

Sept. 6, 2017

Contact: Morgan Sherburne, (734) 647-1844

[morganls@umich.edu](mailto:morganls@umich.edu)

EMBARGOED FOR RELEASE UNTIL 12:01 A.M. ET FRIDAY, SEPT. 8, 2017

National study shows marijuana use among U.S. college students at highest level in three decades; use of most other substances remains steady

ANN ARBOR

Marijuana use among U.S. college students in 2016 was at the highest level seen in past three decades, according to the most recent findings from the national Monitoring the Future Follow-up study. College student marijuana use has been showing a steady increase over the past decade.

**The tables and figures associated with this story are available here:**

<http://www.monitoringthefuture.org/collegetablesandfigures2016>

In 2016, 39 percent of full-time college students aged 19-22 indicated that they used marijuana at least once in the prior 12 months, and 22 percent indicated that they used at least once in the prior 30 days. Both of these 2016 percentages are the highest found since 1987, and represent a steady increase since 2006 (when they were 30 and 17 percent, respectively).

However, the 2016 percentages are still below the peaks in use found in the early 1980s when 12-month and 30-day prevalence reached over 50 and 33 percent, respectively. (Findings on college students were first available in the study in 1980.) Daily or near daily use of marijuana—defined as having used 20 or more times in the prior 30 days—was at 4.9 percent in 2016; this is among the highest levels seen for over 30 years, though it has not shown any further rise in the past two years.

“These continuing increases in marijuana use, particularly heavy use, among the nation’s college students deserve attention from college personnel as well as students and their parents,” said John Schulenberg, the current principal investigator of the Monitoring the Future Follow-up study. “We know from our research and that of others that heavy marijuana use is associated with poor academic performance and non-completion of college.”

“Colleges are not simply inheriting this problem from high schools. Marijuana use has remained steady in recent years among the nation’s high school seniors, so this increase among college students suggests it has something to do with college and young adulthood experiences,” Schulenberg further noted.

There may be multiple reasons for the continuing increase in marijuana use among college students (and among their non-college peers). But one likely reason, according to the study results, is the ongoing decline in perceptions of risk of harm from regular marijuana use. In 2016, 30 percent of those aged 19-22 perceived regular use of marijuana as carrying great risk of harm, the lowest level reached since 1980.

“This percentage peaked at 75 percent in 1991, when marijuana use among college students and their non-college age-mates was at historic lows,” said Lloyd Johnston, the original principal investigator of the Monitoring the Future Follow-up study. “We have consistently seen this inverse relationship between perceptions of risks of harm and actual use, with changes in perceptions of risk typically preceding changes in use.”

In 2016, 12-month and 30-day marijuana use were similar for full-time college males and females, but daily marijuana use was higher for college males (6.6 percent) than college females (3.9 percent). Twelve-month and 30-day marijuana use tend to be lower among full-time college students than among their same-age peers who are not in college full-time. This is particularly true for daily marijuana use, with daily use among non-college youth being two and one-half times as high—at 12.8 percent in 2016, the highest level since this panel study began in 1980—versus 4.9 percent among full-time college students.

These findings emanate from the long term Monitoring the Future study, which has been tracking substance use of all kinds among American college students for the past 37 years. It is conducted by a team of researchers at the University of Michigan and is funded by the National Institute on Drug Abuse. These results are based on fulltime students who are one to four years beyond high school graduation and are enrolled in a two- or four-year college in March of the given year.

### **Use of Other Illicit Drugs**

The use of any illicit drug (including marijuana) has been gradually increasing among college students, with annual prevalence (that is, any use in the prior 12 months) reaching 42 percent in 2016, the highest level over the past 30 years. But most of this recent increase has been due to the increase in marijuana use noted above.

Annual use of illicit drugs other than marijuana among college students has leveled in recent years, with about one in five students reporting using an illicit drug other than, and usually in addition to, marijuana at least once in the prior 12 months. There was an increase in annual use from 2008 through 2014, but this increase appears to have stalled at a relatively high level over the past few years. In 2016, 20 percent of college students used an illicit drug other than marijuana at least once in the prior 12 months. Between 2013 and 2016, this percentage has ranged between 19 and 21 percent, among the highest percentages seen since the late 1980s.

This index of illicit drugs other than marijuana consists of numerous illicit drugs, most of which have leveled or declined in use in recent years.

In particular, the nonmedical use of prescription narcotic drugs (other than heroin) has shown some leveling in the past few years among college students. Annual prevalence declined from a peak of 8.8 percent in 2006 to 3.3 percent in 2015; but it increased non-significantly to 3.8 percent in 2016, suggesting that this important decline in the use of narcotics without medical supervision may be ending.

Use of heroin, another narcotic drug, has been low among college students for many years. The highest annual prevalence recorded since 1980 was in 1998 at 0.6 percent, but has been at or under 0.3 percent since 2005 and was down to 0.2 percent in 2016.

Use of amphetamines without medical supervision has leveled in the past few years among college students. Annual prevalence has held steady at about 10 percent since 2013, after a steady increase from 5.7 percent in 2008. Notably, amphetamine use tends to be higher among college students than non-college youth, likely due to college students using them to try to improve their academic performance.

The use of MDMA (ecstasy and more recently “Molly”) had made a bit of a comeback among college students, increasing between 2007 (2.2 percent) and 2012 (5.8 percent), but then declining through 2015 (4.2 percent). It increased non-significantly to 4.7 percent in 2016, suggesting that use of this substance among college students is leveling.

The use of LSD among college students has been gradually increasing from an historic low of 0.7 percent in 2005 to 3.1 percent in 2016, still well below its historic peak of 6.3 percent in 1982.

Cocaine use among college students has been level in recent years. In 2016, annual cocaine use was 4.0 percent, similar to 2014 and 2015. This constitutes a slight increase from a recent low of 2.7 percent in 2013, but far below the historic highs of 17 percent in the mid-1980s.

Certain drugs have declined in popularity quite rapidly among the nation’s college students. For example, annual use of synthetic marijuana, which is usually sold over the counter under such brand names as “K2” and “Spice,” dropped from 8.5 percent when first measured in 2011 to just 1.3 percent in 2016—a decline of about 85 percent in just five years. Annual use of Salvia has fallen from 5.8 percent when its use was first measured in 2009 to just 0.7 percent in 2016—a decline of almost 90 percent.

Some other drugs never gained much of a foothold on American college campuses, with use being at near-zero prevalence among college students in 2016. Drugs for which annual use was 0.5 percent or less in 2016 among college students included: ketamine, methamphetamine, crystal methamphetamine (ice), steroids, crack cocaine, “bath salts” (a form of synthetic stimulants), and GHB.

In general, college males are more likely than college females to use illicit drugs other than marijuana. But in recent years, some of the gender gaps have decreased. In 2016, college females, compared to college males, had similar or slightly higher annual prevalence of Adderall, narcotics other than heroin (OxyContin, and Vicodin specifically), sedatives, and synthetic

marijuana. With the exception of amphetamines, illicit drug use tends to be lower among college students compared to same-age non-college youth.

## **Alcohol Use**

Alcohol continues to remain the drug of choice among college students, with 79 percent indicating that they used in the prior 12 months and 63 percent in the prior 30 days in 2016. Indeed, 61 percent say that they were drunk at least once in the prior 12 months and 41 percent in the prior 30 days. Thus, drinking and drunkenness remain commonplace on the nation's college campuses, even though there has been some modest falloff in these rates since the early 1980s. For both 12-month and 30-day alcohol use in 2016, female college students report slightly higher prevalence than college males. Alcohol use tends to be higher among college students than same-aged non-college youth. It is noteworthy, however, that in high school, college-bound 12<sup>th</sup> graders are less involved in alcohol (and other substances) than other 12<sup>th</sup> graders, indicating that the higher levels of alcohol use among college students compared to same-age non-college youth emerges after high school.

Binge drinking—defined as having five or more drinks on at least one occasion in the past two weeks—was reported by 32 percent of all college students in 2016. While binge drinking has gradually declined among college males over the past thirty years, there has been little change among college females, resulting in some closing of the gender gap (though males have consistently had a higher rate of binge drinking). Across the years, binge drinking has been more common among college students than same-aged non-college youth.

Although having 5 or more drinks in a row can be dangerous, college students often drink at more dangerous levels. This is what is called “extreme binge drinking” or “high intensity drinking” and is defined as having 10 or more drinks—or even 15 or more drinks—on at least one occasion in the prior two weeks. Over the years 2012 to 2016 combined, about one in ten college students (10.1 percent) reported having 10 or more drinks in a row on at least one occasion in the prior two weeks; one in 30 (3.4 percent) reported having 15 or more drinks in a row at least once in the same interval. These percentages are much higher among college males than females, with 16.5 percent and 6.6 percent of college males having 10+ and 15+ drinks in a row in the past two weeks (corresponding percentages for college females were 6.2 percent and 1.4 percent).

“Excessive drinking clearly remains the major substance use problem on campuses,” said Schulenberg. “Having 10 or more drinks in a row, which is now happening for one-in-six college males at least once per two-week period, can result in alcohol poisoning, serious accidents, and a host of unwise decisions and dangerous behaviors that adversely affect them and those around them.”

## **Tobacco Use**

Cigarette smoking continues to decline gradually among college students, and the cumulative decline over the past 17 years has been dramatic. A peak rate of any smoking in the prior 30 days was reached in 1999 at 30.6 percent. By 2016 the rate had fallen by over two-thirds to 8.9

percent, a record low and the first time it has been under 10 percent. Daily smoking declined even more, from 19.3 percent in 1999 to 2.6 percent in 2016—a drop of over four-fifths and also a record low since 1980. This continued decline in college student cigarette smoking corresponds to what has been found among the nation’s high school students, indicating that this ongoing improvement has its source in fewer teens initiating cigarette smoking.

From 1980 through 1993, college females had higher rates of smoking than college males; but since 1994, males have had higher rates.

Compared to college students, same-aged non-college youth have dramatically higher rates of smoking: in 2016, 18.8 percent indicated prior 30-day smoking vs. 8.9 percent among the college students. Heavy smoking is even more concentrated among those not in college, with their half-pack or more daily smoking being 5.7 percent versus 1.7 percent among college students. Cigarette smoking is decreasing among non-college youth, but their smoking still remains much higher than among college youth, emphasizing that in this country, cigarette smoking has long been negatively correlated with educational attainment.

Use of other forms of tobacco, including using a hookah, small cigars, snus, and dissolvable tobacco also have been decreasing among college students, and these continuing decreases were evident in 2016.

Electronic vaporizers, which include e-cigarettes, were used in the 30 days prior to the survey by 6.9 percent of full-time college students in 2016, with use being higher among college males (9.5 percent) than among college females (5.2 percent). These percentages declined nonsignificantly from 2015 levels.

“The findings regarding tobacco use continue to be an important part of the good news from our study,” noted Schulenberg. “The new record lows in cigarette smoking among college students, combined with declines in the use of other forms of tobacco suggests that today’s college students have been given the context and tools to increasingly avoid tobacco use, a benefit that will accrue with age.”

## **About the Study**

The Monitoring the Future study (MTF) is now in its 43<sup>rd</sup> year. Starting in 1980, the MTF Follow-up has included nationally representative samples of full-time college students who are one to four years beyond high school. The annual samples of college students have ranged between about 900 and 1,500 per year.

MTF is an investigator-initiated research undertaking, conceived and conducted by a team of research professors (listed as authors below) at the University of Michigan’s Institute for Social Research. It is funded under a series of peer-reviewed, competitive research grants from the National Institute on Drug Abuse, one of the National Institutes of Health.

The MTF Main study conducts annual national surveys of high school seniors, from which random, nationally representative subsamples are drawn for follow-up by mail in future years. Of

these follow-up respondents, those who are one to four years beyond high school and who report being in a 2-year or 4-year college full-time in March comprise the college student sample each year. They are not drawn from particular colleges or universities, which helps to make the sample more representative of the wide range of two-and four-year institutions of higher education in the country.

The findings presented here are drawn from Chapters 5, 8 and 9 in this newly published monograph:

Schulenberg, J.E., Johnston, L.D., O'Malley, P.M, Bachman, J.G., Miech, R.A., & Patrick, M.E. (2017). *Monitoring the Future national survey results on drug use, 1975-2016: Volume 2, College students and adults ages 19-55*. Ann Arbor: Institute for Social Research, The University of Michigan, 445 pp. Available at [http://www.monitoringthefuture.org//pubs/monographs/mtf-vol2\\_2016.pdf](http://www.monitoringthefuture.org//pubs/monographs/mtf-vol2_2016.pdf)