



Teen Marijuana Use Does Not Increase Following Marijuana Policy Reforms

Study after study has concluded that cannabis policy reform is not linked to increased rates of marijuana use among teens. As National Institute on Drug Abuse Director Nora Volkow testified 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 2021, 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 or frequency of 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]

Below are data tables for youth surveys comparing past 30-day marijuana use for high school students before and after adult-use legalization laws passed in the 14 states with before-and-after data. In 13 of the 14 states, government surveys indicate a decrease in teens’ marijuana use rates, a few of which are within the margin of error. In a single state, the surveys suggest a slight increase, within the margin of error. Meanwhile, the CDC’s nationwide survey data shows a modest decrease in teen use since states began legalizing cannabis for adults.

Note: Prior to the COVID pandemic, surveys of high schoolers’ marijuana use before and after legalization indicated no statistically significant changes overall, with a slight decrease as a whole. Results from 2020-2021 indicate more consistent and significant decreases in adolescent’ marijuana use than the previous data. (Of note, in every legalization state other than Massachusetts, adult-use cannabis stores were deemed essential and were not subject to shut-down orders.) It remains to be seen if the 2021 dip was a short-term, pandemic-related change or if it will be more sustained. However, even if the 2020-2021 drop were an anomaly due to the pandemic, the data is clear: legalization for adults does not increase teens’³ marijuana use.

Washington State Healthy Youth Survey (past 30-day use) — Law enacted in November 2012⁴

	2010	2012	2014	2016	2018	2021
8th grade	9.5%	9.4%	7.3%	6.4%	7.0%	2.8%
10th grade	20.0%	19.3%	18.1%	17.2%	17.9%	7.2%
12th grade	26.3%	26.7%	26.7%	26.4%	26.2%	15.9%

Colorado Healthy Kids Survey (past 30-day use) — Law enacted in Nov. 2012 ⁵

	2011	2013	2015	2017	2019	2020	2021
9th - 12th grade	22.0%	19.7%	21.2%	19.4%	20.6%	13.3%	13.3%

Oregon Healthy Teens Survey (past 30-day use) — Law enacted in Nov. 2014 ⁶

	2013	2015	2017	2019	2020
8th grade	9.7%	8.8%	6.7%	7.8%	3.3%
11th grade	20.9%	19.1%	20.9%	20.4%	13.5%

Alaska Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2014 ⁷

	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 Nov. 2016 ⁸

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

Massachusetts Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016 ⁹

	2015	2017	2019	2021
9th - 12th grade	24.5%	24.1%	26.0%	16.6%

Maine Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016 ¹⁰

	2015	2017	2019	2021
9th - 12th grade	19.9%	18.8%	22.3%	17.1%

Nevada Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2016 ¹¹

	2015	2017	2019	2021
9th - 12th grade	19.3%	17.9%	19.8%	16.3%

Vermont Youth Risk Behavior Survey (past 30-day use) — Law enacted in Jan. 2016 ¹²

2017 2019 2021

9th - 12th grade 23.5% 26.5% 19.9%

Michigan Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2018 ¹³

2017 2019 2021

9th - 12th grade 23.7% 21.5% 14.4%

Illinois Youth Risk Behavior Survey (past 30-day use) — Law enacted in June 2019 ¹⁴

2017 2019 2021

9th - 12th grade 20.8% 21.8% 15.1%

Arizona Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2020 ¹⁵

2019 2021

9th - 12th grade 26.1% 19.2%

Montana Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2020 ¹⁶

2019 2021

9th - 12th grade 21.1% 19.7%

New Jersey Youth Risk Behavior Survey (past 30-day use) — Law enacted in Nov. 2020 and Feb. 2021 ¹⁷

2019 2021

9th - 12th grade 20.1% 17.3%

Connecticut, Delaware, Maryland, Minnesota, Missouri, New Mexico, New York, Ohio, Rhode Island, and Virginia's legalization laws are too new to have "after" data. They all passed in 2021 or later.

National Survey on Drug Use and Health (past 30-day use, small sample size, no '20-'21 data) ¹⁸

	'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) ¹⁹

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

1 Anderson, Mark D., et al. "Association of Marijuana Legalization With Marijuana Use Among US High School Students, 1993-2019", September 2021.

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.

4 Accessed here: <http://www.askhys.net/FactSheets> Due to disruptions in education related to the coronavirus pandemic, the survey was not conducted in 2020.

3 Centers for Disease Control and Prevention, "Youth Risk Behavior Survey: Data Summary and Trends Report," February 2023, p. 22.; "Trends in the Prevalence of Marijuana, Cocaine, and Other Illegal Drug Use National YRBS: 1991—2019," CDC. The last, pre-COVID national figure on current teen cannabis use (21.7% in 2019) was slightly lower than the rate before any state legalized cannabis for adults' use (23.1% in 2011).

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.oregon.gov/oha/PH/BirthDeathCertificates/Surveys/OregonHealthyTeens/Pages/index.aspx>

7 Accessed here: <https://www.cdc.gov/healthyouth/data/yrbs/results.htm>

8 Ibid.

9 Ibid.

10 Ibid.

11 Ibid.

12 Ibid.

13 Ibid.

14 Ibid.

15 Ibid.

16 Ibid.

17 Ibid.

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

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