

 News Release

Delta-8-THC use reported by 11% of 12th graders in 2023

Use of the psychoactive cannabis product is higher in states without existing delta-8 regulations or cannabis legalization, NIH-funded study finds

updated on March 12, 2024

Approximately 11% of 12th-grade students across the United States reported past-year use of delta-8- tetrahydrocannabinol (delta-8-THC, or delta-8 for short), according to an [analysis of data](#) from the 2023 Monitoring the Future survey, which is funded by the National Institutes of Health. Delta-8 is a psychoactive substance that is typically derived from hemp, a variety of the Cannabis sativa plant. Delta-8 [has intoxicating effects similar to delta-9-THC](#) (delta-9), the primary THC component responsible for the “high” people may experience from using cannabis.



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The researchers measured delta-8 use for the first time in 2023 to investigate the drug’s popularity among teens as more hemp-derived THC products enter the market and become more accessible. Studies show an association between cannabis

use and negative health impacts for teens, underlining the importance of monitoring use of delta-8 and other cannabis products among younger people.

Among those who reported delta-8 use, close to 91% also reported marijuana use, contributing to the approximately 30% of 12th graders overall who reported past-year marijuana use. The survey also showed delta-8 use was more common in the South and Midwest regions and in states without cannabis legalization or delta-8 regulations. In contrast, levels of marijuana use did not differ by state-level cannabis policies. The findings were published as a [brief report in JAMA](#). The Monitoring the Future survey is conducted by researchers at the University of Michigan, Ann Arbor, and funded by the National Institute on Drug Abuse (NIDA), part of NIH.

“11% is a lot of people – that’s at least one or two students in every average-sized high school class who may be using delta-8. We don’t know enough about these drugs, but we see that they are already extremely accessible to teens,” said Nora Volkow, M.D., NIDA director. “Cannabis use in general has been associated with negative impacts on the adolescent brain, so we must pay attention to the kinds of cannabis products teens are using, educate young people about potential risks, and ensure that treatment for cannabis use disorder and adequate mental health care is provided to those who need it.”

Delta-8 is one of over 100 cannabinoids in the *Cannabis sativa* plant. There is no federal minimum age requirement to purchase delta-8 products, which may be sold online or in gas stations and convenience stores. In 2022, the U.S. Food and Drug Administration issued a [consumer update warning of the serious health risks associated with use of delta-8 THC](#), including reports of adverse events involving use of delta-8 products and risks of exposure to toxic byproducts.

Numerous studies have found that adolescent cannabis use is associated with [adverse effects](#) on learning, memory, and attention; changes in brain development; and the development of [cannabis use disorder](#) and other [psychiatric disorders](#), such as depression, psychosis and suicidality. There are no existing medications to treat cannabis use disorder, and current treatments are primarily through psychosocial

interventions, such as cognitive behavioral therapy. More research is needed to understand how delta-8, specifically, impacts these and other health outcomes.

This analysis of Monitoring the Future survey results also found that approximately 14% of 12th graders in the South and 15% in the Midwest reported delta-8 use, compared to 10% in the Northeast and 5% in the West. Around 14% of those in states without cannabis legalization reported delta-8 use, compared to 8% in states with legalization. In states without existing delta-8 regulations, 14% reported use compared to 6% in states with delta-8 legislation.

“Delta-8 products are out there where teens can easily find and buy them, and there needs to be continued surveillance of its use, as well as public health efforts to help youth and parents stay informed and safe,” said Alyssa Harlow, Ph.D., MPH, clinical assistant professor of population and public health sciences at the University of Southern California (USC), a member of the USC Institute for Addiction Science and lead author of the study.

“The national trends documented by the Monitoring the Future survey provide critical information for research and policy to keep pace with new developments in the market for cannabis products, which has seen considerable change in recent years,” said Richard A. Miech, Ph.D., team lead of the Monitoring the Future study at the University of Michigan and co-author of the study.

Because the survey is taken in school settings, students who were absent, not enrolled, or with less engagement in school – a known risk factor for drug use – may have been less likely to participate in the survey, the investigators note. This exclusion may have potentially led to an underestimation of adolescent use of delta-8. Future work will need to assess delta-8 use in younger teens; include a larger survey sample across a wider range of states; and examine the use of other hemp-derived products, including delta-9 and delta-10.

The Monitoring the Future survey is given annually to students in classrooms in eighth, 10th, and 12th grades who self-report their substance use behaviors over

various time periods, such as past 30 days, past 12 months, and lifetime. In 2023, the survey included questions on delta-8 for the first time, and they were administered to a randomly selected one-third of 12th grade students, resulting in 2,186 12th graders in 27 states. Given the prevalence of use found in the 2023 survey, questions on delta-8 have been added to future surveys for all age groups.

For more information on substance and mental health treatment programs in your area, call the free and confidential National Helpline 1-800-662-HELP (4357) or visit [FindTreatment.gov](https://findtreatment.gov). Anyone who needs assistance with the first steps in pursuing help can find guidance at [FindSupport.gov](https://findsupport.gov).

If you or someone you know is in crisis and needs immediate help, call the [988 Suicide & Crisis Lifeline](https://988lifeline.org) [🔗](https://988lifeline.org) at 988. [Learn more about suicide prevention](https://988lifeline.org) and ways you can help someone who might be at risk for self-harm.

Reference:

- [AF Harlow, et al. Adolescent Delta-8-THC and Marijuana Use in the United States](#) [🔗](#). JAMA. DOI: 10.1001/jama.2024.0865 (2024).

About the National Institute on Drug Abuse (NIDA): NIDA is a component of the National Institutes of Health, U.S. Department of Health and Human Services. NIDA supports most of the world's research on the health aspects of drug use and addiction. The Institute carries out a large variety of programs to inform policy, improve practice, and advance addiction science. For more information about NIDA and its programs, visit www.nida.nih.gov.

About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.

About substance use disorders: Substance use disorders are chronic, treatable conditions from which people can recover. In 2022, nearly 49 million people in the United States had at least one substance use disorder. Substance use disorders are defined in part by continued use of substances despite negative consequences. They are also relapsing conditions, in which periods of abstinence (not using substances) can be followed by a return to use. Stigma can make individuals with substance use disorders less likely to seek treatment. Using preferred language can help accurately report on substance use and addiction. [View NIDA's online guide.](#)

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