



NORML®

California Chapter of the National Organization for the Reform of Marijuana Laws
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March 10, 2025

Maureen Gray
Dept. of Industrial Relations
Division of Workers' Compensation
1515 Clay St 18th Floor
Oakland CA 94612

Dear Ms. Gray:

California NORML is writing to express our objections to adopting the proposed Cannabis Regulation (Sec. 9792.24.8) recommended by the American College of Occupational and Environmental Medicine (Jan 25 2025), which classifies medicinal cannabis as “not recommended” for treating chronic pain.

The report flies in the face of extensive evidence that cannabis is effective in treating chronic pain and reducing dependency on opioids and other prescription drugs, ignoring scores of published scientific studies¹ and the experience of countless chronic pain patients and physicians in California.

In particular, the report’s recommendation conflicts with a comprehensive expert review by the National Academy of Sciences, which concluded: “There is substantial evidence that cannabis is an effective treatment for chronic pain in adults”² (2017).

It likewise conflicts with the findings of California’s Center for Medicinal Cannabis Research, which was established by the legislature to investigate the medicinal efficacy of cannabis, Five out of five of the CMCR’s initial studies found cannabis effective in reducing pain, especially chronic neuropathic pain, leading CMCR Director Dr. Igor Grant to declare “There is good evidence now that cannabinoids may be either an adjunct or first line treatment [for pain and neuropathy]”³ (2012). We have been informed that the CMCR has

recommended that DWC reject the ACOEM's proposed guideline and instead list cannabis as "Recommended class C" for chronic pain. We concur.

In the weeks since publication of the ACOEM report, yet more new studies have appeared showing medical cannabis effective for chronic pain and reducing use of prescription pain killers.⁴

The ACOEM report suffers badly from a lack of informed input from experienced medical cannabis practitioners and patients. Cal NORML has heard from hundreds of patients and medical cannabis practitioners over the years who report cannabis is uniquely effective in treating otherwise intractable chronic pain, especially neuropathic pain.⁵ Many report they have been able to reduce or even eliminate their usage of opioids and other prescription drugs by substituting cannabis.

Chronic pain accounts for some 42% of all recommendations for medical marijuana.⁶ The number of medical cannabis users in California may be fairly estimated at around 2-3% of the population, or ~ 800,000-1.2 million users⁷ (the proportion is grossly understated in the ACOEM report at 0.01%, apparently based on the state's rarely-used voluntary ID Card program). A Kaiser Health survey of pain patients in California found that 30% are using cannabis to help control their pain.⁸

The adjunctive use of cannabis has been shown to augment the analgesic effects of opioids synergistically, reducing opioid usage and abuse liability.⁹ Cannabis appears to be uniquely beneficial in cases of chronic neuropathic pain, which is resistant to standard opioid therapy. Multiple studies have linked legal cannabis access with reduced rates of opioid use and abuse, opioid hospitalizations, accidents and overdose deaths.¹⁰ Multiple studies have likewise linked cannabis access to reductions in overall prescription drug activity.¹¹

Of particular interest to workers' comp policy, state legalization of cannabis has been linked to declines in non-traumatic workplace injury rates and reduced workers' compensation payments.¹² It would therefore seem counterproductive for DCW to dis-recommend cannabis in the treatment of chronic pain.

Critique of ACOEM report

The ACOEM report neglects to cite over 100 published studies involving thousands of subjects that show medicinal benefits from cannabis in reducing chronic pain and opioid use.¹³ Perhaps the ACOEM judged that these studies did not meet its criteria for "critically-appraised higher-quality" evidence; however the footnoted citations show no evidence that they were ever reviewed. It should

be noted that a large quantity of lower quality studies can statistically compensate for a scarcity of higher quality ones.

The ACOEM report dwells at length on a host of adverse effects that are not relevant to the medicinal use of cannabis to treat injured workers – e.g. usage by children, recreational abuse problems, schizophrenia, etc. The report dwells at length on cannabis use disorder, despite the fact that neither medicinal use of cannabis nor chronic pain are risk factors for CUD.

The ACOEM report displays an unscientific bias in its discussion of adverse effects. Rather than limit its discussion to “critically-appraised higher-quality” studies, it cites many weakly established study results that are contradicted or refuted by other studies it fails to mention. For example, reports of increased aggression,¹⁴ violence,¹⁵ crime,¹⁶ COPD,¹⁷ cardiovascular disease¹⁸, pre-diabetes,¹⁹ negative operative outcomes,²⁰ oral cancer (applicable only to smoked marijuana)²¹, neonatal effects,²² and traffic accidents²³ are all disputed or flatly contradicted by other studies not mentioned in the report. All of this raises serious questions about the objectivity of the report.

The report mentions that cannabis potency has increased in recent years. Yet higher THC potency means higher purity, which can be medically beneficial insofar as it eliminates other potentially harmful contaminants such as smoke toxins from the medicine. What is more important than THC potency is the actual dosage delivered. Electronic vaporization devices, which use 80-90% THC concentrates, are typically designed to deliver moderate doses of THC per puff, reducing users’ exposure to harmful smoke toxins. Before being outlawed in 1937, the medicinal cannabis tinctures sold in U.S. pharmacies were highly potent, with dosages measured in droplets.

In an issue of particular concern to workers’ comp policy, the ACOEM report distorts the evidence regarding cannabis and workplace injuries. For example, it cites a 1990 study by Zwerling et al. finding that postal workers who used marijuana suffered increased industrial accidents and injuries. However, it fails to mention a larger, follow-up study of postal workers by Normand et al. which found no such link.²⁴ Likewise, it cites a study by Carnide et al. that showed an increased risk of injury from cannabis use on the job – *but no risk for use off the job*, where injured workers would normally use medical cannabis.²⁵ The report fails to mention other studies finding no increased risk of workplace injuries due to cannabis,²⁶ as well as one showing medical cannabis laws are associated with *fewer* workplace fatalities.²⁷

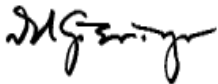
Several other states now allow worker’s compensation payments for cannabis.²⁸ The Colorado Division of Workers’ Compensation recently created an Alternative Pain Management Program aimed at assessing whether medicinal

cannabis can improve health safety and outcomes. The program effectively met its primary goals and determined that worker's compensation insurers can safely support medical cannabis reimbursement and improve treatment outcomes and quality of life. California, the first state to recognize the medicinal value of cannabis, should do likewise.

In sum, the ACOEM recommendations are poorly informed, biased, and ill-advised. Cannabis is substantially less dangerous and addictive than the prescription opioids commonly recommended to treat chronic pain. The evidence overwhelmingly suggests that injured California workers would benefit by the use of cannabis as a substitute or supplement for other, more dangerous and costly prescription analgesics available through workers' comp.

Cal NORML accordingly endorses the recommendation of the California Center for Medicinal Research, as submitted separately to DWC. California should reject the ACOEM guideline dis-recommending use of cannabis, and instead adopt a guideline of “Recommended C level” for chronic pain. We likewise agree that the cannabis guidelines for both acute pain and postoperative pain should be changed from “not recommended” to “Insufficient – No Recommendation.”

Respectfully,



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¹ See attached appendix for references.

² “The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research” National Academy of Sciences, (2017): Conclusion 4-1 p. 90

³ “California research shows marijuana can ease muscle spasms and pain,” by Lisa Leff, AP Press release 17 Feb 2010. “‘Gold Standard’ Studies Show That Inhaled Marijuana Is Medically Safe and Effective” Cal NORML Press Release 18 Feb 2010.

⁴ Reduced opioid use in 440 chronic pain subjects: “Comparative effectiveness of medicinal cannabis for chronic pain versus prescription medication treatment” Ajay

Wasan et al, *Pain* 24 Jan 2025. Substitution of cannabis for traditional pain medications increases as legal availability of recreational cannabis increases: “Recreational Cannabis Laws and Fills of Pain Prescriptions in the Privately Insured,” Shelby Steuart et al, *Cannabis* Vol 8#1 (2025).

“UK Medical Cannabis Registry: An Analysis of Clinical Outcomes of Medicinal Cannabis Therapy for Cancer Pain” Madhur Varadpande et al, *J Pain Palliative Care Pharmacotherapy* 8 Feb 2025;

⁵ Cal NORML first reported on medical cannabis usage in California in 1999, based on records of 2480 patients of Dr. Tod Mikuriya, 45.7% of whom had a primary indication for analgesia or painful inflammation. In subsequent years, Cal NORML heard personally from hundreds of chronic pain patients through our hotline, at conferences, and at medical cannabis dispensaries. “Medical Use of Cannabis: Experience in California,” Dale Gieringer in Franjo Grotenhermen and Ethan Russo, ed. *Cannabis and Cannabinoids: Pharmacology, Toxicology and Therapeutic Potential* (Haworth Press, 2003).

⁶ “Medical Reasons for Marijuana Use, Forms of Use, and Patient Perception of Physician Attitudes Among the US Population,” Patrick M Azcarate et al, *J Gen Intern Med* 6 April 2020.

⁷ Cal NORML estimated the population of medical marijuana users in California as between 2-3% of the population, or 750,000 to 1,125,000, based on a survey of California medical marijuana dispensaries plus patient registries in other states, (Press release, May 31, 2011). Five per cent of Californians surveyed report ever using marijuana for medicine: “Prevalence of medical marijuana use in California, 2012” Suzanne Ryan-Ibarra et al, *Drug Alcohol Rev.* 2015 Mar 34(2).

⁸ “Cannabis Use for Medical Reasons Among Patients in a Large California Health Care System After Legalization for Nonmedical Use,” Ruchir Karmali et al, *Journal of Studies on Alcohol and Drugs* :84, (Sep 2023)

⁹ “Opioid-sparing effect of cannabinoids for analgesia: an updated systematic review and meta-analysis of preclinical and clinical studies”: Suzanne Nielsen et al., *Neuropsychopharmacology* 2022. “Impact of co-administration of oxycodone and smoked cannabis on analgesia”: Ziva Cooper et al, *Neuropsychopharmacology* 43, 2018.

¹⁰ “The clouded debate: A systematic review of comparative longitudinal studies examining the impact of recreational cannabis legalization on key public health outcomes” Maria Athanassiou et al, *Front Psychiatry* 11 Jan 2023;

“Medical Cannabis Legalization and Opioid Prescriptions: Evidence on US Medicaid Enrollees during 1993-2014” Di Liang, Yuhua Bao, Mark Wallace, Igor Grant, Yuyan Shi, *Addiction* 10 July 2018.

“Medical Marijuana Legalization and Opioid- and Pain-Related Outcomes Among Patients Newly Diagnosed With Cancer Receiving Anticancer Treatment” Yuhua Bao et al, *JAMA Oncology*, Dec 2022.

¹¹ “Recreational cannabis and opioid distribution.” Shyam Raman et al, *Health Economics* 32(4) Apr 2023;

“Healthcare provider and medical cannabis patient communication regarding referral and medication substitution: the Canadian context.” Alexis Holman et al., *J. Cannabis Research* 2022:4(1) Jun 2022;

“Recreational cannabis legalizations associated with reductions in prescription drug utilization among Medicaid enrollees,” Shyam Raman and Ashley Bradford, *Health Economics* 15 Apr 2022;

“Medical use among older adults in Canada: Self-reported data on types and amount used, and perceived effects,” Shankar Tumati et al, *Drugs and Aging* 39, 2022;

“Perceived Efficacy, Reduced Prescription Drug Use, and Minimal Side Effects of Cannabis in Patients with Chronic Orthopedic Pain”: Ari Greis et al, *Cannabis and Cannabinoid Research* Vol 7#6 Dec 2022;

“Medical cannabis treatment for chronic pain: Outcomes and prediction of response”: Joshua Aviram et al, *Eur J Pain* 25(2) Feb 2021.

¹² “Does Marijuana Legalization Affect Work Capacity? Evidence from Workers’ Compensation Benefits,” Rahi Abouk et al, National Bureau of Economic Research Working Paper 28471, Feb. 2021.

¹³ ACOEM footnotes #130-141 reference just 12 studies on cannabis in treatment of chronic pain; 56 are listed in the attached appendix, and over 120 are listed at NORML’s website. <https://norml.org/marijuana/fact-sheets/relationship-between-marijuana-and-opioids/>

¹⁴ Aggressive responses are typically reduced by cannabis: “Subjective aggression during alcohol and cannabis intoxication before and after aggression exposure,” EB De Sousa Fernanda Perna et al. *Psychopharmacology (Berl)* 233(18): Sept 2016.

¹⁵ Same day marijuana use not associated with intimate partner violence: “Alcohol, Marijuana and Dating Abuse Perpetration by Young Adults: Results of a Daily Call Study” Emily Rothman et al, *Violence Against Women* 24(10) Aug 2018.

“Couples’ marijuana use is inversely related to their intimate partner violence over the first 9 years of marriage,” Philip Smith et al *Psychology of Addictive Behaviors*, Aug 2014.

¹⁶ “Crime in a Time of Cannabis: Estimating the Effect of Legalizing Marijuana on Crime Rates in Colorado and Washington Using the Synthetic Control Method,” Alexis J Harper et al, *Journal of Drug Issues* 53(4) 2 Nov 2022

¹⁷ COPD not linked to marijuana smoking: “Impact of Marijuana Smoking on COPD Progression in a Cohort of Middle-Aged and Older Persons,” Igor Barjattarevic et al, *Chronic Obst Pulm Dis.* 10(3) Jul 2023.

¹⁸ No association between marijuana use and cardiovascular disease: “Association Between Marijuana Use and Cardiovascular Disease in US Adults” Dhaval Jivanji et al. *Cureus* 12(12) 3 Dec 2020.

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²² Prenatal marijuana exposure not associated with adverse birth outcomes: “Evaluation of the Association Between Prenatal Cannabis Use and Risk of Developmental Delay” Dana Watts et al. *JAACAP Open*. 2(4) May 2024;

²³ No changes in crash fatalities due to legalized cannabis: “Crash fatality Rates After Recreational Marijuana Legalization in Washington and Colorado,” Jayson D Aydelotte et al, *American Journal of Public Health* Aug 2017;

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²⁴ Zwerling C, Ryan J, Orav EJ: The efficacy of preemployment drug screening for marijuana and cocaine in predicting employment outcome. *JAMA*. 1990;264(20); vs Normand J, Salyards S and Mahoney J, "An Evaluation of Preemployment Drug Testing," *Journal of Applied Psychology* 75(6) 629-39 1990.

²⁵ “Workplace and non-workplace cannabis use and the risk of workplace injury” N Carnide et al, *Can J Public Health* Dec 2023.

²⁶ “Comparison of random and postaccident urine drug tests in southern Indiana coal miners” J.W. Price, *J. Addict Med* (2012); “Testing for cannabis in the workplace: a review of the evidence,” S Macdonald et al, *Addiction* 2010.

²⁷ Legalizing medical marijuana correlated with improved workplace safety among workers 25-44: “Medical marijuana laws and workplace fatalities in the United States” D Mark Anderson, Daniel I Rees, Erdal Tekin, *Int J Drug Policy* 60: Oct 2018.

²⁸ States that allow WCI reimbursement for cannabis are said to include Connecticut, New Hampshire, New Jersey, New Mexico, New York, Pennsylvania and Missouri: “Review of cannabis reimbursement by workers’ compensation insurance in the U.S. and Canada,” John Howard et al, *Am J Ind Med*. 64(12): Dec 2021 (et al.)