Use of marijuana and hallucinogenic drugs by young adults aged 19 to 30 years increased significantly in 2021, reaching unprecedented levels in this age group, according to new findings from a long-term study supported by the National Institute on Drug Abuse (NIDA).

In addition, rates of past-month nicotine vaping, which have been gradually rising in young adults over the past 4 years, showed an upward trend in 2021 after leveling off in 2020. Alcohol, however, remained the most widely used substance in this population, with young adults reporting concerning levels of binge drinking, which had rebounded after a decrease during the early days of the COVID-19 pandemic.

The findings were from the Monitoring the Future study, conducted by scientists at the University of Michigan’s Institute for Social Research. This ongoing study includes annual surveys of nationally representative samples of US students in grades 10 through 12, as well as a subset of 12th-grade students from each graduating class who are followed into adulthood.

“These data, gathered on national samples over such a large portion of the lifespan, are extremely rare and can provide needed insight into the epidemiology, etiology, and life course history of substance use and relevant behaviors, attitudes, and other factors," the authors note in the report.

Approximately 43% of young adults reported past-year marijuana use in 2021, a significant increase from 34% in 2016 and 29% in 2011. Use in the past month or daily use (defined as on 20 or more occasions within the past 30 days) also reached historic levels, with past-month use reported by 29% of young adults (compared with 21% in 2016 and 17% in 2011) and daily use reported by 11% of young adults (compared with 8% in 2016 and 6% in 2011). The levels of past-year, past-month, and daily use in 2021 were the highest levels documented since such trends were first measured in 1988.

Since 2017, the survey has also included marijuana vaping. Past-month marijuana vaping doubled from 6% in 2017 to 12% in 2021, after a significant dip in 2020 during the COVID-19 pandemic.

Although young adults used hallucinogens far less often than marijuana—8% of them reported past-year use in 2021—this figure was also the highest ever recorded since the category was first included in the study in 1988, compared with 5% in 2016 and 3% in 2011. The study asked survey respondents about a range of hallucinogens, including lysergic acid diethylamide (LSD); 3,4-methylenedioxymethamphetamine (MDMA), also known as ecstasy or Molly; mescaline; peyote; phencyclidine (PCP); and psilocybin, also known as “shrooms.”

Hallucinogen use had been relatively stable over the past few decades until 2020, when reports of use started to increase dramatically. Of the hallucinogens measured, the only one with significantly decreased use was MDMA.

“As the drug landscape shifts over time, this data provides a window into the substances and patterns of use favored by young adults. We need to know more about how young adults are using drugs like marijuana and hallucinogens, and the health effects that result from consuming different potencies and forms of these substances,” said NIDA Director Nora Volkow, MD, in a statement.

In addition, rates of past-month nicotine vaping showed an upward trend among young adults in 2021. With the exception of a plateau in 2020 during the early part of the COVID-19 pandemic, nicotine vaping has been increasing since 2017, when the study first began monitoring this behavior.
rising from 6% in 2017 to 16% in 2021. In contrast with the upward trend in nicotine vaping, past-month cigarette smoking decreased significantly in the past decade in this age group.

Although alcohol remained the most popular substance used by young adults, past-year, past-month, and daily drinking have declined overall in the past 10 years. However, high-intensity drinking (defined as having 10 or more drinks in a row within the past 2 weeks) reached 13% in 2021, its highest level since it was first tracked in 2005. Rates of binge-drinking (defined as having 5 or more consecutive drinks in the past 2 weeks), which had dropped in 2020 to 28%, returned to prepandemic levels in 2021 (32%).

Heroin use was uncommon, at only 0.2% among young adults, and has significantly decreased over the past 10 years, from 0.4% in 2011. Use of narcotics other than heroin in this age group also showed a downward trend since 2006 (when it peaked at 8.9%) and decreased significantly in the past year, from 2.6% in 2020 to 1.7% in 2021.

The study also included additional data on drug use reported by adults aged 35 to 50 years and other subgroups. For example, notable significant changes among adults aged 35 to 50 years from 2020 to 2021 included increases in marijuana use, reaching the highest levels in past-month use (nearly 16%) and past-year use (nearly 25%) since the survey started documenting such use in 2008. Daily drinking, which was at 12% in 2020, decreased back to prepandemic levels (9%) in 2021.

“Monitoring the Future and similar large-scale surveys on a consistent sample population allow us to assess the effects of ‘natural experiments’ like the pandemic,” Megan Patrick, PhD, the study’s principal investigator and a research professor at the University of Michigan, said in a statement. “We can examine how and why drugs are used and highlight critical areas to guide where the research should go next and to inform public health interventions.”

ARTICLE INFORMATION
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