

Myths vs. Facts – Adult Use Cannabis in Indiana

Myth: Allowing the use of cannabis in Indiana will reduce public safety and result in more violent and property crimes.

Facts: The public safety impact of legalizing and regulating cannabis in other states has been extensively studied. Most of the existing research on the topic has found that such policy changes have either <u>no impact or a positive impact on property and violent</u> <u>crime</u>.ⁱ There are some mixed findings when it comes to property and nuisance crimes in urban neighborhoods with a cannabis dispensary and this means that our local and state leaders should be cautious about how tightly they regulate where dispensaries may open in our communities.ⁱⁱ

Myth: Allowing the regulated use of cannabis will take an important tool away from law enforcement which they can utilize to prosecute those engaged in more serious crimes.

Facts: Ending cannabis prohibition will allow law enforcement to focus on solving and preventing property and violent crimes during a time when cities across Indiana have experienced years of elevated violent crime.ⁱⁱⁱ Research from other states shows that taking the issue of enforcing cannabis prohibition off officers' plates allows them to solve more violent crimes and ensure more victims receive justice.^{iv}

Myth: Permitting the use of cannabis by adults will give minors greater access to the substance and increase their use of marijuana.

Facts: Even though recent data shows that teen substance use has declined to its lowest levels in a decade, our state must still undertake efforts to effectively prevent them from accessing any potentially harmful substances.^v While mixed, most research on this topic concludes that <u>establishing an adult-use cannabis market in a state either does not impact or reduces the use of cannabis among minors.^{vi} The experience of 16 other states reveals that Indiana will not see a major spike in teen cannabis use if it establishes a regulated adult-use cannabis market.^{vii}</u>

Myth: Marijuana is a "gateway drug" and even allowing appropriately regulated access to the substance will result in individuals increasing their use of other drugs.

Facts: The "gateway" theory for cannabis has been questioned by experts for decades and recent evidence tends to reveal that the opposite effect occurs when states allow the

use of cannabis.^{viii} A growing number of studies are finding that states allowing adult use of cannabis <u>reduced binge drinking</u>, <u>overall alcohol consumption</u>, <u>and use of other</u> <u>more dangerous substances</u>.^{ix} The existing research also finds that legalizing the adult use of cannabis results in the reduced prescription of opioids and <u>reductions in opioid-</u> <u>related hospitalizations</u>, <u>deaths</u>, <u>and overdoses</u>.^x

Myth: Allowing the use of cannabis will undermine workforce gains Indiana has achieved in recent years and reduce the number of residents willing to work full-time.

Facts: The limited research studying the topic has found that the legalization of cannabis has either <u>not impacted or marginally improved labor force participation and unemployment</u>,^{xi} There is also substantial research finding that allowing regulated cannabis access significantly reduces both the number of workers' compensation claims and the amount of compensation benefits secured by those who do receive benefits.^{xii}

Myth: Establishing an adult-use cannabis market in Indiana will not help farmers or other small businesses and only benefits a handful of large companies.

Facts: Indiana has an opportunity to establish an adult-use cannabis market which will contribute to its agricultural dominance and its robust economy powered by small businesses if it adopts a proper regulatory and licensing structure. The cannabis industry now supports more than 13,200 farms and has <u>exceeded crops such as every fruit, rice, and peanuts in its total contribution to America's agricultural economy.^{xiii} The industry is also estimated to directly employ more than 428,000 individuals and millions more in industries that serve these businesses like plumbers and electricians.^{xiv}</u>

Myth: Traffic fatalities will skyrocket if Indiana implements an adult-use cannabis market, and we have no credible way to prevent cannabis-impaired driving.

Facts: Evidence does seem to indicate that traffic fatalities and other negative traffic outcomes have *slightly* increased in states that have implemented an adult-use cannabis market.^{xv} This should not be surprising given that similar impacts have been seen when states expand access to alcohol.^{xvi} There are a number of studies that fail to find a relationship, but more research is needed to determine if a causal relationship exists given the scientific complications with how human bodies metabolize THC.^{xvii}

<u>There is a solution</u> – combining robust enforcement of Indiana's impaired driving laws and the expertise of law enforcement officers trained as "Drug Recognition Experts."^{xviii} This training has been found to be highly effective in assisting officers with identifying and responding to impaired driving.^{xix}



Myth: The legalization of cannabis has caused greater mental illness in other states.

Facts: There is no clear correlation (let alone proven causation) between the legalization of cannabis and overall mental illness.^{xx} In fact, the medical use of cannabis has been found to alleviate post-traumatic stress disorder (PTSD) and other types of mental health concerns.^{xxi} The most studied mental health impacts - psychosis and schizophrenia – appear to have some relationship with cannabis use but it is unclear whether it is because cannabis use causes these symptoms or individuals with these symptoms are more likely to use cannabis.^{xxii} A growing body of evidence from those holding both perspectives in the scientific community find that cannabis use *alone* is not enough to cause psychotic incidents without other genetic or environmental factors.^{xxiii}

Myth: Cannabis is a Schedule 1 substance so that means that the scientific community believes that cannabis has no credible medical uses and is extremely dangerous to consume even once.

Facts: A growing body of research reveals that cannabis can be an effective treatment for certain medical conditions such as PTSD, chronic pain, multiple sclerosis, and epilepsy.^{xxiv} This has caused organizations like the American Medical Association, American Academy of Family Physicians, and National Academies of Sciences, Engineering, and Medicine to urge the federal government to reevaluate the Schedule I status of cannabis.^{xxv}

It is also now clear that cannabis is not as dangerous as other Schedule I substances like heroin, lysergic acid diethylamide (LSD), and Ecstasy. The CDC notes that it "is unlikely" that use of cannabis can result in an overdose and the organization does not even track overdose deaths for marijuana or any marijuana derivative.^{xxvi}

Myth: The push to allow adult-use cannabis is supported by only a minority of Indianans.

Facts: Recent Fox News opinion research shows that 63% of Americans and <u>71% of</u> <u>Indiana voters support allowing the adult use of cannabis</u>.^{xxvii} Other states that have posed the legalization of cannabis to their voters in recent years have seen it pass with a significant majority. This includes states such as Arizona (60%), Maryland (67%), and Montana (57%).^{xxviii}



¹ Michael T. French, et al., *Societal Costs and Outcomes of Medical and Recreational Marijuana Policies in the United States: A Systematic Review*, Med. Care Res. 1 (2022) (finding that body of existing research shows that adoption of adult-use cannabis laws has no impact on crime); Guangzhen Wu, et al., *The Spillover Effect of Recreational Marijuana Legalization on Crime: Evidence From Neighboring States of Colorado and Washington State*, 50 J. Drug Issues 392 (2020); Davide Dragone, et al., *Crime and the legalization of recreational marijuana*, 159 J. Econ Behav. Org. 488 (2019); Shana L Maier & Emily L. Koppenhofer, *The Implications of Marijuana Decriminalization and Legalization on Crime in the United States*, 44 Contemp. Drug Probs. 125 (2017); Anjelica Rice, *A Blunt Look at The Impacts Marijuana Has On Violent Crime*, University of Washington Bothell (2019), https://digital.lib.washington.edu/researchworks/handle/1773/44495; Angela Dills, et al., *The Effect of State Marijuana Legalizations: 2021 Update*, Cato Institute (2021), https://www.cato.org/policy-analysis/effect-statemarijuana-legalizations-2021-update; *But see* Guangzhen Wu, et al., *Impact of recreational marijuana legalization on crime: Evidence from Oregon*, 72 J. Criminal Just. 1 (2021); Ruibin Lu, et al., *The Cannabis Effect on Crime: Time-Series Analysis of Crime in Colorado and Washington State*, 38 Just. Q. 565 (2021).

ⁱⁱ Jessee Burkhardt & Chris Goleman's, *The short-run effects of marijuana dispensary openings on local crime*, 63 Annals Reg. Sci. 163 (2019); Christopher Contreras, A Block-Level Analysis of Medical Marijuana Dispensaries and Crime in the City of Los Angeles, 34 Just. Q. 1069 (2016); *But see* William Zakrzewski, et al., *Cannabis in the capital: exploring the spatial association between medical marijuana dispensaries and crime*, 43 J. Crime Just. 1 (2020); Tom Y. Chang & Mireille Jacobson, Going to pot? The impact of dispensary closures on crime, 100 J. Urban Econ. 120 (2017).

ⁱⁱⁱ Federal Bureau of Investigation, *Crime Data Explorer – Arrests Offense Counts in the United States*, U.S. Department of Justice (2022), <u>https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/arrest</u> (showing that homicides have increased by 65% in Indianapolis, 52% in Fort Wayne, and 72% in Evansville since 2019). ^{iv} Guangzhen Wu, et al., *Effects of recreational marijuana legalization on clearance rates for violent crimes: Evidence from Oregon*, 100 Int'l J. Drug Pol'y 1 (2022) (finding that recreational marijuana legalization in Oregon increased the clearance rates for violent crimes by 4.5%); David A. Makin, et al., *Marijuana Legalization and Crime Clearance Rates: Testing Proponent Assertions in Colorado and Washington State*, 22 Police Q. 31 (2019) (legalization of marijuana in Colorado and Washington improved clearance rates – both an immediate jump after implementation and a later upward trend towards higher rates overall).

^v National Institute on Drug Abuse, *Percentage of adolescents reporting drug use decreased significantly in 2021 as the COVID-19 pandemic endured*, National Institutes of Health (2021), <u>https://www.drugabuse.gov/news-events/news-releases/2021/12/percentage-of-adolescents-reporting-drug-use-decreased-significantly-in-2021-as-the-covid-19-pandemic-endured.</u>

vi Jennifer A. Bailey, et al., Effects of Cannabis Legalization on Adolescent Cannabis Use Across 3 Studies, Amer. J. Prevent. Med. (2022); D. Mark Anderson, et al., Association of Marijuana Legalization With Marijuana Use Among US High School Students, 1993-2019, 4 JAMA Net. Open 1 (2021); Rebekah Levine Coley, et al., Recreational Marijuana Legalization and Adolescent Use of Marijuana, Tobacco, and Alcohol, 69 J. Adolescent Health 41 (2021); Greg Midgette & Peter Reuter, Has Cannabis Use Among Youth Increased After Changes in Its Legal Status? A Commentary on Use of Monitoring the Future for Analyses of Changes in State Cannabis Laws, 21 Prevention Sci. 137 (2020); Magdalena Cerda, et al., Association Between Recreational Marijuana Legalization in the United States and Changes in Marijuana Use and Cannabis Use Disorder From 2008 to 2016, 77 JAMA Psychiatry 165 (2020); Emily Kan, et al., Marijuana Use Among Justice-Involved Youths After California Statewide Legalization, 2015-2018, 110 Amer. J. Public Health 1386 (2020); Rosanna Smart & Rosalie Ricardo Pacula, Early evidence of the impact of cannabis legalization on cannabis use, cannabis use disorder, and the use of other substances: Findings from state policy evaluations, 45 Amer. J. Drug Alcohol Abuse 644 (2019); D. Mark Anderson, et al., Association of Marijuana Laws With Teen Marijuana Use, 173 JAMA Pediatrics 879 (2019); Julia A. Dilley, et al., Prevalence of Cannabis Use in Youths After Legalization in Washington State, 173 JAMA Pediatrics 192 (2019); Ashley Brooks-Russell, et al., Adolescent Marijuana Use, Marijuana-Related Perceptions, and Use of Other Substances Before and After Initiation of Retail Marijuana Sales in Colorado (2013–2015), 20 Prevention Sci. 185 (2019); Claire E Blevins, et al., The Implications of Cannabis Policy Changes in Washington on Adolescent Perception of Risk, Norms, Attitudes, and Substance Use, 12 Substance Abuse Res. Treatment 1 (2018); But see Meen Hye Lee, et al., Adolescents' Marijuana Use Following Recreational Marijuana Legalization in Alaska and Hawaii, 34 Asia Pacific J. Public Health 65 (2022); Mallie J. Paschall, et al., Recreational Marijuana Legalization and Use Among California Adolescents: Findings From a Statewide Survey, 82 J. Studies on Alcohol Drugs 103 (2021); Mallie J. Paschall & Joel W. Grube, Recreational Marijuana Availability in Oregon and Use Among Adolescents, 58 Amer. J. Preventive Medicine 63 (2020); Jennifer A. Bailey, et al., Marijuana Legalization and Youth Marijuana, Alcohol, and Cigarette Use and Norms, 59 Amer. J. Prev. Med. 309 (2020); Magdalena Cerdá, et al., Association of State Recreational Marijuana Laws With Adolescent Marijuana Use, 171 JAMA Pediatrics 142 (2017); Barrett Wallace Montgomery, et al., Estimating the effects of legalizing recreational cannabis on newly incident cannabis use, PLOS ONE (2022), https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0271720; Alex Hollingsworth, et al., Comparative



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^{vii} States with an adult-use market currently include Washington, Colorado, Alaska, Oregon, California, Nevada, Maine, Massachusetts, Michigan, Illinois, Montana, Vermont, Arizona, New Jersey, and New Mexico (in order of market open dates). Six more states – Connecticut, New York, Virginia, Rhode Island, Maryland, and Missouri – are currently working to implement their laws to establish an adult-use market.

^{viii} See e.g., Janet E. Joy, et al., National Academy of Sciences, MARIJUANA AND MEDICINE: ASSESSING THE SCIENCE BASE (1998) ("There is no conclusive evidence that the drug effects of marijuana are causally linked to the subsequent abuse of other illicit drugs."); Andrew R Morral, et al., *Reassessing the marijuana gateway effect*, 97 Addiction 1493 (2002).

^{ix} Keaton Miller & Boyoung Seo. The Effect of Cannabis Legalization on Substance Demand and Tax Revenues. 75 Nat'l Tax J. 107 (2021); Collin M. Calvert & Darin Erickson, Recreational cannabis legalization and alcohol purchasing: a diference-in-diferences analysis, 3 J. Cannabis Res. 1 (2021); Jeremy Mennis, et al., Treatment admissions for opioids, cocaine, and methamphetamines among adolescents and emerging adults after legalization of recreational marijuana, 122 J. Substance Abuse Treatment 1 (2021); Davide Dragone, et al., Crime and the legalization of recreational marijuana, 159 J. Econ Behav. Org. 488 (2019); Meenakshi S. Subbaraman & William C. Kerr, Subgroup trends in alcohol and cannabis co-use and related harms during the rollout of recreational cannabis legalization in Washington state, 75 Int'l J. Drug. Pol'y 1 (2020); Joseph Sabia, et al., Is Recreational Marijuana a Gateway to Harder Drug Use and Crime?, NBER (2021), https://www.nber.org/papers/w29038; But see Thanh Lu, Marijuana legalization and household spending on food and alcohol, 30 Health Econ. 1684 (2021); Seong-min Park, et al., The Effect of Marijuana Legalization on the Trajectories of Hard Drug-Related Hospitalizations: A Growth Curve Analysis of the County-Level State Inpatient Database in Washington, 2009–2015, 50 J. Drug Issues 273 (2020); Ashutosh Bhave & B. P. S. Murthi, A Study of the Effects of Legalization of Recreational Marijuana on Sales of Cigarettes, SSRN (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3508422; See also Constanza Risso, et al., Does cannabis complement or substitute alcohol consumption? A systematic review of human and animal studies, 34 J. Psychopharmacology 938 (2020); Hollis C. Karoly, et al., Effects of cannabis use on alcohol consumption in a sample of treatment-engaged heavy drinkers in Colorado, 116 Addiction 2529 (2021). ^x Jiebing Wen, et al., The impact of medical and recreational marijuana laws on opioid prescribing in employersponsored health insurance, 30 Health Econ. 989 (2021); Coleman Drake, et al., Recreational cannabis laws and opioid-related emergency department visit rates, 30 Health Econ. 2595 (2021); Benjamin J. McMichael, et al., The impact of cannabis access laws on opioid prescribing, 69 J. Health Econ. 1 (2020); J.J. Alcocer, Exploring the effect of Colorado's recreational marijuana policy on opioid overdose rates, 185 Public Health 8 (2020); Nathan W. Chan, et al., The Effects of Recreational Marijuana Legalization and Dispensing on Opioid Mortality, 58 Econ. Inquiry 589 (2020); Amalie K. Kropp Lopez, et al., Prescription Opioid Distribution after the Legalization of Recreational Marijuana in Colorado, 17 Int'l j. Environ. Res. Public Health 1 (2020); Yuvan Shi, et al., Recreational marijuana legalization and prescription opioids received by Medicaid enrollees, 194 Drug Alcohol Dependence 13 (2019); Hefei Wen & Jason M. Hockenberry, Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees, 178 JAMA Intern. Med. 673 (2018); Michelle N. Anyaehie, et al., Opioid distribution trends in California post recreational marijuana legalization, medRxiv (2021),

https://www.medrxiv.org/content/10.1101/2021.02.20.21252025v2; Isabella Kathleen MacMillan & Kevin M. Gorey, *Cannabis- Based Reduction in Opioid-Related Harms: Population-Based Observational Meta Analysis*, Research Square (2020), https://assets.researchsquare.com/files/rs-25299/v1/4becba4c-a2ce-49e1-9d06-

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xⁱ Ioana Popovici & Michael French, Cannabis Use, Employment, and Income: Fixed-effects Analysis of Panel Data, 41 J. Behav. Health Serv. Res. 185 (2014); Avinandan Chakraborty, et al., The Effects of Recreational Cannabis Access on the Labor Market: Evidence from Colorado, IDEAS (2020), <u>https://ideas.repec.org/p/cpl/wpaper/2001.html.</u> xⁱⁱ Keshar M. Ghimire & Johanna Catherine Maclean, Medical marijuana and workers' compensation claiming, 29 Health Econ. 1495 (2020); Rahi Abouk, et al., Does Marijuana Legalization Affect Work Capacity? Evidence from Workers' Compensation Benefits, National Bureau of Economic Research (2021),

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^{xv} Charles M. Farmer, et al., Changes in Traffic Crash Rates After Legalization of Marijuana: Results by Crash Severity, 83 Alcohol Drugs 461 (2022); Christian Gunadi, *Does expanding access to cannabis affect traffic crashes? Countylevel evidence from recreational marijuana dispensary sales in Colorado*, 31 Health Econ. 2244 (2022); Care Evelyn



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^{xvi} See e.g. Jennifer Cook Middleton, et al., *Effectiveness of Policies Maintaining or Restricting Days of Alcohol Sales* on Excessive Alcohol Consumption and Related Harms, 39 Amer. J. Prevent. Med. 575 (2010); Garnett P. McMillan & Sandra Lapham, *Effectiveness of Bans and Laws in Reducing Traffic Deaths*, 96 Amer. J. Public Health 1944 (2006).

^{xvii} Marco H. Benedetti, et al., *Self-reported driving after marijuana use in association with medical and recreational marijuana policies*, 92 Int'l J. Drug Pol'y 1 (2021); Jim Dewey, et al., *State Marijuana Laws and Traffic Fatalities*, 51 Rev. Region. Stud. 246 (2021); Taylor Lensch, et al., *Cannabis use and driving under the influence: Behaviors and attitudes by state-level legal sale of recreational cannabis*, 141 Prevent. Med. 1 (2020); Collin Calvert & Darin Erickson, *An examination of relationships between cannabis legalization and fatal motor vehicle and pedestrian-involved crashes*, 21 Traffic Injury Prev. 521 (2020); Gregory Leung & Jessica Dutra, *Legal Access to Marijuana and Motor Vehicle Fatalities in the United States*, 1990–2019, SSRN (2021),

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^{xx} Jacob James Rich et al., *Effect of Cannabis Liberalization on Suicide and Mental Illness Following Recreational Access: A State-Level Longitudinal Analysis in the USA*, medRxiv (2022),

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^{xxiv} Hindocha, supra note xxi; Eric P. Baron, Medicinal Properties of Cannabinoids, Terpenes, and Flavonoids in Cannabis, and Benefits in Migraine, Headache, and Pain: An Update on Current Evidence and Cannabis Science, 58 Headache 1139 (2018); Emily Stockings, et al., Evidence for cannabis and cannabinoids for epilepsy: a systematic review of controlled and observational evidence, 89 J. Neurology Neurosurgery Psychiatry 741 (2018); Brendan Saloner, et al., A Public Health Strategy for the Opioid Crisis, 133 Pub. Health Rep. 24S (2018); National Academies of Sciences, Engineering, and Medicine, The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research, National Academies of Sciences, Engineering, and Medicine (2017), https://www.nap.edu/catalog/24625/the-health-effects-of-cannabis-and-cannabinoids-the-current-state;

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