

Teen Marijuana Use Does Not Increase Following Marijuana Policy Reforms

"[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.

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. 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.

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.

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 data

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% |

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

| | 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 data $\dot{}$

| | 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. 2012[°]

| | 2010 | 2012 | 2014 | 2016 | 2018 | 2021 | 2023 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| 8 th grade | 9.5% | 9.4% | 7.3% | 6.4% | 7.2% | 2.8% | 3.7% |
| 10 th grade | 20.0% | 19.3% | 18.1% | 17.2% | 17.9% | 7.2% | 8.4% |
| 12 th 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. 2012°

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

Oregon Healthy Teens Survey & Student Health Survey (past 30-day use)

— Law enacted in Nov. 2014¹⁰

| | 2013 | 2015 | 2017 | 2019 | 2020 | 2022 |
|------------------------|-------|-------|-------|-------|-------|-------|
| 8 th grade | 9.7% | 8.8% | 6.7% | 7.8% | 3.3% | 3.1% |
| 11 th 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.

2014"

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

California Healthy Youth Survey (past 30-day use) — Law enacted in Nov. 2016¹¹

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

Massachusetts Youth Risk Behavior Survey (past 30-day use); Youth Health Survey — Law enacted in Nov. 2016

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

Maine Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016¹¹

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

Nevada Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016 $^{\circ}$

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

Vermont Youth Risk Behavior Survey (past 30-day use) — Law enacted in Jan. 2018°

| | 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 2019"

| | 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. 2020"

| | 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 2021^a

| | 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. 2021²

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

New Mexico Youth Risk Behavior Survey (past 30-day use) — Law enacted in March 2021

| | 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 2021¹¹

| | 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 2021 **

| | 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 2022"

| | 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 2022²¹

| | 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.

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. In contrast, licensed cannabis stores have overwhelming compliance with age-gating. As part of legalization, a portion of cannabis taxes are often directed to education and prevention, such as after-school activities.

- 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
- 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/2023/12/mtf2023table9.pdf . https://monitoringthefuture.org/wp-content/uploads/2024/12/trends-in-availability-12-grade.pdf . https://monitoringthefuture.org/wp-content/uploads/2023/12/mtf2023table9.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 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.
- 13. 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 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

- 14. 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.
- 15. Ibid.
- 16. Ibid.
- 17. Ibid.

| 18. | Ibid. |
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| 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% on 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 Behavio Survey Data. Available at http://yrbs-explorer.services.cdc.gov/. Accessed on December 30, 2024 . |
| 21. | Ibid. |
| 22. | Ibid. |
| 23. | Ibid. |
| 24. | Ibid. |
| 25. | Ibid. |
| 26. | Ibid. |
| 27. | Ibid. |

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.

28. Ibid.

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-d-verification-laws |
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