



Relationship Between Marijuana and Opioids

Cannabis access is associated with reduced rates of opioid use and abuse, opioid-related hospitalizations, opioid-related traffic fatalities, opioid-related drug treatment admissions, and opioid-related overdose deaths

"In this five-year retrospective analysis of prospectively collected outcomes from 241 treatment-refractory CLBP [chronic low back pain] patients, inhaled medical cannabis was associated with large, statistically robust, and clinically meaningful sustained improvements in pain, disability, pain severity, and pain interference. Concomitant medication trajectories showed near-universal displacement of opioids (100 percent to 4.6 percent), NSAIDs (100 percent to 7.1 percent), SSRI/SNRIs (80. percent to 5.4 percent), and gabapentinoids (38.6 percent to 2.5 percent)."

[Long-term inhaled cannabis therapy for chronic low back pain: A five-year retrospective analysis of prospectively collected patient-reported outcomes in 241 treatment-refractory patients, *Biomedicines*, 2026](#)

"This study examines the association between state cannabis legalization policies and non-fatal opioid poisoning diagnoses among enrollees in employer-sponsored health insurance. ... MCD [medical cannabis dispensary openings] was associated with a 15.47 percent reduction, and RCL [recreational cannabis laws] was associated with an 11.92 percent reduction in NF-OPD [non-fatal opioid poisoning diagnoses]. ... These findings suggest that expanded access to cannabis through MCD and RCL is associated with lower NF-OPD among adults with employer-sponsored insurance, particularly among males and younger adults, who are disproportionately affected by the opioid epidemic."

[The association between state cannabis legalization and non-fatal opioid poisonings among adults with employee-sponsored insurance in the United States, *Preventive Medicine Reports*, 2026](#)

"Twenty-nine patients were recruited from a university-based outpatient chronic pain clinic. Mean daily opioid consumption decreased from a baseline of 46.8 MMEs/day to 16.2 MMEs/day at one month and remained low throughout the five-month follow-up period. ... Seven patients (24%) were able to completely discontinue opioid therapy by the end of the study. Pain levels also decreased over time. ... These results suggest that medical cannabis may be a useful adjunct therapy for reducing opioid use, relieving chronic pain, and improving health-related quality of life."

[Medical cannabis as an opiate alternative: A prospective observational cohort study, *Cureus*, 2026](#)

Cannabis access is associated with reductions in overall prescription drug activity

"We implement two-way fixed-effects regressions and leverage variation from eleven U.S. states that adopted a recreational cannabis law (RCL) between 2010 and 2019. We find that RCLs lead to a reduction in codeine dispensed at retail pharmacies. Among prescription opioids, codeine is particularly likely to be used non-medically. Thus, the finding that RCLs appear to reduce codeine dispensing is potentially promising from a public health perspective."

[Recreational cannabis and opioid distribution, *Health Economics*, 2023](#)

The adjunctive use of cannabis augments the analgesic properties of opioids

"This Phase II study evaluated analgesia, abuse liability, and cognitive performance of hydromorphone and oral delta-9-tetrahydrocannabinol (THC; dronabinol) using a within-subject, double-blind, randomized, placebo-controlled, human laboratory trial. ... Analgesia only improved in the



hydromorphone + dronabinol 2.5 mg condition. ... These data suggest that dronabinol may enhance the analgesic effects of a *low dose of hydromorphone*, indicative of possible opioid-sparing effects, but that this effect only occurs within a narrow dose range beyond which hyperalgesia, increased risk for AEs [adverse events], and abuse liability are more likely to occur."

Within-subject, double-blinded, randomized, and placebo-controlled evaluation of the combined effects of the cannabinoid dronabinol and the opioid hydromorphone in a human laboratory model, Neuropsychopharmacology, 2021

Patients often use cannabis as a substitute for other controlled substances, including prescription medications, alcohol, and tobacco

"In this prospective, observational study, 52 patients with confirmed painful DN [diabetic neuropathy], unresponsive to at least three prior analgesics plus non-pharmacological interventions, were recruited from a single clinic. Following a 1-month washout, patients initiated inhaled medical-grade cannabis (20% THC, <1% CBD), titrated individually. ... Patients in our study decreased their morphine-equivalent doses by more than 90%, reduced their gabapentin doses by 97%, duloxetine by 93%, and pregabalin by 79% without developing rebound pain."

Long-term efficacy and safety of inhaled cannabis therapy for painful diabetic neuropathy: A 5-year longitudinal observational study, Biomedicines, 2025

Cannabis use is associated with greater rates of opioid use treatment retention and may mitigate opioid-related cravings

"Among 197 participants, 89 (45.2%) reported cannabis use to manage symptoms of opioid withdrawal in the past six months. In multivariable analysis, cannabis use for opioid withdrawal was significantly associated with self-reported reductions in opioid use in the same time period. ... Aligned with other studies, these findings support conducting experimental trials of cannabinoids to support individuals experiencing opioid withdrawal and living with pain."

Self-reported cannabis use to manage opioid withdrawal symptoms and reductions in opioid use among people who use unregulated opioids: A cross-sectional analysis, Journal of Cannabis Research, 2026

"This serial cross-sectional observational study used staggered adoption difference-in-differences models to analyze data (2012, 2015, 2018, 2022) from 28,069 PWID [people who inject drugs] from 13 states. ... The magnitude of the decline in daily opioid use (9-11 percentage points) in a population with highly prevalent use post RCL+MCL [recreational cannabis legalization and medical cannabis legalization] passage was striking. Notably, the magnitude of this decline was equivalent across all racial and ethnic groups and for males and females. ... Our findings suggest that ongoing efforts to reduce regulatory barriers and legal and criminal consequences of cannabis use via RCL+MCLs may have the potential to help reduce overdoses and other opioid-related harms among PWID."

Cannabis legalization and cannabis and opioid use in a large, multistate sample of people who inject drugs: A staggered adoption difference-in-differences analysis, Drug and Alcohol Dependence, 2026