

NORML'S STATEMENT TO THE
INDIANA INTERIM STUDY
COMMITTEE ON RESOLUTION 2-
MEDICAL MARIJUANA LEGISLATION

1. It is not only appropriate, but necessary, to allow patients diagnosed with certain chronic, incurable, terminal, or treatment-resistant disease conditions to undergo medically-supervised, evidence-based therapies involving marijuana.

Medical use of marijuana is not new. It has been used as an effective, natural medicine for thousands of years all over the world. It is the most researched and investigated therapeutic substance in history. To date, there are more than 26,000 published studies or reviews in the scientist's literature referencing the cannabis plant and its cannabinoids.

A 2017 review of over 10,000 recent studies by the National Academies of Science, Engineering, and Medicine concluded that "conclusive or substantial evidence exists in support of the clinical use of cannabis for the treatment of chronic pain and other conditions."

To date, over 140 gold-standard clinical trials exist to examine the safety and efficiency of cannabis or individual cannabinoids in some 8000 patients. The median number is two trials prior to FDA approval.

We need to allow doctors to treat their patients with medical marijuana in Indiana just like 31 states already have. There is no need to have marijuana reclassified as a schedule II drug to research and study its substantial therapeutic potential since that has been already proved with conclusive and substantive evidence. In fact, the DEA recently reclassified plant-derived marijuana medicine to schedule V

2. It is well documented that patients often receive effective and safe treatment for a variety of conditions by using marijuana and its compounds, including CBD oils, by rubbing it in the skin with oils, lotions, and creams and by

other delivery methods such as eye drops for glaucoma patients which don't involve inhalation or ingestion.

3. The potential impact on improving the overall public health in Indiana by allowing medical marijuana is tremendous. Thousands of Hoosiers have already benefited from use of CBD products with very limited amounts of THC. They get relief from a variety of symptoms--not high. They report much satisfaction with the availability and use of CBD products. It certainly improved the quality of their lives.

Medical marijuana is needed now in Indiana to help our raging opioid crisis. 1840 Hoosiers died last year from opioid O.Ds. That was an 18% increase from the year before.

But a 2016 Journal of the American Association Internal Medicine reported studies showing a 25% decrease in opioid O.Ds in the medical marijuana states. A 2017 study by University of California at San Diego called Drug and Alcohol Dependence found that opioid addiction and hospitalization was down 23% in the medical marijuana states.

Let's help our citizens have medical marijuana available to improve the quality of their lives and save thousands of Hoosiers from opioid addiction and death.

4. We are fortunate to have the experiences of most of the country (31 states so far) and dozens of localities in allowing the use of medical marijuana.

- A. The research and reports to date indicate that medical marijuana use does not lead to addiction or cause mental health problems. A small percentage of users have conditions that would not benefit from medical marijuana. Maybe 10% of heavy, regular users become habituated if not mentally and physically dependent on its use.

Judge Francis Young ruled in 1988 that cannabis was the safest therapeutic drug known to man. "Similar studies have found marijuana much safer than almost all other drugs and compounds including alcohol," most significantly according to Paul Armentano, "The consumption of marijuana-regardless of quantity or potency-cannot induce a fatal overdose." According to the World Health Organization, "there are no recorded cases of overdose fatalities attributed to cannabis."

- B. Medical marijuana regulatory schemes for the control of production, processing, and distribution of marijuana to patients vary greatly between

the 31 states. Many of them continue to modify and adapt new regulations based on their respective experiences. Some modify existing agencies such as the Liquor and Cannabis Board (Washington) and others create new agencies.

- C. The impact on youth perceptions and use is minimal. According to the Colorado Department of Public Health and Environment in Monitoring Health Concerns related to Marijuana in Colorado, 2017, “for adults and adolescents marijuana use has not changed since legalization either in terms of the number of people using or the frequency of use among users.”

The enactment of adult use cannabis regulation is not associated with upticks in marijuana use by adolescents. “I think the concern was that by legalizing marijuana, we should certainly see an increase in adult use, and maybe that would leak into our youth. (There was also a concern that) youth would somehow gain greater access, and/or feel entitled to go ahead and use in greater numbers. We just haven’t seen that pan out.... It appears that teenagers make decisions to consume marijuana for reasons other than legalization-like they do with other risk behaviors.”

(Comments from Larry Wolk, Chief Medical Officer of the Colorado Department of Public Health (<http://www.Cbc.ca/listen/shows/island-morning/segment/14496573>), October 23, 2017).

“The presence of recreational marijuana retail stores was not associated with perceived easy access to marijuana, controlling for perceived ease of access before the retail sales. There was no significant change in past 30-day marijuana use in bivariate analysis or in multivariate model including presence of a recreational marijuana store.” (Adolescent marijuana use and perceived ease of access before and after recreational marijuana implementation in Colorado

(<http://www.ncbi.nlm.nih.gov/pubmed/28816599>), Substance Use & Misuse, 2017).

“For adults and adolescents (in Colorado), past-month marijuana use has not changed since legalization either in terms of the number of people

using or the frequency of use among users. Based on the most comprehensive data available, past month marijuana use among Colorado adolescents is nearly identical to the national average.” (Colorado Department of Public Health and Environment (<https://drive.google.com/file/d/0b0tmpq67k3nvvmtmlupqdfbirhm/view>), Monitoring health Concerns related to marijuana in Colorado, 2017).

Marijuana use, both among adults and among youth (in Colorado), does not appear to be increasing to date. No change was observed in past 30 day marijuana use among adults between 2014 (13.6%) and 2015 (13.4%). Similarly, there was no statistically significant change in 30-day or lifetime marijuana use among high school students.”(lessons learned after three years of legalized, recreational marijuana: the Colorado experience (<http://sci-hub.bz/10.1016/j.ypped.2017.02.021>), Preventive Medicine, 2017).

- D. Allowing medical marijuana in Indiana would not cause an increase in crime or lead to use of illicit drugs. In fact, a recent report in the Journal of Urban Economics (2017) found that the establishment of cannabis retailers is not associated with upticks in criminal activity. “We find no support for the idea that closing dispensaries reduced crime. Rather, temporary closures deter some types of part I (serious) crime... “An open dispensary provides over \$30,000 per year in social benefit in terms of larcenies prevented.” (going to pot: the impact of dispensary closures on crime (<https://www.sciencedirect.com/science/article/pii/S0094119017300281>)). Journal of Urban Economics, 2017).

There were no observed cross-section associations between the density of medical marijuana dispensaries and either violent or property crime rates in this study.

Experts agree that the use of marijuana is not causally linked to the use of other illicit substances. “there is compelling and enduring evidence that marijuana is not a gateway drug... Yet, non-evidence-based political factors on both the left and the right remain the reason for the persistence of the gateway myth.” The Benjamin Center for Public Policy Initiatives at SUNY New Patlz University, The Marijuana Gateway Fallacy, 2017

https://www.newpatlz.edu/media/the-benjamin-center/db_18_the_marijuana_gateway_fallacy.pdf).

By allowing medical marijuana we would have significantly less child welfare cases and juvenile justice matters because of the proven reduction in opioid addiction, hospitalization, and O.Ds

- E. There are no increased risks on traffic and workplace accidents, fatalities, and injuries with medical marijuana.

In fact, neither medical use nor adult use legalization is associated with adverse effects on traffic safety. “we (the state of Colorado) have not experienced any significant issue as a result of legalization... we have actually seen an overall decrease in DUI’s since legalization. So, the short answer is: there has been no increase since legalization of marijuana here.” (Comments from Larry Wolk, Chief Medical Officer of the Colorado Department of Public Health

<https://www.cbc.ca/listen/shows/island-morning/segment/14496573>), October 23, 2017.

“We found no significant association between recreational marijuana legalization in Washington and Colorado and subsequent changes in motor vehicle crash fatality rates in the first three years after recreational marijuana legalization... We also found no association between recreational marijuana legalization and total crash rates when analyzing available state-reported nonfatal crash statistics.” (Crash fatality rates after recreational marijuana legalization in Washington and Colorado (<http://ajph.aphapublications.org/doi/10.2105/ajph.2017.303848>), Journal of the American Public Health Association, 2017)

“In monitoring the impacts of recreational marijuana legalization in Washington State, government researchers report that there was no trend identified in the percentage of drivers testing positive for marijuana (either marijuana only or marijuana in combination with other drugs/alcohol) for those involved in traffic fatalities and who were tested for drugs or alcohol. (The Marijuana Policy Gap and the Path Forward

(<https://fas.org/sgp/crs/misc/r44782.pdf>), Congressional Research Service, 2017)

“To this point, as a result of legalization, we haven’t seen a large spike or epidemic of ...THC driving (in Oregon).” “On average, medical marijuana law states had lower traffic fatality rates than non-MML states... medical marijuana laws are associated with reductions in traffic fatalities, particularly pronounced among those aged 25 to 44 years... it is possible that this related to lower alcohol-impaired driving behavior in MML states.”(US Traffic Fatalities, 1985-2014, and their relationship to medical marijuana laws

(<https://ajph.aphapublications.org/doi/abs/10.2015/ajph.2016.303577?journalcode=ajph>), Journal of the American Public Health Association, 2016.

There are several field sobriety tests for marijuana impairment currently in use. Most of them, like the ones used in Indiana, are ineffective to detect impairment. More scientific breath sample methods are being developed to work like an alcohol sensor and blood tests can determine more accurately the percentage of THC in the sample with a better indication of impairment.

Marijuana regulation is not associated with adverse effects on workplace performance or safety.

“There is no evidence to support... A statistical association between cannabis use and occupational accidents or injuries.”(<https://nationalacademies.org/hmd/-/media/files/report%20files/2017/cannabis-health-effects/cannabis-conclusions.pdf>), 2017

- F. Allowing medical marijuana in Indiana would have a positive effect on the economy and workforce such has been seen throughout the country since majority of states changed their laws. It is estimated that there are currently over 155,000 people with full time jobs in the legal cannabis industry.

Marijuana regulation is associated with increased tax revenue and job creation. A state by state analysis by content provider leafly.com identified 149,304 full-time jobs in the legal cannabis sector. (leafly.com, cannabis jobs count: legal marijuana supports 149,304 Americans (<https://www.leafly.com/news/politics/cannabis-jobs-count-legal-marijuana-supports-149304-americans>), 2017

Reducing criminal penalties for marijuana offenses is associated with increased probability of employment, particularly for young males, and an average increase of 4.5 percent in weekly earnings. “this data provides suggestive evidence that marijuana decriminalization laws improve extrinsic labor market outcomes... this result is consistent with existing literature that suggest black adults, especially men, stand to benefit the most from removing these penalties.” (Economic Self-Sufficiency Policy Research Institute, marijuana decriminalization and labor market outcome, (<https://www.esspri.uci.edu/files/docs/2016/esspri%20working%20paper%2020162%20timothy%20young.pdf>), 2016).

Among those over the age of 50, the enactment of medical cannabis laws was associated with a “9.4 percent increase in the probability of employment and a 4.6 percent to 4.9 percent increase in hours worked per week... medical marijuana law implementation leads to increase in labor supply among older adult men and women.” “utilizing the current population survey, the study identifies that absences due to sickness decline following the legalization of medical marijuana. (The effect of medical marijuana on sickness absence. <https://onlinelibrary.wiley.com/doi/10.1002/hec.3390/full>), Health Economics, 2016.

- G. There are various ways the states and Federal government agencies implement data system to collect, share and publish medical marijuana information. There is an effort in congress to pass medical research act regarding the licensing of cannabis cultivation for research.
- H. The impact of allowing medical marijuana on state and local government revenues is very positive. All of the recreational marijuana states also have medical marijuana for sale so there is not sufficient data available

for just medical marijuana revenues. However, all the legal marijuana states report revenues of well over \$100 million dollars a year. In fact, a recent auditor's report in Pennsylvania estimated that taxing the state's existing retail cannabis market would yield \$581 million in new annual revenue.

“Cannabis sales in Washington state continue to grow at a steady rate, with total 2017 sales topping \$1.1 billion at the end of September.... According to data released by Washington State Liquor and Cannabis Board, over the past five months the state's cannabis industry has broken a number of its own sales records, with monthly sales now exceeding \$130 million.”

“Nevada dispensaries sold more than \$33 million in recreational marijuana and the states pulled in nearly \$5 million in total taxes in August (2017), according to numbers released by the Nevada Department of Taxation... The recreational sales numbers were significantly ahead of the state's projected \$21.5 million in sales for August. In fact, the state did not project any month in the first year of recreational sales to eclipse \$28 million.” (Las Vegas Review Journal, Nevada recreational marijuana sales reach \$33m in August (<https://www.reviewjournal.com/news/pot-news/nevada-receational-marijuana-sales-reach-33m-in-august>), 2017).

In conclusion, Indiana needs to allow medical marijuana for all the reasons discussed. We don't need to be the last state to take action to help our citizens with the opioid crisis and provide safe effective treatment for conditions. We don't need more studies. We need to act now.

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