



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

"This cohort study used data from the NYS [New York State] Prescription Monitoring Program (PMP) from September 2018 through July 2023. Adults prescribed opioids for chronic pain who were newly certified for medical cannabis use in NYS were recruited from a large academic medical center and nearby medical cannabis dispensaries in the Bronx, New York. Monthly dispensation of medical cannabis to study participants was monitored for 18 months. ... In our study, mean daily MME was 22% lower at the completion of the follow-up period. ... This reduction is clinically significant and concordant with an emphasis on slow opioid dose reduction over years rather than quick cessation in patients with chronic pain. ... Our findings add to existing evidence that suggests that medical cannabis may be a substitute for prescription opioids in patients with chronic pain."

Medical cannabis and opioid receipt among adults with chronic pain, JAMA Internal Medicine, 2025

"Fifty patients were able to utilize cannabis during their inpatient stay over a 1-year period after medical cannabis policy implementation. Pain relief was the primary reason for cannabis usage, with 60% of surveyed patients reporting reducing opioids since starting cannabis."

Medical cannabis: Breaking through the glass ceiling for in-patient care and use, Clinical Nurse Specialist, 2025

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

Chronic pain patients are less likely to abuse medicinal cannabis as compared to opioids

"Generally, rates of problematic use of MC (medicinal cannabis) among MC users seem lower than rates of problematic use of opioids among those prescribed opioids."

Problematic use of prescription opioids and medicinal cannabis among patients suffering from chronic pain, *Pain Medicine*, 2016

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

"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

"We investigated the relationship between cannabis use and cessation of unregulated opioid use among people who use drugs (PWUD) living with chronic pain. ... Daily cannabis use was positively associated with opioid cessation (adjusted hazard ratio 1.40). In the sex-stratified sub-analyses, daily cannabis use was significantly associated with increased rates of opioid cessation among males (adjusted hazard ratio 1.50). ... Participants reporting daily cannabis use exhibited higher rates of cessation compared to less frequent users or non-users. ... Our findings add to the growing evidence supporting the potential benefits of cannabis use among PWUD, underlining the need for further research."

Cannabis use and illicit opioid cessation among people who use drugs living with chronic pain, *Drug and Alcohol Review*, 2025