

# Prevalence and incidence of drug use among college students: An 8-year longitudinal analysis

## MAJOR FINDINGS:

Drug use among college students has been linked to negative academic and health outcomes, so understanding drug use trends during this time period is critical. Few studies have looked at drug use after college graduation. The present study examined long-term drug use trends during the eight years following college entry. Data were taken from Years 1 through 8 of a longitudinal study of a single cohort of undergraduate students, where Year 1 corresponds to the year participants entered college.

Results indicated that marijuana was the most commonly used drug, with almost half of incoming students reporting past-year use. Annual prevalence of marijuana use peaked in Year 3 (47%) and was at the lowest in Year 8 (29%) when the modal age of participants was 25 years old. Year 3 was also the peak year for prevalence of past-year nonmedical use of prescription stimulants, analgesics, and tranquilizers, as well as use of hallucinogens. Past-year prevalence of use of inhalants, amphetamines/methamphetamine, and heroin was low during all eight years. The lowest annual prevalence of use occurred in Year 8 for all drugs except cocaine and ecstasy, which had their lowest annual prevalence at baseline.

By Year 8, 68% of participants had used marijuana, representing a 37% increase from college entry. Large increases in prevalence during college were also observed for the nonmedical use of prescription stimulants and prescription analgesics, with 35% and 28% of participants reporting lifetime use by Year 8, respectively. The risk to initiate use of most drugs studied did not diminish until around Year 4 of the study, coinciding with college graduation for most participants. These results suggest that students are at risk for initiating drug use throughout college and not just at college entry.

A post-hoc analysis of frequency of use revealed that most participants reporting marijuana use had used more than once during the past year, with more than half having used more than 11 times during the past year in both Year 4 and Year 8. Among participants reporting cocaine use, frequency of using more than once during the past year was greater in Year 4 than Year 8, suggesting cocaine use might be more frequent during college as compared with post-graduation.

### *Of major interest to:*

- College Administrators
- Parents
- Educators
- Health Professionals
- Students
- Law and Policy Makers



**Practice and Policy Suggestions:**

The results of this study suggest that students are not only at risk for initiating drug use when they first transition into college, but that this risk is present during all four years. Prevention and intervention efforts should not only target incoming students, but should also include students who are more advanced in their college career. Additionally, drug use persists after college graduation, highlighting the need for increased attention to the predictors and consequences of drug use during young adulthood.

The complete publication referenced in this research brief can be found here: Arria, A.M., Caldeira, K.M., Allen, H.K., Bugbee, B.A., Vincent, K.B., O'Grady, K.E. (in press). Prevalence and incidence of drug use among college students: An 8-year longitudinal analysis. *American Journal of Drug and Alcohol Abuse*. doi:10.1080/00952990.2017.1310219

**About the College Life Study (CLS)**

The CLS is a longitudinal study of 1,253 college students at a large, public, mid-Atlantic university. This study is one of the first large-scale scientific investigations that aims to discover the impact of health-related behaviors during the college experience. Any first-time, first-year student between 17 and 19 years old at the university in the fall of 2004 was eligible to participate in a screening survey. The researchers then selected students to participate in the longitudinal study, which consisted of two-hour personal interviews administered annually, beginning with their first year of college. A full description of the methods used is available.<sup>1,2</sup> Inherent to all self-reporting research methods is the possibility for response bias. Because the sample is from one large university, the ability to generalize the findings elsewhere is uncertain. However, response rates have been excellent and attrition bias has been minimal.

For more information about the study, please visit [www.cls.umd.edu](http://www.cls.umd.edu) or contact Amelia M. Arria at the University of Maryland School of Public Health at [aarria@umd.edu](mailto:aarria@umd.edu).

<sup>1</sup> Arria, A.M., Caldeira, K.M., O'Grady, K.E., Vincent, K.B., Fitzelle, D.B., Johnson, E.P., Wish, E.D. (2008). Drug exposure opportunities and use patterns among college students: Results of a longitudinal prospective cohort study. *Substance Abuse*. 29(4), 19-38. doi:10.1080/08897070802418451; PMC2614283

<sup>2</sup> Vincent, K.B., Kasperski, S.J., Caldeira, K.M., Garnier-Dykstra, L.M., Pinchevsky, G.M., O'Grady, K.E., Arria, A.M. (2012). Maintaining superior follow-up rates in a longitudinal study: Experiences from the College Life Study. *International Journal of Multiple Research Approaches*. 6(1), 56-72. doi:10.5172/mra.2012.6.1.56; PMC3255097

*This research brief was prepared by Maddie McGann.*

