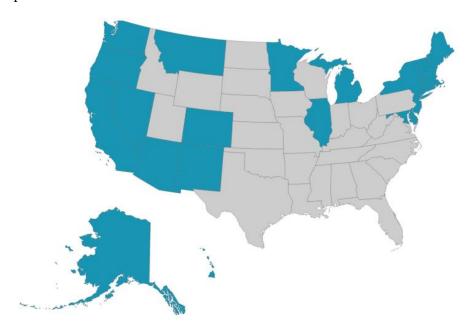


Medical Marijuana and Pain Management

Medical Marijuana Today

Twenty-three states and the District of Columbia, have passed laws since 1996 legalizing the use of medical marijuana for qualifying patients under state law. While state medical marijuana programs differ from one another in significant ways, most allow medical marijuana for the treatment of severe, intractable pain.



Safety and Efficacy of Medical Marijuana

Marijuana's medical safety and efficacy is incontrovertible – particulary for the treatment of various types of severe and chronic pain.

In February 2010, the University of California Center for Medicinal Cannabis Research released a report of its findings after a decade of randomized, double-blind, placebo-controlled clinical trials on the medical utility of inhaled marijuana. The studies concluded that marijuana should be a "first line treatment" for patients with painful neuropathy and other serious and debilitating symptoms, who often do not respond to other available medications.

Among the Center's trials, four studies assessed smoked marijuana's potential to relieve chronic, neuropathic pain – a type of nerve pain associated with cancer, diabetes, HIV/AIDS, spinal cord injury and many other serious conditions. Each of the studies that the Center's investigators conducted found that marijuana consistently reduced patients' pain levels to a comparable or better degree than currently available treatments. The researchers concluded, "The results from these four studies have been convergent, with all four demonstrating a significant decrease in pain after cannabis administration. The magnitude of effect in these studies...was comparable to current therapies." 2

Another trial assessed the use of marijuana as a treatment for patients suffering from multiple sclerosis. That study determined that "smoked cannabis was superior to placebo in reducing spasticity and pain in patients with MS, and provided some benefit beyond currently prescribed treatments."



A recent literature review of 38 studies evaluating medical marijuana's efficacy for treating pain found that "71 percent (27) concluded that cannabinoids had empirically demonstrable and statistically significant pain relieving effects, whereas 29 percent (11) did not." Of major significance, the review concluded, ""[F]or notoriously difficult to treat conditions such as HIV neuropathy, ... cannabinergic pain medicines, particularly inhaled cannabinoid botanicals, are one of the only treatments that have been shown to be safe and effective with the highest levels of evidence."

Another recent, authoritative review article summarizing the state of the research indicated smoked marijuana reduces symptoms of chronic/neuropathic pain, spasticity associated with multiple sclerosis, and other conditions – and does so with an acceptable safety profile. The article recommends that doctors be allowed to weigh the benefits against risks of medical marijuana therapy – just as they do with any other medicine. The article concludes by recommending marijuana rescheduling, writing: "The classification of marijuana as a Schedule I drug as well as the continuing controversy as to whether or not cannabis is of medical value are obstacles to medical progress in this area. Based on evidence currently available the Schedule I classification is not tenable; it is not accurate that cannabis has no medical value, or that information on safety is lacking. It is true cannabis has some abuse potential, but its profile more closely resembles drugs in Schedule III (where codeine and dronabinol are listed). The continuing conflict between scientific evidence and political ideology will hopefully be reconciled in a judicious manner." ⁵

Medical Marijuana & Prescription Opioids

Not only is medical marijuana effective for treating chronic and intractable pain, but inhaled marijuana has also been found to complement prescription opioid pain medicines well, enhancing the efficacy of (and safely interacting with) these more powerful narcotic medications. An important recent study reported that their subjects' pain "was significantly decreased after the addition of vaporized cannabis", and suggested that cannabis treatment "may allow for opioid treatment at lower doses with fewer [patient] side effects." The authors concluded that their results "demonstrate that inhaled cannabis safely augments the analgesic effects of opioids."

Such findings are increasingly common, prompting a recent journal commentary to note, "There is sufficient evidence of safety and efficacy for the use of [marijuana] in the treatment of nerve pain relative to opioids...[that] where medicinal cannabis is legal, physicians who treat neuropathic pain with opioids should evaluate their patients for a trial of cannabis and prescribe it when appropriate prior to using opioids." The commentary went on to suggest that, "Prescribing cannabis in place of opioids for neuropathic pain may reduce the morbidity and mortality rates associated with prescription pain medications and may be an effective harm reduction strategy."

¹ See California Center for Medicinal Cannabis Research, Report to the Legislature and Governor of the State of California presenting findings pursuant to SB847 which created the CMCR and provided state funding (2010), http://www.cmcr.ucsd.edu/images/pdfs/CMCR_REPORT_FEB17.pdf. (Summarizing a decade of research) . ² Ibid.

³ Jody Corey-Bloom et al., "Smoked Cannabis for Spasticity in Multiple Sclerosis: A Randomized, Placebo-Controlled Trial," *Canadian Medical Association Journal* 184, no. 10 (2012).

⁴ Aggarwal SK. "Cannabinergic pain medicine: A concise clinical primer and survey of randomized controlled trial results," *The Clinical Journal of Pain* (2012-forthcoming).

⁵ Igor Grant et al., "Medical Marijuana: Clearing Away the Smoke," *The Open Neurology Journal* 6 (2012): 24; 18–25. doi:10.2174/1874205X01206010018.

⁶ D Abrams, et al. "Cannabinoid-Opioid interaction in chronic pain," Clinical Pharmacology & Therapeutics (2011); 90 6, 844–851

⁷ Mark Collen "Prescribing cannabis for harm reduction" Harm Reduction Journal (2012), 9:1, http://www.harmreductionjournal.com/content/pdf/1477-7517-9-1.pdf.