



**California NORML Research Report  
STUDIES SHOW MEDICAL CANNABIS REDUCES OPIOID USE**

A mounting body of scientific research shows that medical cannabis is being used by chronic pain patients as an effective harm-reduction substitute for opioids and other more dangerous prescription drugs.

**Medical Marijuana Laws May Be Associated With A Decline In The Number Of Prescriptions For Medicaid Enrollees (Bradford & Bradford, *Health Affairs*, Apr 2017):**

*Medicaid prescription drug costs were lower in states with medical marijuana laws in five of nine clinical areas, including pain. Estimated cost savings > \$1 billion.*

<http://content.healthaffairs.org/content/early/2017/04/13/hlthaff.2016.1135>

**Substitution of medical cannabis for pharmaceutical agents for pain, anxiety, and sleep. (Piper et al, *J. Psychopharmacol*, 1 Mar 2017):**

*Survey of 1,513 New England dispensary members reported 76.7% reduced use of opiates starting use of medical cannabis*

<https://www.ncbi.nlm.nih.gov/pubmed/28372506>

**Cannabis as a Substitute for Opioid-Based Pain Medication: Patient Self-Report. (Amanda Reiman et al, *Cannabis and Cannabinoid Research* Vol 2.1 2017**

*A survey of 2897 medical cannabis patients found 30-34% used opioids and 61% of those used opioids with cannabis, 97% of whom “strongly agreed/agreed” that cannabis reduced their opioid consumption.*

<http://online.liebertpub.com/doi/pdfplus/10.1089/can.2017.0012>

**Medical Marijuana Policies and Hospitalizations Related to Marijuana and Opioid Pain Reliever (Y Shi, *Drug Alcohol Depend.* Apr 2017)**

*Medical marijuana legalization associated with reductions of 23% in hospitalizations due to opioid dependence and 13% due to overdose.*

<https://www.ncbi.nlm.nih.gov/pubmed/28259087>

**Medical Marijuana Laws Reduce Prescription Medication Use In Medicare Part D (Bradford & Bradford, *Health Affairs* Apr 2017)**

*National overall reductions in Medicare program and enrollee spending in states with medical marijuana laws estimated to be \$165.2 million per year in 2013.*

<http://content.healthaffairs.org/content/35/7/1230.abstract>

**Cannabis as a substitute for prescription drugs – a cross-sectional study (Corroon, Mischley, Sexton, *J of Pain Research*, Mar 2017)**

*46% of 2,774 cannabis users reported using it as a substitute for RX drugs, the most common being narcotics/opioids (35.8%).*

<https://www.dovepress.com/cannabis-as-a-substitute-for-prescription-drugs-ndash-a-cross-sectiona-peer-reviewed-article-JPR>

**Cannabis and intractable chronic pain: an explorative retrospective analysis of Italian cohort of 614 patients (Fanelli et al. *J of Pain Research* May 2017)**

*“Even with the heterogeneity of the sample size and limited data available... the treatment seems to be effective and safe in the majority of patients”*

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5449133/>

**Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers? (Powell, Pacula, Jacobson, NBER Working Paper Jul 2015)**

*States permitting medical marijuana dispensaries experience a relative decrease in both opioid addictions and opioid overdose deaths compared to states that do not.*

<http://www.nber.org/papers/w21345>

**Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010 (Bachhuber et al, *JAMA Intern Med.* Oct 2014)**

*Conclusion: Medical cannabis laws are associated with significantly lower state-level opioid overdose mortality.*

<http://archinte.jamanetwork.com/article.aspx?articleid=1898878>

**Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain (Boehnke, Litinas, Clauw, *J. Pain* Jun 2016.)**

*Survey of 244 chronic pain patients found medical cannabis use associated with a 64% decrease in opioid use, decreased number and side effects of medications, and an improved quality of life.*

<http://www.ncbi.nlm.nih.gov/pubmed/27001005>

**Splendor in the Grass? A Pilot Study Assessing the Impact of Medical Marijuana (Gruber et al, *Front Pharmacol*, Oct 2016)**

*Study of 24 medical cannabis patients found notable decrease in use of conventional pharmaceutical agents, with opiate use declining more than 42%*

<https://www.ncbi.nlm.nih.gov/pubmed/27790138>

**The Effect of Medicinal Cannabis on Pain and Quality of Life Outcomes in Chronic Pain: A Prospective Open-label Study (Haroutounian et al, *Clin J Pain*, Dec 2016)**

*The treatment of chronic pain with medicinal cannabis in 176 patients resulted in improved pain and functional outcomes, and a significant reduction in opioid use.*

<http://www.ncbi.nlm.nih.gov/pubmed/26889611>

**Among veterans, opioid prescription requests down in step with rise in medical pot (Vancouver *Globe and Mail*, Jun 7, 2016)**

*Fewer Canadian veterans have sought prescription opioids and tranquilizers in recent years while prescriptions for medical marijuana have skyrocketed.*

<http://www.theglobeandmail.com/news/national/among-veterans-opioid-prescription-requests-down-in-step-with-rise-in-medical-pot/article30285591/>

**U. New Mexico study suggests medical marijuana could decrease prescription opiate abuse, (Study by UNM Prof. Jacob Vigil and Prof. Sara Stith)**

*18-month study finds 31% reduction in opioid use among chronic pain patients using medical cannabis.*

<http://www.dailylobo.com/article/2017/03/medical-cannabis-research.>

Other reports about the potential benefits of medical cannabis in addressing the opioid epidemic:

**The opioid crisis in America's workforce**

<http://www.castlighthealth.com/typ/the-opioid-crisis/>

**Could Pot Help Solve the U.S. Opioid Epidemic?**

<http://www.sciencemag.org/news/2016/11/could-pot-help-solve-us-opioid-epidemic>

**Cannabidiol: Swinging the Marijuana Pendulum from 'Weed' to Medication to Treat the Opioid Epidemic**

[http://www.cell.com/trends/neurosciences/fulltext/S0166-2236\(17\)30001-2](http://www.cell.com/trends/neurosciences/fulltext/S0166-2236(17)30001-2)

**Substituting cannabis for prescription drugs, alcohol and other substances among medical cannabis patients: The impact of contextual factors**

<http://onlinelibrary.wiley.com/doi/10.1111/dar.12323/abstract>

**Medical Cannabis in Arizona: Patient Characteristics, Perceptions, and Impressions of Medical Cannabis Legalization**

<http://www.ncbi.nlm.nih.gov/pubmed/26317379>

**Profiles of medicinal cannabis patients attending compassion centers in Rhode Island**

<http://www.ncbi.nlm.nih.gov/pubmed/25715068>

**Who are medical marijuana patients? Population characteristics from nine California assessment clinics**

<http://www.ncbi.nlm.nih.gov/pubmed/21858958>

**Patients Are Ditching Opioid Pills for Weed**

<https://www.theatlantic.com/health/archive/2017/02/marijuana-cannabinoids-opioids/515358/>