



Medical Marijuana by the Numbers

States Recognizing Marijuana's Medical Value

- 33 states with effective medical marijuana laws
- 16 states with laws pertaining to low-THC, high-CBD marijuana
- 0 states have repealed effective medical marijuana laws.
- In total, 49 states acknowledge the medical benefits of marijuana.

Medical Marijuana and Opioids

- 25% average decrease in opioid overdose deaths in the first year of patient access to a medical marijuana program¹
- 33% average decrease in opioid overdose deaths after five years of patient access to a medical marijuana program²
- 48% reduction in patients' opioid use after three months of medical marijuana treatment³
- 78% of patients either reduced or stopped opioid use altogether.⁴
- 1,826 fewer doses of painkillers on average per year, per state, for patients participating in Medicare Part D⁵

Prescription Medications

- 500,000 people died of prescription drug overdoses between 2000 and 2015.⁶
- 20% of prescriptions are "off label" — prescribed for a condition for which they are not FDA-approved.⁷
- 0 people have died from marijuana overdoses in all of recorded history.

Number of Patients

- 1% of a state's population, on average, enrolls in the medical marijuana program.⁸
- 38% of the U.S. population took prescription opioids in 2015.⁹

¹ Marcus A. Bachhuber, et al., "Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010," *JAMA Intern Med.* October 2014, Vol. 174 no. 10.

² Ibid.

³ Staci A. Gruber, et al., "Splendor in the Grass? A Pilot Study Assessing the Impact of Medical Marijuana on Executive Function," *Front. Pharmacol.* 13 October 2016, Vol. 7.

⁴ "The Cannabis and Opioid Survey," Healer.com, 4 October 2016.

⁵ Ashley C. Bradford et al., "Medical Marijuana Laws Reduce Prescription Medication Use In Medicare Part D," *Health Aff.* July 2016, Vol. 35 no. 7.

⁶ <http://news.unm.edu/news/study-finds-legal-cannabis-may-reduce-use-of-dangerous-prescription-drugs>

⁷ Radley, David C., Finkelstein Stan N., and Stafford, Randall S., "Off-label Prescribing Among Office-Based Physicians," *Archives of Internal Medicine* 166 (9), 2006: 1021-1026.

⁸ www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/medical-marijuana-patient-numbers/

⁹ "More than 1 in 3 Americans prescribed opioids in 2015," *CBS News*, August, 1, 2017.

Qualifying Conditions

- **31** states' programs include a general category for severe or chronic pain or allow cannabis if opiates have been or could be prescribed for the condition.
- **32** states include PTSD as a qualifying condition. Alaska is the only exception.

Research

- **10,000** studies were reviewed by the National Academies of Sciences, Engineering and Medicine, which led them to find:¹⁰
 - Conclusive or substantial evidence that marijuana or cannabinoids are effective in the treatment of chronic pain, chemotherapy-induced nausea and vomiting, and multiple sclerosis spasticity symptoms;
 - No link between smoking marijuana and lung cancer; and
 - No gateway effect.
- **50%** of Crohn's patients who used medical marijuana entered complete remission and **45%** found significant improvement in symptoms.¹¹
- **75%** reduction in symptom scores were reported when PTSD patients were using marijuana compared to when they were not.¹²
- **Hundreds of thousands** of patients suffering from HIV/AIDS, glaucoma, cancer, multiple sclerosis, Crohn's disease, seizure disorders, chronic, severe, and persistent pain, and other debilitating illnesses find that marijuana provides relief from their symptoms.

Support for Allowing Medical Marijuana

- **76%** of doctors¹³
- **94%** of Americans¹⁴
- **83%** of veterans¹⁵

¹⁰ "The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research" National Academies of Sciences, Engineering and Medicine, January 2017.

¹¹ Timna Naftali, et al., "Treatment of Crohn's Disease with Cannabis: An Observational Study," *Israel Medical Association Journal* (2011).

¹² Greer, GR, et al., "PTSD symptom reports of patients evaluated for the New Mexico Medical Cannabis Program," *Journal of Psychoactive Drugs*, 2014 January-March;46(1):73-7.

¹³ *Journal of New England Medicine* survey, February 2013.

¹⁴ Quinnipiac University Poll, "U.S. Voter Support For Marijuana Hits New High," April 2017.

¹⁵ The American Legion, "Survey shows veteran households support research of medical cannabis," November 2017.