



Adult-use Cannabis Legalization Corresponds With Drops in Teen Use

“[L]egalization by some states of marijuana has not been associated with an increase in adolescents’ marijuana use.”

—National Institute on Drug Abuse Director Nora Volkow, testifying at a 2022 U.S. Senate Health, Education Labor & Pensions Committee hearing.¹

Study after study has found that cannabis policy reforms are not linked to increased rates of marijuana use among adolescents. The *Journal of the American Medical Association* published a major report analyzing data from more than 1.4 million high school students through 2019.² The researchers found “no significant associations between enactment of RMLs [“recreational” marijuana legalization laws] or MMLs [medical marijuana laws] and marijuana use among high school students.”

New data was released in late 2024 and it is even more encouraging, showing *decreases* in youth cannabis use since states began legalizing and regulating cannabis for adults 21 and older. As the below data tables show, in 19 of the 21 states with before-and-after data, government surveys indicate a decrease in high schoolers’ marijuana use rates post-legalization.³

Nationwide, both the U.S. Centers for Disease Control and Prevention and Monitoring the Future survey results show significant drops in youth marijuana use between 2011 and 2023/2024, while half of the country legalized and regulated cannabis for adults. Since states began legalizing cannabis for adults in 2012, MTF data shows 28% to 46% drops in past 30-day marijuana use in the three grades it surveyed — 8th, 10th, and 12th — along with significant drops in the percent of youths reporting “very easy” or “fairly easy” access to marijuana.⁴

National Survey Data on Teen Use & Access Since States Began Legalizing Cannabis

The CDC’s Youth Risk Behavior Survey, past 30-day marijuana use, national data⁵

The first two state legalization laws were enacted in 2012.

| | 2011 | 2013 | 2015 | 2017 | 2019 | 2021 | 2023 |
|--|-------|-------|-------|-------|-------|-------|-------|
| 9 th – 12 th grade | 23.1% | 23.4% | 21.7% | 19.8% | 21.7% | 15.8% | 17.0% |

¹ Available at: <https://www.youtube.com/watch?v=fAbi3VtTAOI>

² Anderson DM, Rees DI, Sabia JJ, Safford S. Association of Marijuana Legalization With Marijuana Use Among US High School Students, 1993-2019. *JAMA Netw Open*. 2021;4(9):e2124638. doi:10.1001/jamanetworkopen.2021.24638

³ The “before” year for the only two states with data indicating a post-legalization increase in teens’ marijuana use was 2021, a year with major nationwide drops related to COVID-related shutdowns and separation. For every state that had CDC/ Youth Risk Behavior data both before passage and in 2023, that data was used.

⁴ Miech, R. A., Johnston, L. D., Patrick, M. E., & O’Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Monitoring the Future Available at <https://monitoringthefuture.org/results/annual-reports/>

⁵ Centers for Disease Control and Prevention (CDC). 1991-2023 High School Youth Risk Behavior Survey Data. Available at <http://yrbs-explorer.services.cdc.gov/>. Accessed on December 30, 2024. =AK

Monitoring the Future, past 30-day marijuana use, national data⁶

| | 2011 | 2024 |
|-------------------|-------|-------|
| 8th grade | 7.2% | 4.3% |
| 10th grade | 17.6% | 9.5% |
| 12th grade | 22.6% | 16.2% |

Monitoring the Future, percent of students finding marijuana “fairly easy” or “very easy” to obtain, national data⁷

| | 2011 | 2024 |
|-------------------|-------|-------|
| 8th grade | 37.9% | 24.2% |
| 10th grade | 68.4% | 41.2% |
| 12th grade | 82.2% | 65.1% |

State-By-State Data Post-Legalization, With the Oldest Laws First

Washington State Healthy Youth Survey (past 30-day use) — Law enacted in Nov. 2012⁸

| | 2010 | 2012 | 2014 | 2016 | 2018 | 2021 | 2023 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 8th grade | 9.5% | 9.4% | 7.3% | 6.4% | 7.2% | 2.8% | 3.7% |
| 10th grade | 20.0% | 19.3% | 18.1% | 17.2% | 17.9% | 7.2% | 8.4% |
| 12th grade | 26.3% | 26.7% | 26.7% | 26.4% | 26.2% | 15.9% | 16.3% |

Colorado Healthy Kids Survey (past 30-day use) — Law enacted in Nov. 2012⁹

| | 2011 | 2013 | 2015 | 2017 | 2019 | 2021 | 2023 |
|---|-------|-------|-------|-------|-------|-------|-------|
| 9th – 12th grade | 22.0% | 19.7% | 21.2% | 19.4% | 20.6% | 13.3% | 12.8% |

⁶ Miech, R. A., Johnston, et al. Available at <https://monitoringthefuture.org/data/bx-by/>

⁷ Miech, R. et al. Available at <https://monitoringthefuture.org/wp-content/uploads/2024/12/trends-in-availability-8-grade.pdf>
<https://monitoringthefuture.org/wp-content/uploads/2024/12/trends-in-availability-10-grade.pdf>
<https://monitoringthefuture.org/wp-content/uploads/2023/12/mtf2023table9.pdf>.

<https://monitoringthefuture.org/wp-content/uploads/2024/12/trends-in-availability-12-grade.pdf>

⁸ Washington State Healthy Youth Survey. Healthy Youth Survey Dashboard. Available at <https://www.askhys.net/SurveyResults/DataDashboard/>. Accessed on December 30, 2024.

⁹ Colorado Department of Public Health & Environment. Healthy Kids Survey Dashboard. Available at <https://cdphe.colorado.gov/healthy-kids-colorado-survey-dashboard/>. Accessed on December 30, 2024. 2011 data at p. 2 of Overview of the 2011 Healthy Kids Colorado Survey: High School: Available at: https://www.coloradoedinitiative.org/wp-content/uploads/2012/04/Overview_2011-Healthy-Kids-Colorado-Survey.pdf CDC data was only through 2021, during COVID disruptions. It also showed a drop since legalization, from 22% in 2011 to 18% in 2021. The CDC survey also reported a post legalization decrease before COVID. In 2019, 20.1% of high schoolers reported using marijuana in the past 30 days.

Oregon Healthy Teens Survey & Student Health Survey (past 30-day use) — Law enacted in Nov. 2014¹⁰

| | 2013 | 2015 | 2017 | 2019 | 2020 | 2022 |
|------------------------------|-------|-------|-------|-------|-------|-------|
| 8th grade | 9.7% | 8.8% | 6.7% | 7.8% | 3.3% | 3.1% |
| 11th grade | 20.9% | 19.1% | 20.9% | 20.4% | 13.5% | 12.0% |

Alaska Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2014¹¹

| | 2013 | 2015 | 2017 | 2019 | 2023 |
|---|-------|-------|-------|-------|-------|
| 9th – 12th grade | 19.7% | 19.0% | 21.5% | 21.5% | 17.9% |

California Healthy Youth Survey (past 30-day use) — Law enacted in Nov. 2016¹²

| | 2013-2015 | 2015-2017 | 2017-2019 | 2019-2021 |
|------------------------------|-----------|-----------|-----------|-----------|
| 9th grade | 12% | 10% | 10% | 6% |
| 11th grade | 18% | 16% | 16% | 12% |

Massachusetts Youth Risk Behavior Survey (past 30-day use); Youth Health Survey — Law enacted in Nov. 2016¹³

| | 2015 | 2017 | 2019 | 2021 | 2023 |
|---|-------|-------|-------|-------|-------|
| 9th – 12th grade | 24.5% | 24.1% | 26.0% | 16.6% | 18.6% |

Maine Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016¹⁴

| | 2015 | 2017 | 2019 | 2021 | 2023 |
|---|-------|-------|-------|-------|-------|
| 9th – 12th grade | 19.9% | 18.8% | 22.3% | 17.1% | 18.4% |

Nevada Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016¹⁵

| | 2015 | 2017 | 2019 | 2021 | 2023 |
|---|-------|-------|-------|-------|-------|
| 9th – 12th grade | 19.3% | 17.9% | 19.8% | 16.3% | 14.7% |

¹⁰ Oregon Health Authority. Oregon Student Healthy Survey Data 2020 and 2022. Available at: <https://www.bach-harrison.com/SHSDataPortal/Crosstabs.aspx> Oregon Health Authority. Oregon Healthy Teens Survey Results, 2013-2019. <https://www.oregon.gov/oha/PH/BirthDeathCertificates/Surveys/OregonHealthyTeens/Pages/index.aspx>

¹¹ Centers for Disease Control and Prevention (CDC). 1991-2023 High School Youth Risk Behavior Survey Data. Available at <http://yrbs-explorer.services.cdc.gov/>. Accessed on December 30, 2024.

¹² California Healthy Kids Survey (CHKS), CalSCHLS Public Dashboards Available at <https://calschls.org/reports-data/public-dashboards/f882f1e2-dfc0-4448-b90b-f49cef6e6d3f/>. CDC data was only through 2019. It also showed a decrease — from 22.9% in 2015 to 17.1% in 2019 among high schoolers.

¹³Centers for Disease Control and Prevention (CDC). 1991-2023 High School Youth Risk Behavior Survey Data. Available at <http://yrbs-explorer.services.cdc.gov/>. Accessed on December 31, 2024. *Massachusetts Department of Public Health. Results of the Massachusetts Youth Health Survey 2023.* <https://www.mass.gov/doc/results-of-the-massachusetts-youth-health-survey-2023/download>. (p. 29) A

¹⁴Centers for Disease Control and Prevention (CDC). 1991-2023 High School Youth Risk Behavior Survey Data. Available at <http://yrbs-explorer.services.cdc.gov/>. Accessed on December 30, 2024.

¹⁵ *Ibid.*

Vermont Youth Risk Behavior Survey (past 30-day use) — Law enacted in Jan. 2018¹⁶

| | 2017 | 2019 | 2021 | 2023 |
|--|-------|-------|-------|-------|
| 9 th – 12 th grade | 23.5% | 26.5% | 19.9% | 22.4% |

Michigan Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2018¹⁷

| | 2017 | 2019 | 2021 | 2023 |
|--|-------|-------|-------|-------|
| 9 th – 12 th grade | 23.7% | 21.6% | 14.4% | 16.7% |

Illinois Youth Risk Behavior Survey (past 30-day use) — Law enacted in June 2019¹⁸

| | 2017 | 2019 | 2021 | 2023 |
|--|-------|-------|-------|-------|
| 9 th – 12 th grade | 20.8% | 21.8% | 15.1% | 17.3% |

Arizona Youth Survey (past 30-day use) — Law enacted in Nov. 2020¹⁹

| | 2018 | 2020 | 2022 | 2024 |
|------------------------|-------|-------|-------|-------|
| 8 th grade | 8.1% | 5.9% | 5.7% | 3.8% |
| 10 th grade | 17.0% | 14.1% | 11.0% | 7.8% |
| 12 th grade | 23.2% | 20.7% | 17.6% | 14.1% |

Montana Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2020²⁰

| | 2019 | 2021 | 2023 |
|--|-------|-------|-------|
| 9 th – 12 th grade | 21.1% | 19.7% | 19.6% |

Virginia Youth Risk Behavior Survey (past 30-day use) — Law enacted in 2021²¹

| | 2019 | 2021 | 2023 |
|--|-------|-------|------|
| 9 th – 12 th grade | 17.3% | 13.3% | 9.5% |

New Jersey Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2020 and Feb. 2021²²

| | 2019 | 2021 | 2023 |
|--|-------|-------|-------|
| 9 th – 12 th grade | 20.1% | 17.3% | 13.6% |

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ Arizona Youth Survey State Report 2024, Available at: www.azcjc.gov/Portals/0/Documents/pubs/AYSReports/2024/2024_AYS_State_Report.pdf p. 12. 2018 data: www.azcjc.gov/Portals/0/Documents/pubs/AYSReports/2018/2018_Arizona_Youth_Survey_State_Report.pdf p. 50. CDC data was only through 2021, during COVID disruptions. It found 26.1% of high schoolers reported past-30 day use of marijuana in 2019 and 19.2% in 2021.

²⁰ Centers for Disease Control and Prevention (CDC). 1991-2023 High School Youth Risk Behavior Survey Data. Available at <http://yrbs-explorer.services.cdc.gov/>. Accessed on December 30, 2024.

²¹ *Ibid.*

²² *Ibid.*

New Mexico Youth Risk Behavior Survey (past 30-day use) — Law enacted in March 2021²³

| | 2019 | 2021 | 2023 |
|--|-------|-------|-------|
| 9 th – 12 th grade | 27.7% | 20.2% | 17.4% |

New York Youth Risk Behavior Survey (past 30-day use) — Law enacted in March 2021²⁴

| | 2019 | 2021 | 2023 |
|--|-------|-------|-------|
| 9 th – 12 th grade, survey omits NYC | 17.9% | 15.4% | 12.0% |

Connecticut Youth Risk Behavior Survey (past 30-day use) — Law enacted in June 2021²⁵

| | 2019 | 2021 | 2023 |
|--|-------|-------|-------|
| 9 th – 12 th grade | 21.7% | 11.1% | 14.7% |

Rhode Island Youth Risk Behavior Survey (past 30-day use) — Law enacted in June 2022²⁶

| | 2021 (during COVID) | 2023 |
|--|------------------------|-------|
| 9 th – 12 th grade | 15.5% | 19.8% |

Missouri Youth Risk Behavior Survey (past 30-day use) — Law enacted in November 2022²⁷

| | 2021 (during COVID) | 2023 |
|--|------------------------|-------|
| 9 th – 12 th grade | 16.7% | 20.3% |

Maryland Youth Risk Behavior Survey (past 30-day use) — Law enacted in November 2022²⁸

| | 2021 (during COVID) | 2023 |
|--|------------------------|-------|
| 9 th – 12 th grade | 15.0% | 14.4% |

States Without Data

Delaware, Minnesota, and Ohio's legalization laws passed in 2023 and do not yet have "after" data.

Conclusion

More than a decade into states legalizing cannabis for adults the data is clear: Legalization does not increase youth cannabis use. Moving cannabis sales from streets and schools to adults-only stores has been accompanied by reduced access and use of cannabis by youth.

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ *Ibid.*

²⁸ *Ibid.*

On the illegal market, no one is checking IDs before selling marijuana. When and where cannabis is illegal, high schoolers often sell cannabis to their peers.²⁹ In contrast, licensed cannabis stores have overwhelming compliance with age-gating.³⁰ As part of legalization, a portion of cannabis taxes are often directed to education and prevention, such as after-school activities.

²⁹ In 2012, before any states had regulated adult-use cannabis sales, 40% of high schoolers reported knowing a student who sells marijuana at school. "National Survey of American Attitudes on Substance Abuse XVII: Teens," The National Center on Addiction and Substance Abuse at Columbia University, 2012, p. 2.

³⁰ Carla J. Berg, Katelyn F. Romm, Alexandria Pannell, Priyanka Sridharan, Tanvi Sapra, Aishwarya Rajamahanty, Yuxian Cui, Yan Wang, Y. Tony Yang, Patricia A. Cavazos-Rehg, Cannabis retailer marketing strategies and regulatory compliance: A surveillance study of retailers in 5 US cities, *Addictive Behaviors*, Volume 143, 2023, 107696, ISSN 0306-4603, See additional sources at: "Study: Licensed Cannabis Retailers Are Strictly Complying with ID Verification Laws," NORML, April 5, 2023. Available at: <https://norml.org/blog/2023/04/05/study-licensed-cannabis-retailers-are-strictly-complying-with-id-verification-laws>