CITY COUNCIL MEETING
MEMORANDUM

TO: Mayor and Council Members
Marlene Best, City Manager
Shawn Hagerty, City Attorney

FROM: Annette Ortiz, CMC, City Clerk

DATE: March 27, 2024

SUBJ: Updated Council Meeting Materials – March 27, 2024

PUBLIC HEARING:

(11) Public Hearing for the Adoption of the Commercial Cannabis Retail Business Application Process, Including Procedures and Fees, and Finding the Action is Covered by the Previously Adopted Mitigated Negative Declaration for the Santee Cannabis Business Ordinance Pursuant to the California Environmental Quality Act. (Planning and Building – Sawa)

The attached correspondence for above mentioned Item was received and is provided for your consideration.

From:	Kathleen Lippitt
To:	John Minto; Clerk Info; Ronn Hall; Laura Koval; Dustin Trotter; Wendy Stratton
Subject:	Please reconsider bringing marijuana businesses into Santee
Date:	Friday, March 22, 2024 1:47:03 PM
Attachments:	US seizes pot-growing houses tied to China-based criminals.docx Workplace MJ use was associated with a nearly 2x increased risk of workplace injury (RR 1.97, 95%CI 1.32-2.93).pdf More Teens Who Use Marijuana Are Suffering From Psychosis.docx Gov Proposes Using 100Million In MJ Tax Revenue to Help Close State Budget Deficit, As He Commits to 'Strengthen' Industry.docx Prop 47 overhaul - summary.docx MJ dispensaries sell to thousands of minors – text I left out of my edited version.docx

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Dear Mayor Minto and fellow councilmembers,
I have watached with sadness as Santee has gone from prioritizing your residents and what is in their best interest to allowing the marijuana industry to chip away at your one staunch resolve.

As a concerned mother, grandmother, public health practitioner, and drug policy consultant, I have worked to protect youth from harmful and addictive drugs.

Please remember who your city's authentic community stakeholders are; your youth leaders, the faith community, school representatives, addiction specialists, the medical community, law enforcement, public health and safety experts. These stakeholders are not paid to show up and advocate for bringing marijuana businesses to the city. They are not marijuana land use consultants, lawyers, advocates, applicants, or entrepreneurs with economic conflicts of interest that will undermine your ability to serve your constituents and their priorities.

I hope each one of you asks some important questions:

- Ø Will marijuana businesses enhance or undermine the lives of your residents?
- Ø Will marijuana businesses enhance your city's reputation as a family-friendly city to live, work, recreate, raise children, shop and/or visit?
- Ø Would you welcome a new lowered community standard of drug normalization?
- Ø Would you want your children to become marijuana users, budtenders, victims of driving under the influence of marijuana, injured by a marijuana user in a workplace injury incident, have their academic potential compromised, or risk their mental health."
- Ø Will permitting the availability, sale, access, and use of high potency commercial interests and products that raise the risk of addiction, mental health problems and homelessness be a fair exchange for taxes revenues?
- Ø Drug abuse and addiction not only destroy the lives of users but the lives of those who love them but drive criminal offenses—shoplifting, harassment, vehicular burglary which in many cities have gone unpunished. Marijuana businesses are unconcerned.

If the answer is, "no", then show the same concern for those you were elected to serve. Consider what the success of these businesses in your city will mean for your city and its residents, especially your youth and other vulnerable populations."
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Kathleen M. Lippitt, MPH
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US seizes pot-growing houses tied to China-based criminals

Updated: 1:46 PM PDT Apr 4, 2018

SACRAMENTO, Calif. (AP) —

Hundreds of federal and local law enforcement agents have seized roughly 100 Northern California houses purchased with money wired to the United States by a Chinese-based crime organization and used to grow massive amounts of marijuana illegally, authorities said Wednesday.

The raids culminate a months-long investigation focusing on dozens of Chinese nationals who bought homes in seven counties. Most of the buyers were in the country legally and came from as far away as Georgia, Illinois New York, Ohio and Pennsylvania, U.S. Attorney McGregor Scott said.

Much of the pot was shipped back to those states through Atlanta, Chicago and New York City.

The drug is legal in California but requires permits to grow and can't be sent across state lines. It is still banned by the U.S. government. Black-market pot farms are often set up in the inland region where authorities carried out the raids because it's cheaper than the San Francisco Bay Area.

"This criminal organization has put a tremendous amount of equity into these homes through these wire transfers coming in from China and elsewhere," Scott said in an interview with The Associated Press. "We're going to take it. We're going to take the house. We're going to take the equity."

None of the buyers was arrested as authorities seized the houses in what the U.S. Department of Justice called one of the largest residential forfeiture operations ever. Prosecutors will now ask judges to transfer ownership to the U.S. government.

Authorities were trying to learn if the buyers were brought to the United States for the purpose of buying the houses and were indebted to the criminal organization. They are not ruling out criminal charges but have filed none at this stage of the investigation.

Down payments were financed by money wired from Fujian Province in China, authorities said. Many of the transfers stayed just below the $50,000 limit imposed by the Chinese government.

The buyers generally used the same Sacramento real estate agents, borrowed from private lenders

who usually charge higher interest rates and require larger down payments than traditional banks, and used straw buyers who purchased the properties on behalf of the real owners.

A message left with the Chinese consulate general's office in San Francisco was not immediately returned.

The federal crackdown on the illegal pot operations comes as California is months into creating the world's largest legal marijuana market amid uncertainty about whether the U.S. government will try to shut it down.

More than 500 officers, including SWAT teams, fanned out over two days to search and seize about 75 houses and two real estate businesses. The remaining 25 houses were raided previously.

They seized more than 36,000 marijuana plants, 115 kilograms (253 pounds) of processed marijuana, at least $68,500 in cash and 15 firearms, including one that had been stolen. They also seized generators, one of which was strong enough to power three normal homes.

Most of the suburban houses were valued at $300,000 to $500,000, though some were in rural areas and some in more upscale neighborhoods.

Black-market pot operations have been a widespread problem in Northern California for at least a dozen years. Sacramento officials have estimated that there might be as many as 1,000 illegal grow houses in California's capital city.

Suburban tract homes are transformed with high intensity lights and irrigation pipes, gutted to add ventilation pipes and air filtration systems to vent the tell-tale smell through the attic, and stacked with tables full of marijuana plants that could produce multiple crops each year.

"It's like industrial agriculture," Scott said.

Authorities often are alerted when the houses catch fire because of illegal electrical hookups or when they are found to be using extraordinary amounts of electricity to power the equipment.

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QUANTITATIVE RESEARCH

Workplace and non-workplace cannabis use and the risk of workplace injury: Findings from a longitudinal study of Canadian workers

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Received: 24 March 2023 / Accepted: 31 May 2023

Abstract

Objectives Findings of previous studies examining the relationship between cannabis use and workplace injury have been conflicting, likely due to methodological shortcomings, including cross-sectional designs and exposure measures that lack consideration for timing of use. The objective was to estimate the association between workplace cannabis use (before and/or at work) and non-workplace use and the risk of workplace injury.

Methods Canadian workers participating in a yearly longitudinal study (from 2018 to 2020) with at least two adjacent years of survey data comprised the analytic sample ($n=2745$). The exposure was past-year workplace cannabis use (no past-year use, non-workplace use, workplace use). The outcome was past-year workplace injury (yes/no). Absolute risks and relative risks (RR) with 95% confidence intervals (CIs) were estimated between workplace and non-workplace cannabis use at one time point and workplace injury at the following time point. Models were adjusted for personal and work variables and were also stratified by whether respondents' jobs were safety-sensitive.

Results Compared to no past-year cannabis use, there was no difference in workplace injury risk for non-workplace cannabis use (RR 1.09, 95%CI 0.83–1.44). However, workplace use was associated with an almost two-fold increased risk of experiencing a workplace injury (RR 1.97, 95%CI 1.32–2.93). Findings were similar for workers in safety-sensitive and non-safety-sensitive work.

Conclusion It is important to distinguish between non-workplace and workplace use when considering workplace safety impacts of cannabis use. Findings have implications for workplace cannabis use policies and substantiate the need for worker education on the risks of workplace cannabis use.

Résumé

Objectifs Les résultats d'études antérieures portant sur la relation entre la consommation de cannabis et les accidents du travail sont contradictoires, probablement en raison de lacunes méthodologiques, notamment les études transversales et les mesures de l'exposition qui ne tiennent pas compte du moment de la consommation. L'objectif était d'estimer l'association entre la consommation de cannabis sur le lieu de travail (avant et/ou pendant le travail) et la consommation en dehors du lieu de travail et le risque d'accident du travail.

Méthodes Les travailleurs canadiens participant à une étude longitudinale annuelle (de 2018 à 2020) avec au moins deux années adjacentes de données d'enquête constituaient l'échantillon analytique (n = 2 745). L'exposition était la consommation de cannabis au travail au cours de l'année écoulée (pas de consommation au cours de l'année écoulée, consommation en dehors du lieu de travail, consommation sur le lieu de travail). Le résultat était l'accident du travail de l'année écoulée (oui/

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non). Les risques absolus et les risques relatifs (RR) avec des intervalles de confiance (IC) de 95% ont été estimés entre la consommation de cannabis sur le lieu de travail et en dehors du lieu de travail à un moment donné et l'accident du travail au moment suivant. Les modèles ont été ajustés pour tenir compte des variables personnelles et professionnelles et ont également été stratifiés selon que les emplois des répondants étaient ou non sensibles à la sécurité.

Résultats Par rapport à l'absence de consommation de cannabis au cours de l'année écoulée, il n'y avait pas de différence dans le risque d'accident du travail en cas de consommation de cannabis en dehors du lieu de travail (RR 1,09, IC à 95% 0,83–1,44). Cependant, la consommation sur le lieu de travail était associée à un risque presque deux fois plus élevé de subir un accident du travail (RR 1,97, IC à 95% 1,32–2,93). Les résultats étaient similaires pour les travailleurs exerçant des activités sensibles à la sécurité et pour ceux qui ne le sont pas.

Conclusion Il est important de distinguer entre la consommation en dehors du lieu de travail et la consommation sur le lieu de travail lorsqu'on étudie les effets de la consommation de cannabis sur la sécurité sur le lieu de travail. Les résultats ont des implications pour les politiques relatives à la consommation de cannabis sur le lieu de travail et justifient la nécessité d'informer les travailleurs sur les risques liés à la consommation de cannabis sur le lieu de travail.

Keywords Cannabis · Occupational injuries · Accidents, occupational · Workplace · Occupational groups · Longitudinal studies · Humans

Mots-clés Cannabis · lésions professionnelles · accidents du travail · lieu de travail · groupes professionnels · études longitudinales · humains

Introduction

The legal status of cannabis use continues to evolve worldwide. In Canada, a legal medical cannabis program has existed since 2001, while cannabis for non-medical purposes became legal in October 2018. In the United States, an increasing number of states have implemented regulations to allow medical and non-medical use of cannabis. Alongside these changes have come greater accessibility to cannabis (Myran et al., 2022) and increased use among the working-age population (Fischer et al., 2021; Frone, 2019). Public perceptions of cannabis use have also become increasingly positive (Carliner et al., 2017).

Against this backdrop have been calls for more research into understanding the potential impacts of cannabis use on workplace safety (Howard & Osborne, 2020). The acute cognitive and psychomotor impairments that result from cannabis use (Broyd et al., 2016) have the potential to adversely impact a worker's ability to perform their work safely, particularly for workers in safety-sensitive occupations (i.e., where impaired performance could result in injury to employees or others and/or damage to the property or environment (Els & Straube, 2016)). Yet, studies examining the relationship between cannabis use and risk of workplace injury have yielded conflicting findings, with some demonstrating a greater risk of workplace injury associated with cannabis use and others finding no association (Biasutti et al., 2020).

The inconsistency in prior findings may have resulted from several critical methodological limitations. First, prior studies have relied primarily on cross-sectional data collection. The lack of temporality between the exposure and outcome is problematic given cannabis may be used therapeutically following injury to treat symptoms, such as pain, sleep problems, and poor mental health (Leung et al., 2022).

Second, consistent with other research on worker substance use (Frone, 2019), most studies on cannabis and workplace injury used context-free measures of self-reported lifetime or past-year use that could include use outside work hours. Frone developed a comprehensive model on the associations of worker substance use to workplace outcomes (injuries, performance, attendance) (Frone, 2019). A key feature of this model is that the temporal context of substance use and impairment is matched to specific work outcomes (two types of attendance outcomes and several performance outcomes, including workplace injuries). Notably, the model suggests that workplace cannabis use (use in close proximity to work) is a more critical risk factor for workplace injuries than non-workplace cannabis use (use outside of work). However, to our knowledge, prior studies on cannabis use and workplace injuries have not considered this distinction. With no widely accepted measure of cannabis-related impairment available, workplace use may act as a proxy for workplace impairment (Frone, 2019).

Finally, most studies of cannabis use and workplace injury have included workers in various occupations and industries without exploring whether underlying job hazards modify this association (Biasutti et al., 2020). As noted in Frone's model, associations between employee substance use and workplace outcomes may be conditional on several moderating variables, including occupation (Frone, 2019). Combining workers in safety-sensitive and non-safety-sensitive occupations may have attenuated the association between cannabis use and workplace injury, as workers in

non-safety-sensitive jobs are inherently less likely to experience an injury due to the nature of their work.

The present study aimed to address these limitations using data from a longitudinal study of Canadian workers. Our objectives were to (1) estimate the association between workplace and non-workplace cannabis use and the risk of workplace injury, compared to no cannabis use; and (2) examine whether the relationship between workplace and non-workplace cannabis use and workplace injury is modified by type of occupation (safety-sensitive versus non-safety-sensitive).

Methods

Study design and sample recruitment

Data come from a national, split-panel longitudinal study of Canadian workers (Carnide et al., 2021, 2022). Individuals were eligible to enter the cohort at each study wave if they were at least 18 years of age, currently employed, and working 15 or more hours per week for another person or business employing five or more persons. Respondents were recruited mainly from pre-existing panels of households who agreed to participate in occasional surveys, with a small number also recruited through random digit dialing. At each time point, consenting respondents were recontacted in subsequent waves. Additional replenishment samples of respondents were added at each follow-up wave.

The current analysis is limited to workers participating in at least two adjacent surveys from the first three yearly waves (2018–2020; denoted as Time 1[T1]-Time 3[T3]). The analytic sample included 2745 participants: 445 who only completed the T1 and T2 surveys; 1130 who only completed the T2 and T3 surveys; and 585 who completed all three surveys. This latter group appears twice in the analytic sample, contributing one set of data from T1 and T2 and another set from T2 and T3 (see Supplemental File 1 for more detail on participation and the derivation of the analytic sample).

All respondents provided informed consent to participate. The study protocol was approved by the University of Toronto Health Sciences Research Ethics Board (reference 36019 and 37602).

Measures

Participants completed surveys online or by telephone. Cannabis use and covariates were assessed at T1 and T2, and workplace injury was assessed at T2 and T3, respectively. Thus, information on cannabis use and covariates was collected a year before the assessment of workplace injury.

Outcome: workplace injury

Participants were asked a single yes/no item: "*During the past 12 months, have you experienced an incident that resulted in injury to yourself while working?*".

Exposure: workplace and non-workplace cannabis use

Using questions adapted from general population surveys (Health Canada, 2017; Statistics Canada 2017a), participants were asked about lifetime cannabis use and their frequency of past-year use, ranging from never to 5–7 days per week. Respondents reporting past-year use reported their frequency of using cannabis within 2 h before work, during work (excluding breaks), and during breaks, adapting questions from previous research (Frone, 2006). Respondents were then categorized into one of three groups: no past-year use; past-year non-workplace use (use in the past year, but not before/at work); and past-year workplace use (use in the past year, including before/at work).

Cannabis use characteristics

In addition to frequency of cannabis use, information on the self-reported purpose of use and primary method of consumption was also collected.

Covariates

Personal characteristics Data were collected on sociodemographic factors, including age, sex, province/territory, and highest level of education. Measures of self-rated general health, past-year alcohol use frequency, and current frequency of cigarette smoking used items from the Canadian Community Health Survey (Statistics Canada, 2016a).

Work-related characteristics Using questions from the Canadian Labour Force Survey (Statistics Canada, 2016b), data were collected on average weekly work hours, usual work schedule, job permanency, and job tenure. Workers also reported whether they had a supervisory role in their workplace.

Informed by the OHS Vulnerability Measure (Smith et al., 2015), a new item was developed, asking workers whether they participated in hazardous or safety-sensitive work tasks at least weekly in the past year (e.g., driving a motor vehicle; working from heights 2 m/6.5 feet or more above ground; operating or working close to equipment/machinery/tools).

Respondents were asked about their usual contact with their supervisor in the past year ("*I have a lot of contact with*

my supervisor during a typical workday"), with responses ranging from strongly agree to strongly disagree (Frone & Trinidad, 2012). Frequency of performing job duties in front of others was assessed using an adapted item ("*How often do you usually perform your job duties in front of or near other people*"), with responses ranging from never to very often (Frone, 2003).

Workplace characteristics Industry, workplace size, and workplace smoking restrictions were measured using items from Statistics Canada surveys (Statistics Canada, 2016a, 2016b, 2017b). Finally, a single yes/no item was used to identify workers' awareness of a formal substance use policy in their workplace.

Analysis

Descriptive and regression analyses were generated using SAS software version 9.4 (SAS Institute Inc., Cary, NC, USA) and R software (2020).

The relative risks (RR) and associated 95% confidence intervals (CIs) of experiencing a workplace injury associated with workplace and non-workplace cannabis use were obtained from absolute risks (ARs) (Localio et al., 2007), estimated from logistic regression models using the method of predictive margins (or marginal standardization) (Graubard & Korn, 1999). Standard errors were adjusted for clustering to account for the inclusion of 585 respondents who participated in all three surveys and contributed two observations to the analyses. Models compared workplace and non-workplace use with no past-year use. Unadjusted models were initially estimated, followed by a model fully adjusted for personal, work and workplace characteristics (including safety-sensitive work), previous work injury, an indicator for time (T1/T2, T2/T3), and survey mode (online only $n=1661$, telephone only $n=672$, mixed $n=412$). Age, frequency of cigarette smoking, alcohol consumption, work hours, job tenure, and workplace size were treated as continuous, with all other variables treated as nominal. Models were also run separately by safety-sensitive work status.

Respondents lost to follow-up were more likely to be younger, be female, report workplace cannabis use, have less than a post-secondary education, be in a supervisory role, and be in non-permanent jobs. There was also variation across industries (details upon request). To address unit nonresponse, each respondent was assigned a nonresponse adjustment weight, proportional to the inverse of the propensity to participate in the corresponding wave. Weights were applied to the regression analyses and results from unweighted and weighted models were similar (details upon request). Only the weighted regression results are reported.

A total of 123 respondents (4.5%) were missing data, on the injury outcome ($n=8$), workplace cannabis use ($n=42$), and/or one or more covariates ($n=84$) (see Supplementary File 2, Tables S1 and S2). To address item nonresponse, multiple imputation was implemented using a fully conditional specification approach with IVEware version 0.3 (2021). All variables included in the analysis were included in the imputation models, which used 20 imputation cycles. Parameters were estimated in each imputed dataset and pooled using Rubin's rules (Rubin, 1987).

Results

Sample characteristics

Information on the personal, work and workplace, and cannabis use characteristics (using unweighted data) are shown in Supplementary File 2 Tables S1–S4. The mean age of the sample was 46.2, with over half (58.5%) being male. Over a third were in a safety-sensitive job.

Cannabis and workplace injury in the sample

Among all workers, 65.5% did not use cannabis in the past year, 27.4% reported non-workplace use in the past year, and 7.0% reported workplace use (Table 1, using weighted data). The percentages were similar for respondents in safety-sensitive and non-safety-sensitive jobs.

Overall, 11.3% of workers in the sample experienced a workplace injury. When stratified by safety-sensitive work, 22.0% of workers in safety-sensitive jobs and 4.9% in non-safety-sensitive jobs had a workplace injury.

Relationship between workplace and non-workplace cannabis use and workplace injury

Table 2 provides the ARs and RRs for the relationship between workplace and non-workplace cannabis use and workplace injury. Among all respondents, the adjusted AR of workplace injury was 10.22% (95%CI 8.45–11.98) for no past-year cannabis use, 11.14% (95%CI 8.68–13.61) for non-workplace use, and 20.13% (95%CI 12.99–27.27) for past-year workplace use. Compared to no past-year use, the risk of experiencing a workplace injury was 1.97 times (95%CI 1.32–2.93) higher among workers reporting workplace use. No statistically elevated association was seen for non-workplace use (RR 1.09, 95%CI 0.83–1.44).

Table 1 Cannabis use status and workplace injury among survey respondents, overall and stratified by safety-sensitive work (weighted data)

	%	95% LCL[a]	95% UCL
Cannabis use			
All respondents			
No past-year use	65.5	63.3	67.7
Past-year non-workplace use	27.4		
Past-year workplace use	7.0	5.8	8.3
Respondents in safety-sensitive jobs			
No past-year use	64.7	61.0	68.5
Past-year non-workplace use	27.8	24.2	31.3
Past-year workplace use	7.5	5.4	9.6
Respondents in non-safety-sensitive jobs			
No past-year use	66.0	63.3	68.7
Past-year non-workplace use	27.3	24.8	29.8
Past-year workplace use	6.7	5.2	8.3
Workplace injury			
All respondents			
Yes	11.3	9.8	12.8
No	88.7	87.2	90.2
Respondents in safety-sensitive jobs			
Yes	22.0	18.6	25.3
No	78.0	74.7	81.4
Respondents in non-safety-sensitive jobs			
Yes	4.9	3.7	6.1
No	95.1	93.9	96.3

Abbreviations: *LCL*, lower confidence limit; *UCL*, upper confidence limit

[a]Confidence intervals are not provided when no data are imputed for a particular category

When stratified by safety-sensitive work, ARs of workplace injury among workers in safety-sensitive jobs were 20.14% (95%CI 16.22–24.06) for those reporting no past-year use, 23.30% (95%CI 17.80–28.80) for those reporting non-workplace use, and 31.15% (95%CI 18.51–43.79) among workers reporting workplace use. ARs of workplace injury for workers in non-safety-sensitive jobs were 4.27% (95%CI 2.97–5.57) for no past-year use, 4.19% (95%CI 2.20–6.18) for non-workplace use, and 12.30% (95%CI 5.21–19.40) for workplace use. When compared to no past-year use, non-workplace use was not statistically significantly associated with the risk of workplace injury among workers in safety-sensitive and non-safety-sensitive jobs. On the other hand, for workers in both safety-sensitive (RR 1.55, 95%CI 0.97–22.46) and non-safety-sensitive (RR 2.87, 95%CI 1.48–5.57) jobs who reported workplace use, the risk of experiencing a workplace injury was elevated compared to workers not using cannabis in the past year, though this finding was not statistically significant for workers in safety-sensitive jobs.

Discussion

In this longitudinal study, we evaluated the relationship between past-year cannabis use and the risk of workplace injury, differentiating workers who used cannabis before and/or at work (workplace use) from those using outside of work only (non-workplace use). While no statistically elevated relationship existed between non-workplace use and workplace injury, workplace use was associated with an almost two-fold increase in the risk of workplace injury. This pattern of findings was seen among workers in both safety-sensitive and non-safety-sensitive jobs.

Study results bring greater clarity to the question of whether cannabis use increases the risk of experiencing a workplace injury, an issue that the conflicting findings of previous studies have hampered. Findings suggest that, when thinking about the potential occupational safety impacts of a worker's cannabis use, it is important to consider when that use is taking place. More specifically, only use in close temporal proximity to work appears to be a risk factor for workplace injuries, not use away from work. Our findings support Frone's conceptual model of worker substance use and workplace productivity (Frone, 2019). Our results are also consistent with at least one previous study of employed adolescents that found workplace substance use (alcohol and cannabis combined) was associated with greater odds of workplace injury, but not general substance use (Frone, 1998). Another study found workplace cannabis use to be associated with poor work performance, while no relationship was seen for after-work use (Bernerth & Walker, 2020).

Further, the findings of our study may also explain the source of inconsistencies in prior research on cannabis use and workplace injury. Whether or not cannabis use was associated with workplace injury in past research was likely a function of the proportion of the sample engaging in workplace use. A study including a small proportion of workers engaging in workplace use may have null findings, and a larger proportion may result in a significant positive association. Therefore, assessments of general cannabis use may not lead to appropriate conclusions. In our sample, ~ 18% of respondents reporting past-year cannabis use used before and/or at work. If we had only considered any past-year cannabis use, we would have found that cannabis use was only marginally associated with an increased risk of workplace injury compared to no use (RR 1.25, 95%CI 0.96–1.63; details upon request). In addition, we would have missed the critical contribution of the context of this use. This has implications for how studies examining this issue may inform future research and workplace policy. When using measures of general cannabis use, null results suggest cannabis is not a concern for workplace injuries, while a significant positive association suggests that *any* cannabis use is problematic and should be the focus of research and policy aimed at injury reduction. However, our results clearly

Table 2 Absolute risks and relative risks of workplace injury by cannabis use status, among all respondents and stratified by safety-sensitive work (weighted data)

Cannabis use	Absolute risks						Relative risks					
	Unadjusted			Fully adjusted[a]			Unadjusted			Fully adjusted[a]		
	AR	95% LCL	95% UCL	AR	95% LCL	95% UCL	RR	95% LCL	95% UCL	RR	95% LCL	95% UCL
All respondents												
No past-year use	9.74	8.04	11.45	10.22	8.45	11.98	1.00			1.00		
Past-year non-workplace use	11.69	8.19	15.19	11.14	8.68	13.61	1.20	0.86	1.68	1.09	0.83	1.44
Past-year workplace use	24.25	15.23	33.28	20.13	12.99	27.27	2.49	1.65	3.75	1.97	1.32	2.93
Stratified by safety-sensitive work												
Safety-sensitive jobs												
No past-year use	19.25	15.58	22.92	20.14	16.22	24.06	1.00			1.00		
Past-year non-workplace use	23.86	16.12	31.61	23.30	17.80	28.80	1.24	0.86	1.79	1.16	0.86	1.56
Past-year workplace use	38.44	25.66	51.21	31.15	18.51	43.79	2.00	1.36	2.93	1.55	0.97	2.46
Non-safety-sensitive jobs												
No past-year use	4.15	2.87	5.42	4.27	2.97	5.57	1.00			1.00		
Past-year non-workplace use	4.25	2.23	6.27	4.19	2.20	6.18	1.02	0.58	1.81	0.98	0.54	1.77
Past-year workplace use	14.72	4.75	24.69	12.30	5.21	19.40	3.54	1.68	7.46	2.87	1.48	5.57

Abbreviations: *AR*, absolute risk; *LCL*, lower confidence limit; *RR*, relative risk; *UCL*, upper confidence limit

[a]For analyses of all respondents, adjusted for age, sex, province/territory, education, general health, alcohol use, cigarette smoking, average weekly work hours, usual work schedule, job permanency, job tenure, supervisory role, safety-sensitive work, usual contact with supervisor, job visibility, industry, workplace size, workplace smoking restrictions, workplace substance use policy, survey wave, and survey mode. For stratified analyses, models were adjusted for the same covariates, excluding safety-sensitive work

demonstrate that by considering the temporal context of cannabis use, future research, workplace interventions, and workplace policies focusing on workplace injury mitigation should focus on cannabis use before or during work hours, which can result in cognitive and psychomotor impairment on the job.

Study findings also suggest that, irrespective of whether a worker's job is safety-sensitive, only workplace cannabis use poses a risk to future workplace injury. Using relative effect measures, the risk associated with workplace use was larger among workers in non-safety-sensitive jobs (RR 2.87) than in safety-sensitive work (RR 1.55). However, this finding should be interpreted along with the absolute risks. The baseline risk (among unexposed) was considerably higher among those in safety-sensitive jobs (20.14%) compared to those in non-safety-sensitive jobs (4.27%). This likely contributed to the larger relative increase in risk among workers in non-safety-sensitive work. Furthermore, injuries incurred by those in safety-sensitive positions are more likely to be severe. Still, the increase in risk associated with workplace cannabis use among workers in non-safety-sensitive jobs should not be discounted, as it represents a preventable increase in risk.

Certainly, results from our study should be replicated in other samples. The findings also do not diminish employers' legitimate concerns regarding workplace impairment. Nonetheless, zero-tolerance policies that prohibit cannabis use entirely, including use outside of work, may be overly broad and are incompatible with the results of this study. In an increasingly legalized environment, more nuanced approaches to workplace policies around cannabis use may be warranted, and could include employing minimum waiting periods after cannabis consumption when impairment is most likely present. For instance, it has been recommended that workers wait at least 6 to 12 h after inhalation and 8 to 12 h after ingesting cannabis before engaging in safety-sensitive tasks (MacCallum et al., 2022). The Occupational and Environmental Medical Association of Canada has more cautiously recommended waiting at least 24 h after consuming cannabis before engaging in safety-sensitive work (Occupational and Environmental Medical Association of Canada, 2018). Although more robust evidence on precise impairment windows is still required, using waiting periods in workplace policies derived from the best available evidence may be a reasonable approach and could include adding "safety cushions" to the length of the waiting period for safety-sensitive workplaces (Beckson et al., 2022).

Strengths and limitations

This study addressed several limitations of previous research. First, the longitudinal study design ensured that cannabis exposure preceded the workplace injury outcome. Second, our contextual measure of cannabis use differentiated between non-workplace and workplace use. Third, the study sample was large and broadly represented workers from various occupations and industries, allowing for stratified

analyses by the safety-sensitivity of the job. Finally, the findings were robust to adjustment for a wide range of potential confounders, and there was little item-level missing data.

The study also has limitations. We could not directly measure workplace impairment, nor could we account for the type of cannabis product used. In previous analyses (Carnide et al., 2021), we demonstrated that most workers reporting workplace use in our initial sample were using products with higher amounts of tetrahydrocannabinol (70.3%) or they did not know the amount (21.2%). However, due to questionnaire modifications, this information was not consistently recorded across survey cycles. Likewise, most of our sample used inhalation methods of consumption and we could not assess whether differences in risk exist between various forms of cannabis consumption. Our definition of use before work was limited to 2 h before work, which is likely insufficient to capture longer-lasting effects of ingestible methods. As such, study findings should not be interpreted as suggesting that 2 h be considered an appropriate cutoff beyond which using cannabis before work is safe. Furthermore, given that product type and method of consumption can influence the magnitude and duration of cannabis impairment, future research needs to assess the effects of different product formulations on risk of workplace injury.

The workplace injury outcome did not account for the severity or nature of the injury. Further, the lag between when cannabis use and workplace injury were measured may have resulted in some misclassification of exposure and attenuation of the findings. All data were based on self-report and social desirability bias may also have led to an underestimate of workplace cannabis use, and consequently, an underestimate of the association. Although we adjusted for several potential confounders, residual confounding is still possible, as we lacked information on other variables potentially associated with cannabis use and injury, such as co-occurring use of other substances, fatigue, and personality characteristics. Finally, the survey wave response rates were low (from 13.2% to 18.3%). However, the eligibility of those sampled but not contacted is unknown, making these rates conservative estimates of response. This large sample of Canadian workers is also similar in composition to the Canadian labour force, and those reporting cannabis use in this study exhibit a similar frequency of cannabis use, method of consumption, and age and sex demographics as seen in Canadian general population studies (Health Canada, 2020; Rotermann & Langlois, 2015).

Conclusion

Workplace injuries pose a substantial burden on workers, employers, and society. Workplace cannabis use represents a preventable risk factor for workplace injuries. Although the prevalence of workplace cannabis use in the overall working population is relatively low, recent data have shown that, among workers who use cannabis, approximately one in four do so before or at work (Carnide et al., 2021; Health Canada, 2020). Furthermore, cannabis use among workers and working-aged adults is increasing (Carnide et al., 2022; Fischer et al., 2021; Frone, 2019). Over time, it is conceivable that workplace use may also increase. Although educational campaigns on cannabis impairment have primarily focused on preventing cannabis-impaired driving, our study findings demonstrate that workers are an important segment of the population who merit workplace-focused education on the risks of workplace cannabis use. Specific messaging around use before safety-sensitive work is also warranted, as some workers may be unsure of or perceive minimal safety risk of using cannabis before safety-sensitive work (Carnide et al., 2022). Workers in safety-sensitive jobs may also be more likely to engage in workplace use (Carnide et al., 2021).

Results of this novel study suggest workplace cannabis use, not use outside of work, is a risk factor for workplace injuries. Additional research examining the impact of specific cannabis product characteristics on the risk of workplace injury is warranted.

Contributions to knowledge

What does this study add to existing knowledge?

- This study offers novel insights and greater clarity to the question of whether cannabis use increases the risk of experiencing a workplace injury, an issue that the conflicting findings of previous studies have hampered.
- Findings from this longitudinal study of Canadian workers clearly demonstrate that only cannabis use before and/or at work (workplace use) is a risk factor for workplace injuries, not use away from work (non-workplace use).
- This pattern of findings was seen among workers in both safety-sensitive and non-safety-sensitive jobs.

What are the key implications for public health interventions, practice, or policy?

- Workplace cannabis use represents a preventable risk factor for workplace injuries.
- While considerable efforts have been made to educate the public on cannabis-impaired driving, study findings underscore the need for worker-focused education on the risks of workplace cannabis use. Specific messaging around use before safety-sensitive work is important, given the potential catastrophic consequences of impairment in these roles.

- Findings suggest zero-tolerance workplace policies that prohibit cannabis use entirely, including use outside of work, may be overly broad. In an increasingly legalized environment, more nuanced approaches, such as employing minimum waiting periods after cannabis consumption, may be warranted.

Supplementary information The online version contains supplementary material available at https://doi.org/10.17269/s41997-023-00795-0.

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Availability of data and material The data underlying this article may be shared on reasonable request by contacting the corresponding author.

Code availability The SAS and R codes used in the analyses are available on reasonable request by contacting the corresponding author.

Declarations

Ethics approval This study was approved by the University of Toronto Health Sciences Research Ethics Board (reference 36019 and 37602).

Consent to participate All respondents provided informed consent.

Consent for publication Not applicable.

Conflict of interest The authors declare no competing interests.

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More Teens Who Use Marijuana Are Suffering From Psychosis

More potent cannabis and more frequent use are contributing to higher rates of psychosis, especially in young people

https://www.wsj.com/us-news/marijuana-depression-psychosis-869490d1?mod=Searchresults_pos1&page=1

When Braxton Clark was 18, he had a psychotic episode after using cannabis and was admitted to a hospital.

By Julie Wernau
Jan. 10, 2024 9:00 pm ET

When Braxton Clark was in high school, he used marijuana to control his emotions. At 17, he used it every day.

When he was 18, he had a psychotic episode after using cannabis and was admitted to a hospital. He spent the next three years sober. Then one day he tried cannabis again. Before long, he was back in the hospital.

“I had lost my faculties. I wasn’t making sense,” said Clark, now 24.

He has been sober a year and is thriving in college with the help of medication. Doctors have diagnosed him with a psychotic disorder, brought on by using cannabis.

Braxton is among thousands of teenagers and young adults who have developed delusions and paranoia after using cannabis. Legalization efforts have made cannabis more readily available in much of the country. More frequent use of marijuana that is many times as potent as strains common three decades ago is leading to more psychotic episodes, according to doctors and recent research.

“This isn’t the cannabis of 20, 30 years ago,” said Dr. Deepali Gershan, an addiction psychiatrist at Compass Health Center in Northbrook, Ill. Up to 20% of her caseload is patients for whom she suspects cannabis use triggered a psychotic episode.

Rates of diagnoses for cannabis-induced disorders were more than 50% higher at the end of November than in 2019, healthcare-analytics company Truveta said this week. The trend is contributing to the broader burden of caring for people who developed mental health and addiction problems during the pandemic.

Symptoms of serious mental disorders including schizophrenia often emerge in adolescence. Cannabis can't be isolated as the culprit in any particular case, but large studies show a clear link between frequent and more potent cannabis use and higher rates of psychosis, particularly in young users, said Dr. Deepak D'Souza, professor of psychiatry at Yale University School of Medicine.

At 17, Braxton Clark was using marijuana every day.

Even one psychotic episode following cannabis use was associated with a 47% chance of a person developing schizophrenia or bipolar disorder, a 2017 study in the American Journal of Psychiatry showed. The risk was highest for people 16-to-25-years-old and higher than for substances including amphetamines, hallucinogens, opioids and alcohol.

At Boston Children's Hospital, doctors are treating more children developing psychotic disorders from cannabis use. Nearly a third of adolescents they see for checkups say they are using cannabis. About a third of children using cannabis report experiencing hallucinations or paranoia.

Doctors and other health workers from the hospital's Adolescent Substance Use and Addiction Program hold weekly rounds to review cases. Recently, they discussed one young cannabis user who thought she was being followed. One young man had nearly crashed his car because he thought demons were chasing him. A teenager with cannabis-use disorder had threatened to kill his mother.

"This is a lot of my life, figuring out what to do with these kids," said Dr. Sharon Levy, the hospital's head of addiction medicine.

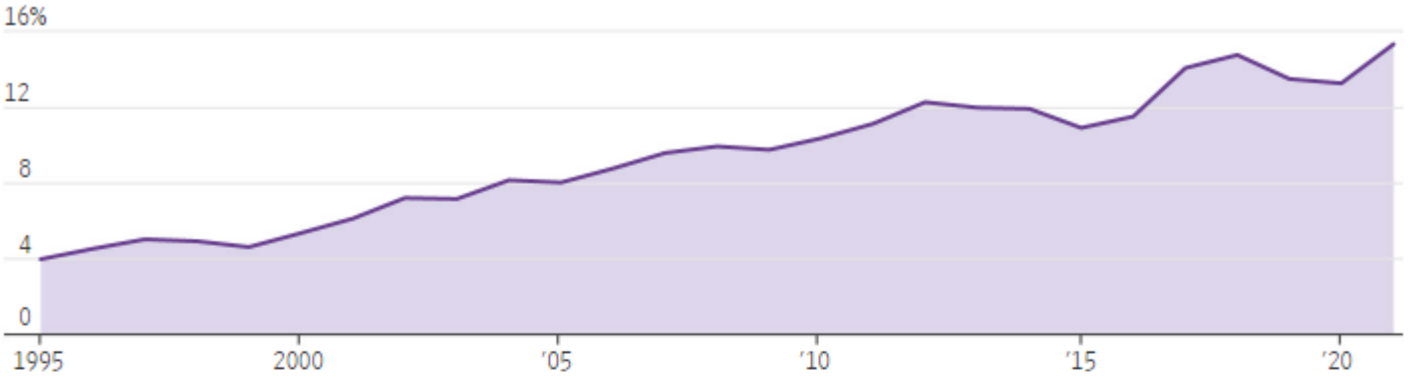
Until recently, marijuana referred to plant material. These days it can mean plant extract containing highly concentrated THC, the substance responsible for marijuana's intoxicating effects, or lab-created derivatives that were rare a couple of years ago.

The average THC content of cannabis seized by the Drug Enforcement Administration was 15% in 2021, up from 4% in 1995. Many products advertise THC concentrations of up to 90%.

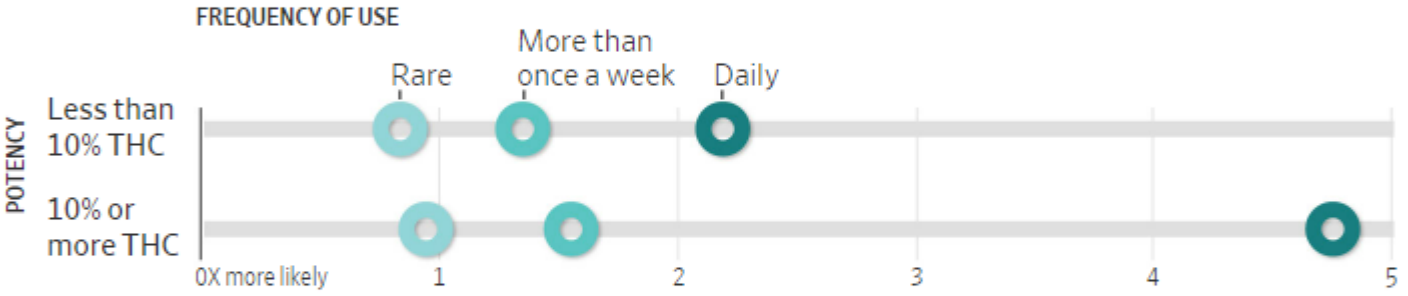
Higher Risk

Cannabis has become more potent and is associated with higher rates of psychotic disorders. Psychotic episodes following cannabis use could be more likely to lead to chronic psychiatric problems than those following consumption of other illicit drugs.

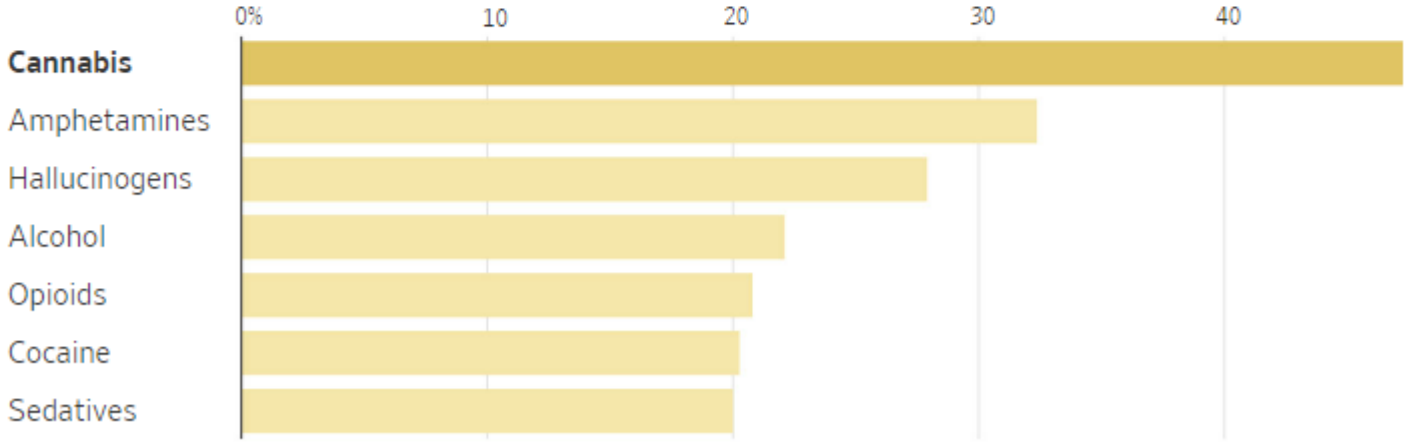
Average percentage of THC in cannabis samples seized by the Drug Enforcement Administration*



Increased risk of developing a psychotic disorder compared with people who have never used cannabis, based on potency and frequency of use



Chances of developing schizophrenia or bipolar disorder after drug-induced psychosis, by drug type†



*THC is main active component of cannabis; †Twenty-year conversion rate
Sources: National Institute on Drug Abuse; The Lancet; American Journal of Psychiatry
Josh Ulick/THE WALL STREET JOURNAL

"This is attacking young brains," said Dr. Roneet Lev, an emergency room physician at Scripps Mercy Hospital in San Diego.

Jahan Marcu, scientific adviser for the Coalition for Cannabis Scheduling Reform, which represents cannabis companies, said research on connections between psychosis and cannabis doesn't sufficiently distinguish between different kinds of products.

"Any time we talk about any substance, it's just a factor. It can be a good factor, and it can be a bad factor," he said.

Dr. Karen Randall moved to Pueblo, Colo., for a job in an emergency room more than a decade ago after working in Detroit for 18 years. She thought it would be like retiring early. She bought a ranch where she could ride horses in an area locals now call the Napa Valley of cannabis.

“I see more psychotic people here than I did in Detroit,” she said. “We’re just making this huge population of people who we can no longer fix.”

She is considering quitting medicine.

Randy Bacchus started smoking marijuana as a freshman in high school in Mahtomedi, Minn. By the time he was old enough to move out, his life had spun out of control.

In one of hundreds of videos his parents found on his phone after he died, Randy Bacchus told would-be fans that he was going to be a rap star. The 21-year-old held a vape pen in his hand, stopping to take hits at intervals.

He regularly talked about smoking cannabis in his videos. His interactions with his parents had been increasingly angry and erratic. He claimed he had spoken to God and the devil.

One night after using cannabis he had been so afraid people were after him that he ran out into a snowstorm in Denver and was lost for 24 hours. He survived with frostbite and infected toes.

“I was in full-blown psychosis,” he said in another video.


Heather Bacchus and Randy Bacchus Jr., with their son Randy, who started smoking marijuana as a freshman in high school.

His parents called the police for a wellness check but said that because he was an adult and not a danger to himself or others, they couldn’t force him into treatment.

“I think I’m going to take a break from smoking for a sec because I’m enjoying it too much,” he said in a March 2021 video.

In July 2021, he texted his mom to say he wanted to stop using cannabis and give up on music.

“I love you and am sorry for everything. I love dad and the same to him. I wish I would have been a better person,” he wrote at 2:09 a.m.

His mother wrote back that life isn't easy and it is never too late. Today is a fresh start, she said. Police found him dead 48 hours later from a self-inflicted gunshot wound.

Doctors who treated Randy said his cannabis use was triggering psychotic episodes. In the videos on his phone, he said he believed cannabis had caused his delusions.

"I didn't know that marijuana could cause paranoia," said Heather Bacchus, Randy's mom. "They don't even know what they're smoking."

Write to Julie Wernau at julie.wernau@wsj.com

Marijuana Moment 1.11.24 Kyle Jaeger

California Governor Proposes Using $100 Million In Marijuana Tax Revenue To Help Close State Budget Deficit, As He Commits to 'Strengthen' Industry

As **the governor of California pledges to continue working to "strengthen" the state's marijuana market**, he's also **proposing to help close an overall government budgetary deficit by borrowing $100 million from a cannabis tax fund designated for law enforcement and other public safety initiatives.**

Gov. Gavin Newsom (D) presented his budget plan on Wednesday, previewing a series of steps he wants to take to address **the state's $37.9 billion deficit.** That includes taking a $100 million budgetary loan from the Board of State and Community Correction (BSCC)'s Cannabis Tax Fund subaccount to support the General Fund.

A summary of the executive plan notes that the marijuana tax dollars, which would be repaid in a future fiscal year, would come from resources "not currently projected to be used for operational or programmatic purposes."

The governor's office also used the budget announcement to tout ongoing efforts to improve the state's cannabis industry.

That's included the "reform and simplification of the tax structure, fee relief to support entry into the legal market, investment in grant programs that foster equity, providing resources to cities and counties to expand pathways for local licensing and regulation of cannabis retailers, and assisting local governments to move licensees from provisional licensure to annual licenses."

"Moving forward, the state will continue focusing on reforms that support and strengthen enforcement against the illegal market, and reinforce compliance, accountability, and stability within the legal market," the summary says.

Meanwhile, after covering administrative and regulatory costs, the budget estimates that $568.9 million in marijuana revenue will be earmarked for 2024-2025 to fund education, prevention and youth

substance use disorders ($341.3 million), environmental remediation and enforcement related to illicit marijuana grows ($113.8 million) and public safety initiatives ($113.8 million).

The California legislature is also looking at ways to build on the state's cannabis market, while exploring other drug policy reforms dealing with issues such as psychedelics.

For example, Assemblymember Matt Haney (D) is renewing his push to legalize cannabis cafes in the state, with a newly introduced bill and plans to work with the governor and regulators to address concerns that resulted in the last version being vetoed.

Also, on Tuesday, a California Assembly committee unanimously approved a revised bill to create a state workgroup that would be tasked with exploring a regulatory framework to provide therapeutic access to psychedelics like psilocybin and ibogaine.

The sponsor of that legislation, Assemblymember Marie Waldron (R), will also be working with Sen. Scott Wiener (D) on a separate psychedelics therapeutic access bill that they plan to introduce in the coming weeks after Newsom vetoed a broader legalization measure last year.

While the governor vetoed both the earlier cannabis cafe bill and prior psychedelics legalization legislation, he did enact a number of marijuana measures last year, including several that took effect at the beginning of the month.

For instance, California employers are now prohibited from asking job applicants about past cannabis use, and most are barred from penalizing employees over lawful use of marijuana outside of the job.

Prop 47 overhaul - summary

Homeless, Drug Addiction, and Theft Reduction Act

Feb 22, 2024

Crimes, drugs, and homelessness have plagued California for decades. Prop 47 passed in 2014 property crimes up to $950 became misdemeanors. Drug possession became a misdemeanor. Past drug convictions could also be reduced to a misdemeanor. Over the next 10 yrs overdose deaths in S.F. increased by 400%. California homeless population increased 51% while that of the country decreased 11%. Despite 15k empty prison beds, the state began a program of de-incarceration. By 2021 Calif looked more like a 3rd world country than the Golden State it once was. The state continues to bleed retail corporations. Smash and grabs continue to force small businesses to close. Drug dealers, drug addicts, and homeless people are everywhere.

An overhaul of Prop 47 is supported by 70% of survey respondents. We already have obtained over 400,000 signatures, and we need at least about 550,000 valid signatures before April 30th to put this on the November ballot.

Please do work with us on this initiative to create a safer California. Signature form(s) can be obtained by emailing to info@justice-equality.org, specifying your address and number of forms you need (each form can take signatures of 6 registered voters from the same county).

Top leaders in law enforcement, retail corporations, medical experts, community leaders, and mayors of San Francisco, San Jose, Santa Monica, Santa Clara, Fremont, Saratoga, Milpitas, etc., endorse this pivotal initiative. Criminal Justice Director of NAACP-Oakland spoke in a statewide press event with us supporting the initiative.

The intention of this initiative is mainly to change people's behaviors for the betterment of our state. The principle of deterrence is pivotal. Deterrence plus education can solve our crime and drug problems eventually.

The three key points of this initiative include:

1. Possession of hard drugs will require drug rehab or face a felony charge with mandated treatment.
2. Enhances the punishment of drug dealers especially fentanyl dealers. Crime increases as addiction increases.
3. A 3rd arrest for stealing regardless of amount will be charged as a felony. Many deep blue states have much tougher laws against thefts. Vermont's maximum sentence for theft is 10 yrs compared to 6 months in Calf. Judges will still have the discretion to allow diversion.

Released 1st , 2nd, 3rd, and 4th time prisoners have a 50-60% rate of recidivism. 3 in 5 U.S. prisoners are drug dependent. 11k “LARGELY” NON VIOLENT prisoners were given early release due to COVID in prisons to protect inmates… What about the public?

Calif eliminated cash bail requirements but never implemented a procedure that would have required judges to consider certain factors when setting bail, including public safety.

MJ dispensaries sell to thousands of minors – text I left out of my edited version.

What happens in the dispensary stays in the dispensary.

When high school users in Arizona were asked how they obtained marijuana, 21.0% of 12th graders, 13.1% of 10th graders, and 8.2% of 8th graders said they "bought it from a dispensary within Arizona," according to the 2022 Arizona Youth Survey.

Similarly, the 2021 Washington State Healthy Youth Survey found that 12% of 12th graders, 6% of 10th graders, and 3% of 8th graders who obtained marijuana in the past month answered, "I bought it from a store." The 2021 Massachusetts Youth Health Survey found that 4.3% of high school students who used marijuana in the past month answered, "I bought it from a store."

When past-month high school users in Colorado were asked to identify the one source where they "usually" obtained marijuana, 4.9% answered, "I bought it at a marijuana store or center," the 2021 Healthy Kids Colorado Survey found. An additional 1.7% answered, "I used a marijuana delivery service."

The Arizona Youth Survey also indicates that 12th-grade users are just as likely to buy marijuana from dispensaries as they are to buy it from drug dealers. Statewide, in 2022, 21.0% of 12th-grade users said they bought marijuana from an Arizona dispensary, compared to 23.1% that said they "bought it from a drug dealer." In Pinal, Yavapai, Coconino, and Navajo counties, the first two of which are Arizona's third- and fourth-largest counties, 12th-grade users were more likely to buy marijuana from a dispensary than from a dealer.

Moreover, the Arizona Youth Survey found that minors are more likely to buy marijuana from dispensaries than they are to buy alcohol from stores. In Arizona, in 2022, 21.0% of 12th graders, 13.1% of 10th graders, and 8.2% of 8th graders that used marijuana bought it "from a dispensary within Arizona," whereas 13.0% of 12th graders, 8.5% of 10th graders, and 4.0% of 8th graders that used alcohol "bought it at a store."

The 2021 Massachusetts Youth Health Survey found that high school marijuana users were twice as likely to have bought marijuana from a store than were tobacco users to have bought tobacco products from a "vape shop or vapor store," at 4.3% and 2.0%, respectively.

The issue of dispensaries selling to minors has been worsening. Between 2018 and 2022, the percentage of 12th-grade users in Arizona that bought marijuana from a

dispensary nearly doubled from 11.3% to 21.0%. In Colorado, the percentage of past-month high school users that "usually" bought marijuana from a dispensary increased from 3.3% in 2017 to 4.5% in 2019 and 4.9% in 2021, which prompted the state to warn, "there was a Significant Increase in the percentage that usually bought marijuana at a marijuana store or center." In Washington, the percentage of 12th-grade users that bought marijuana from a store increased from 7% in 2016 to 12% in 2021.

Voters who supported Proposition 207 in Arizona were assured the products inside dispensaries would be inaccessible to children. Proposition 207 said, "individuals must show proof of age before purchasing marijuana" and selling to "minors and other individuals under the age of twenty-one remains illegal." Other states have similar laws. Any non-zero percentage of minors that purchases marijuana from a regulated dispensary undermines a supposed benefit of legalization.

Some may point out that minors can legally purchase marijuana from a dispensary with a doctor-approved medical marijuana card. Even so, the Arizona Department of Public Health reported there were only 105 medical marijuana patients below the age of 18 in June 2022. Dispensaries were estimated to have sold to more than 5,000 students in 12th, 10th, and 8th grades, after adjusting for usage rates, the percentage of users that bought from dispensaries in Arizona, and school enrollment for the 2021–2022 school year. This does not include students in any other grade, suggesting the actual number of K-12 customers is closer to 10,000.

Likewise, Colorado's Medical Marijuana Registry reported only 132 11–17-year-olds in December 2021. Nearly fifteen times as many high school students in Colorado were "usually" buying marijuana from licensed retailers without a medical marijuana prescription in 2021, in addition to those who may have gone once or twice but favored a different source.

Beyond that, the privileges afforded to individuals, likely including some minors, with medical marijuana cards are being abused. The 2020 Illinois Youth Survey found that 11% of 12th graders, 9% of 10th graders, and 9% of 8th graders who used marijuana in the past year in suburban counties obtained it through "someone else's medical marijuana prescription." This increased to 15% of 12th graders in urban counties and 18% of 12th graders in rural counties.

In Arizona, 18.3% of 12th graders, 13.0% of 10th graders, and 10.2% of 8th graders that used marijuana in 2022 obtained it "from someone with a medical marijuana card." In 2018, before recreational dispensaries were legalized in Arizona, 29.7% of

12th graders, 21.5% of 10th graders, and 20.4% of 8th graders obtained marijuana "from someone with a medical marijuana card."

Public health officials in many states appear to be under the assumption that minors are not purchasing marijuana directly from dispensaries or online delivery services. Regarding the sources of tobacco, alcohol, and e-cigarettes, the Illinois Youth Survey allows students to answer that they bought them from a gas station or store. Yet the question about where they obtained marijuana does not have a comparable answer relating to a dispensary or store. The Oregon Healthy Teens Survey asks students where they obtained tobacco and alcohol but does not even have a question that asks them where they obtained marijuana.

Colorado's Marijuana Enforcement Division announced in August 2022 that they "conducted over 190 underage compliance checks utilizing underage operatives" and found "a 98% compliance rate." A 2021 study found that 96.8% of dispensaries in California passed ID checks, and the Oregon Liquor Control Commission found "licensed retailers in central Oregon scored 100 percent on refusal to sell marijuana to a minor" in 2017. However, these investigations only checked whether a dispensary asked a minor for their ID. Of course, minors can get around this by using a fake ID.

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