employees who might themselves be impaired
- Passenger Safety for students riding school buses and riders on charter buses

COLORADO TRAFFIC FATALITIES WHERE THE DRIVER TESTED POSITIVE FOR MARIJUANA



(Colorado Department of Transportation, 2019)

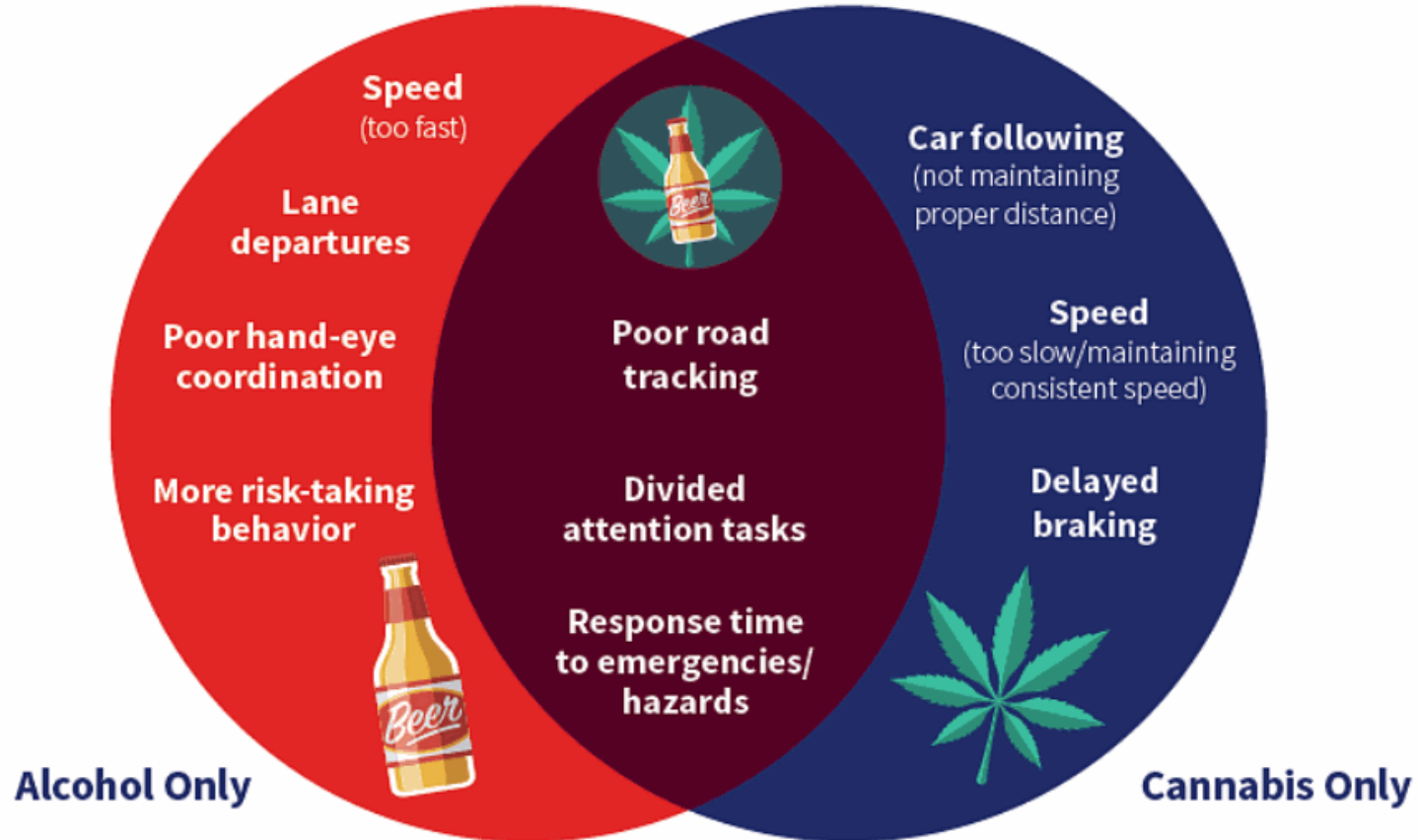


47% of Colorado drivers who tested positive for marijuana at a level of 5.0+ THC, also had a BAC of 0.08 or higher.

(Colorado Division of Criminal Justice, 2019)

Transportation Safety

Negative Effects of Alcohol and Cannabis on Brain Functions and Driving Skills



Sources: Bondallaz et al., 2016; Sewell, Polling, & Sofuoglu, 2009.

Workforce Shortage

- Employers already having trouble finding employees and have applicants walk out when they find they must have a drug test
- As marijuana becomes legal a higher portion of the population will partake thus disqualifying them from safety sensitive occupations
- **33%** of people who use pot come to work stoned

Workforce Shortage

- American workers are failing drug tests at the highest rate in 16 years, despite a decrease in use of other drugs
 - States that have legalized recreational marijuana saw a **118.2%** increase in tests positive for marijuana from 2012 – 2020.
 - States with only medical marijuana legislation saw a **68.4%** increase
 - States with no marijuana legislation saw a **57.9%** increase
- Testing
 - No breathalyzers
 - Metabolites
 - Blood vs. urine tests



Workforce Shortage

Hiring and Testing

Some states have reported difficulty in hiring workers

What does the current MN bill say

- An employer may not refuse to hire a job applicant or discipline or discharge an employee because the applicant or employee engages in or has engaged in the use or enjoyment of lawful consumable products, if the use or enjoyment takes place off the premises of the employer during nonworking hours.
- An employer must not request or require a job applicant to undergo cannabis testing or drug and alcohol testing solely for the purpose of determining the presence or absence of cannabis as a condition of employment unless otherwise required by state or federal law.
- An employer must not refuse to hire a job applicant solely because the job applicant submits to a drug and alcohol test authorized by this section and the results of the drug and alcohol test indicate the presence of cannabis unless otherwise required by state or federal law.
- Bottom line: the one exception is if you write testing into your handbook.

Increased Costs & Liability

Employers will bear the increased expense through:

1. Increased workers compensation costs for injuries to impaired workers and those around them

Washington state from 2011 to 2014 found that the percentage of work-related injuries was significantly higher among marijuana users 8.9% compared to nonusers

2. Assignment of liability in the event of highway accidents even when an employed driver is not impaired, yet still fails a post-accident drug test

Increased Costs & Liability

3. Increased healthcare costs (drug treatment, mental illness, pregnancy complications)

- Virtually every scientific review including a 2016 World Health Organization report and a 2017 National Academy of sciences study makes the same point marijuana is addictive and harmful
- Addiction rates doubled - about 30% of marijuana users have some form of CUD
- In 2018 the journal of American Medical Association said the opioid crisis appears to be worsening where marijuana has been legalized
- Researchers have found a connection between marijuana use and lung damage as well as serious cardiovascular problems including hypertension, myocardial infraction, cardiomyopathy arrhythmias stroke and cardiac arrest



(Colorado Department of Public Health and Environment, 2013-2017; Alaska Department of Health and Social Services, 2020).

THANK YOU !
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Questions and Discussion

