

Marijuana legalization's workforce impact looks positive

Limited research so far shows lower unemployment, higher workforce participation and lower worker's compensation claims



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Cannabis legalization might be a policy that many would assume is a negative for a state's workforce, but our analysis of the limited available research paints a much more complex and positive picture.¹

We were able to identify some clear conclusions from the research in this area so far:

- Early research indicates that the legalization of cannabis for adult use reduces unemployment and increases labor force participation while allowing medical use appears to have a positive workforce impact for only certain populations.
- The legalization of cannabis for medical or adult use will have no impact on the wages for workers in a jurisdiction adopting such reforms.
- The legalization of cannabis for medical or adult use is likely to result in a reduction in workers' compensation claims and will have no impact on disability insurance payouts.

Labor Force Participation and Unemployment

Adult-use: The research in this area has been historically nonexistent because until recent years researchers have been focused on the other questions explored as part of this series of reports. Two studies finally exploring the impact of adult-use legalization were published in 2021.² Johanna Catherine Maclean, then a professor at Temple University, and her colleagues utilized data from the Social Security Administration and Census Bureau to explore the labor market outcomes in

states that had adopted an adult-use marijuana law by 2020. They found that the adoption of such a law does not impact a state's labor force participation rate but does reduce its unemployment rate by 5.8%.³ Another study looking only at the impact in Colorado utilizing county-level labor market data concluded that the combined impact of the state's legalization of cannabis and a dispensary opening in a particular county was a 0.7% decrease in unemployment and a 4.5% increase in overall employment.⁴ Authors note that employment in the new legal cannabis industry accounts for some of this employment gain but cannot account for it all. These two studies provide evidence that cannabis legalization reduces unemployment in a state and might improve overall labor force participation but the mechanism by which this occurs is still unclear. Identifying the reasons why this is occurring is a fruitful area for further research and some hypotheses that we hope researchers will explore include the specific impacts on employment rates from changes in drug testing standards, self-medication with cannabis products, and so-called cannabis-related tourism.

Medical: The adoption of medical legalization has received slightly more attention, and those studies seem to show that this legal change improves the labor force participation of certain groups of individuals.⁵ Each of the three existing studies finds a positive impact on an entirely different group, so these findings are still far from a consensus. For example, one study found a positive impact on females aged 30 to 39 years old, while another found a positive impact only on older workers.⁶

Wages and Compensation

Similar to labor force participation, the potential impact of marijuana reform on wages has been little studied, so we have limited evidence to explore in this area. The two studies looking at *adult use* legalization and the single study analyzing *medical* legalization conclude that the adoption of such laws has no impact on wages.⁷ The most recent study from two economists at the University of Oregon evaluated the impact on retail and agricultural wages in Washington and Colorado. They found that “while the number of workers in the relevant sectors increased following the entry of cannabis producers and retailers, the wage per worker remained effectively constant.”⁸

Impacts on Workers’ Compensation and Disability Programs

Employers and others have raised concerns that the legalization of marijuana might result in a significant cost to them or the state if it results in increases in workers’ compensation or disability costs on account of higher employee injuries.⁹ Only a few studies have explored these topics but, taken together, they indicate that these concerns are either uninformed or exaggerated.¹⁰

The most recent study was completed by Rahi Abouk and colleagues. It explored Census Bureau data on how many Americans received a workers’ compensation benefit each year and Bureau of Labor Statistics data on nonfatal workplace injuries for workers aged 40 to 62 years of age in all 50 states. Their first finding was that traumatic injuries declined in the workplace by 0.5 percent while non-traumatic workplace injuries declined by a much higher rate of 16.4 percent.¹¹ Likely on account of the reduced injury rate, workers’ compensation benefits also declined significantly in states with *adult-use* marijuana legalization.¹²

This outcome in the research initially seemed to be counterintuitive to us given the significant effect we saw in our prior research of such policies on traffic fatalities and crashes (even though these are different types of injuries in a different setting).¹³ Authors of the research we have cited in this report speculate that this effect could be occurring because cannabis might be a better method of symptom management,

especially with chronic pain as an alternative to opioids.¹⁴ This could allow older workers to work later in life or might disincentivize all workers from seeking workers’ compensation or shorten their time out of work on account of better symptom management.¹⁵

Researchers Keshar Ghimire and Johanna Maclean utilized the same dataset and a similar methodology in a separate study to reach a similar conclusion regarding the impact of *medical* marijuana legalization but with smaller positive effects.¹⁶ They also are the only researchers to complete an analysis of the impact of *adult-use* legalization on disability programs. They found that the number of claims for disability benefits increased but that the number of claims paid was unaffected.¹⁷

Conclusion

The research we have compiled in this study shows that concerns that the legalization of cannabis could lead to decreased workforce engagement and productivity have not materialized in states that allow medical or adult use of the substance. In fact, the research indicates that such reforms can have a positive impact on the workforce by bringing workers back into the legal workforce and reducing the utilization of workers’ compensation programs.

This does not mean that such policies might not have a negative impact on individual employees in isolation if they choose to use these products, so readers should not interpret this as indicating that we believe any employee should work while under the influence of cannabis. We will explore the health outcomes from an individual’s use of the substance in a future report for this series.



About the author

Jeremiah Mosteller is an attorney and criminal justice policy expert who serves as a policy director at Americans for Prosperity and a visiting fellow at the Badger Institute.

Endnotes

1: Note: There is robust research to show that cannabis use, especially heavy use, is detrimental to an individual's educational and employment outcomes but those effects are present under every policy choice – including prohibition – evaluated by our work since none of them will completely eliminate cannabis access. Our analysis is focused on the impact of the policy choice, not the substance itself. See generally Jenny Williams and Jan C. van Ours, Hazardous or not? Cannabis use and early labor market experiences of young men, 29 Health Econ. 1148 (2020); Joseph M. Boden, et al., Modelling possible causality in the associations between unemployment, cannabis use, and alcohol misuse, 175 Soc. Sci. Med. 127 (2017) (finding that marijuana dependence results in someone being 3.6 times more likely to be unemployed than those who never use cannabis).

2: Johanna Catherine Maclean, et al., Marijuana legalization and disability claiming, 30 Health Econ. 453 (2021); Avinandan Chakraborty, et al., The Effects of Recreational Cannabis Access on the Labor Market: Evidence from Colorado, 10 IZA J. Labor Econ. 1 (2021); See also Rahi Abouk, et al., Pain Management and Work Capacity: Evidence from Workers' Compensation and Marijuana Legalization, __ J. Pol'y Analysis Management __ (2023) (finding that marijuana legalization increased the likelihood that a worker worked in the past year (1.9%) and week (3%) and the number of hours worked); Dhaval M. Dave, et al., The Effects of Recreational Marijuana Legalization on Employment and Earnings, National Bureau of Economic Research (2022), <https://www.nber.org/papers/w30813> (finding that adoption of adult-use marijuana law is associated with a "statistically insignificant" increase in probability of employment across all groups and a 1.8% probability for 21-29 year old Hispanic individuals); Seung-hun Chung and Mark D. Partridge, Impact of Recreational Marijuana Legalization on Regional Economies, Drug Enforcement and Policy Center (2021), available at <https://moritzlaw.osu.edu/faculty-and-research/drug-enforcement-and-policy-center/research-and-grants/marijuana-and-drug> (finding that legalization of cannabis for adult-use increases employment growth).

3: Maclean, supra note 2.

4: Chakraborty, supra note 2.

5: William Jergins, The effect of marijuana on labour market outcomes: evidence from medical marijuana laws, 54 Applied Econ. 2077 (2021) (finding that adoption of a medical cannabis market improved labor force participation for 30- to 39-year-old females and had no impact across other age groups); Lauren Hersch Nicholas and Johanna Catherine Maclean, The Effect of Medical Marijuana Laws on the Health and Labor Supply of Older Adults: Evidence from the Health and Retirement Study, 38 Pol'y Anal. Mgmt. 445 (2019) (finding that medical marijuana laws resulted in more older workers returning to full-time work or otherwise increasing their hours worked per week); Joseph J. Sabia and Thanh Tam Nguyen, The Effect of Medical Marijuana Laws on Labor Market Outcomes, 61 J. L. & Econ. 361 (2018) (finding no impact of medical marijuana legalization on employment rates or hours worked for legal change but that access to dispensaries results in a slight positive effect on employment rates for men of certain ages); See also William Jergins, Who Fears the Reaper? Medical Marijuana Laws and Labor Market Outcomes, SSRN (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3220725 (finding that medical marijuana laws substantially increased the labor force participation of women in the 30-39 and 40-49 years old age groups.).

6: Jergins, supra note 5; Nicholas, supra note 5.

7: Sichao Jiang and Keaton Miller, Watching the grass grow: does recreational cannabis legalization affect retail and agricultural wages?, 4 J. Cannabis Res. 1 (2022) (finding no evidence that legalization of adult use cannabis in Colorado or Washington had any impact on worker wages in the retail or agriculture sector); Maclean, supra note 2 (finding no impact on wages in states that have adopted adult-use legalization); Sabia, supra note 5 (finding no impact of medical marijuana legalization on wages for legal changes but that access to dispensaries results in a slight negative effect on wages for men of certain ages); See also Dave, supra note 2 (finding that adoption of adult-use marijuana law is not associated with any meaningful change in wages for workers except for a 6.9% increase in average wages for 16- to 20-year-old Black individuals); Seung-hun Chung, supra note 2 (finding no impact of adult-use cannabis legalization on average wages).



8: Jiang, *supra* note 7.

9: These two types of benefits for workers are frequently confused even though they are related. Workers' compensation benefits cover injuries that occur on the job or are caused by the job, while disability benefits cover health issues that are not related to employment but still cause an employee to take time off work. The first is also a strong proxy for the impact of policy changes on workplace injuries but intentionally excludes injuries that might occur on account of most traffic incidents (see our earlier report) since many will not occur during someone's ordinary course of employment.

10: Abouk, *supra* note 2; Maclean, *supra* note 2; Keshar M. Ghimire and Johanna Catherine Maclean, Medical marijuana and workers' compensation claiming, 29 Health Econ. 1495 (2020).

11: Abouk, *supra* note 2.

12: Abouk, *supra* note 2 (specific effect sizes were a 21% decline in the number of employees receiving workers' compensation benefits and a 19% reduction in the amount of income workers received from that source).

13: See Jeremiah Mosteller, Marijuana legalization and the impact on public safety, Badger Institute (2023), <https://www.badgerinstitute.org/marijuana-legalization-and-the-impact-on-public-safety/>.

14: Abouk, *supra* note 2; Ghimire, *supra* note 10.

15: See e.g. Abouk, *supra* note 2; Ghimire, *supra* note 10.

16: Ghimire, *supra* note 10 (specific effect sizes were a 13.3% decline in the likelihood of workers' compensation claims and a 1.8% decline in the amount of income workers received from that source).

17: Maclean, *supra* note 2 (the increase in the number of applications was similar across all applications [4.4%], Social Security Disability Insurance [3.6%], and Supplemental Security Income [6.5%]).