

Teen Marijuana Use Does Not Increase Following Marijuana Policy Reforms

Study after study has concluded that marijuana policy reform is not linked to increased rates of marijuana use among teens. As National Institute on Drug Abuse Director Nora Volkow said at a March 23, 2022 Senate Health, Education Labor & Pensions Committee hearing, “in the United States, legalization by some states of marijuana has not been associated with an increase in adolescents’ marijuana use.”

In July 2019, the *Journal of the American Medical Association* published a major report analyzing federal data from more than 1.4 million high school students.¹ The researchers found no significant associations between the enactment of adult-use legalization laws and marijuana use among high school students. The study also looked at medical cannabis laws and concluded they had no impact on youth marijuana use. These findings were consistent with the results of a meta-analysis of 55 academic papers and multiple data sources published by the journal *Current Addiction Reports* in September 2018. Those researchers wrote that, “Liberal forms of medical cannabis regulation ... have not to date increased rates of cannabis use among adolescents.”²

Another major report focused on cannabis use disorders among adolescents from 2002 to 2013. During that time, as dozens of significant marijuana policy reforms were passed throughout the states, a peer-reviewed study in the *Journal of the American Academy of Child & Adolescent Psychiatry* found that, “Past-year prevalence of marijuana use disorders among US adolescents declined by an estimated 24%.”³

In 2012, Colorado and Washington became the first states to legalize marijuana for adult use. Both have conducted large-scale surveys involving tens of thousands of high school students in the years since. In each case, the results (see below) show an overall *reduction* in past 30-day marijuana use among teens. Research published in the journal *Substance Abuse* also suggests that legalization has not increased use among teens who were already using marijuana.

As of March 2022, the available data suggests that regulating marijuana for adults’ use does not impact marijuana use among youth. Below are data tables for youth surveys comparing past 30-day marijuana use for teens before and after adult-use legalization laws passed in 10 states — Colorado, Washington, Oregon, Alaska, California, Maine, Massachusetts, Nevada, Vermont, and Michigan.⁴ In five of the states, government surveys indicate a slight decrease in teens’ marijuana use rates, while in the other half, surveys suggest a slight increase. In most cases, the changes were within the confidence intervals. Taken as a whole, rates are unchanged. Meanwhile, two nationwide surveys show a modest decrease in teen use since states began legalizing cannabis for adults.

Washington State Healthy Youth Survey (past 30-day use) — Law enacted in November 2012⁵

	2010	2012	2014	2016	2018
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8th grade	9.5%	9.4%	7.3%	6.4%	7.0%
10th grade	20.0%	19.3%	18.1%	17.2%	17.9%
12th grade	26.3%	26.7%	26.7%	26.4%	26.2%

Colorado Healthy Kids Survey (past 30-day use) – Law enacted in November 2012 ⁶

	2011	2013	2015	2017	2019
9th - 12th grade	22.0%	19.7%	21.2%	19.4%	20.6%

Oregon Healthy Teens Survey (past 30-day use) – Law enacted in November 2014 ⁷

	2013	2015	2017	2019
8th grade	9.7%	8.8%	6.7%	7.8%
11th grade	20.9%	19.1%	20.9%	20.4%

Alaska Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2014 ⁸

	2013	2015	2017	2019
9th - 12th grade	19.7%	19.0%	21.5%	21.5%

California Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2016 ⁹

	2015	2017	2019
9th - 12th grade	22.9%	21.8%	17.1%

Massachusetts Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2016 ¹⁰

	2015	2017	2019
9th - 12th grade	24.5%	24.1%	26.0%

Maine Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2016 ¹¹

	2015	2017	2019
9th - 12th grade	19.9%	18.8%	22.3%

Nevada Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2016 ¹²

	2015	2017	2019
9th - 12th grade	19.3%	17.9%	19.8%

Vermont Youth Risk Behavior Survey (past 30-day use) – Law enacted in January 2018 ¹³

	2017	2019
9th - 12th grade	23.5%	26.5%

Michigan Youth Risk Behavior Survey (past 30-day use) – Law enacted in November 2018

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	2017	2019
9th - 12th grade	23.7%	26.5%

National Survey on Drug Use and Health (past 30-day use, small sample size) ¹⁵

	'12-'13	'13-'14	'14-'15	'15-'16	'16-'17	'17-'18	'18-'19
U.S., 12-17 years old	7.2%	7.2%	7.2%	6.8%	6.5%	6.6%	7.0%
Colorado, 12-17 years old	11.2%	12.6%	11.1%	9.1%	9.0%	9.4%	9.8%
Washington, 12-17 years old	9.8%	10.1%	9.2%	7.9%	9.0%	9.9%	9.9%
Alaska, 12-17 years old	N/A	9.2%	10.6%	10.4%	8.8%	7.9%	8.5%
Oregon, 12-17 years old	N/A	10.2%	9.4%	9.8%	10.4%	9.7%	10.7%
D.C., 12-17 years old	N/A	10.6%	8.9%	8.1%	8.3%	8.5%	9.0%

Nevada, 12-17 years old	N/A	N/A	N/A	8.7%	8.8%	9.2%	9.7%
Maine, 12-17 years old	N/A	N/A	N/A	9.7%	9.9%	10.3%	10.9%
California, 12-17 years old	N/A	N/A	N/A	7.3%	6.9%	7.1%	8.9%
Massachusetts, 12-17 years old	N/A	N/A	N/A	8.7%	8.9%	9.3%	9.7%
Michigan, 12-17 years old	N/A	N/A	N/A	N/A	N/A	7.9%	7.4%

Nationwide Youth Risk Behavior Survey (past 30-day use) ¹⁶

	2011	2013	2015	2017	2019
9th - 12th grade	23.1%	23.4%	21.7%	19.8%	21.7%

¹ Anderson, Mark D., et al. "Association of Marijuana Laws With Teen Marijuana Use New Estimates From the Youth Risk Behavior Surveys," *Journal of the American Medical Association*, July 2019.

² Leung, Janni, et al. "Has the Legalisation of Medical and Recreational Cannabis Use in the USA Affected the Prevalence of Cannabis Use and Cannabis Use Disorders?," *Current Addiction Reports*, September 2018.

³ Grucza, Richard A., et al. "Declining Prevalence of Marijuana Use Disorders Among Adolescents in the United States, 2002 to 2013." *Journal of the American Academy of Child & Adolescent Psychiatry*, vol. 55, no. 6, 2016.

⁴ Eight additional states — Illinois, Montana, Arizona, Virginia, New Jersey, New Mexico, New York, and Connecticut — have legalized marijuana for adults since 2019 and do not yet have "after" data.

⁵ Accessed here: <http://www.askhys.net/FactSheets> Likely due to disruptions in education due to the coronavirus, the survey was not conducted in 2020. The next survey, the Healthy Youth Survey, will be administered in October 2021.

⁶ Accessed here: <https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data>

⁷ Accessed here: <https://www.oregon.gov/oha/PH/BirthDeathCertificates/Surveys/OregonHealthyTeens/Pages/index.aspx>

⁸ Accessed here: <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ Accessed here: <https://pdas.samhsa.gov/saes/state> (N/A is listed for pre-legalization years)

¹⁶ Accessed here: <https://nccd.cdc.gov/youthonline/App/Results.aspx?>

