

The CBHSQ Report

Short Report

August 16, 2016

TRENDS IN PERCEPTION OF RISK AND AVAILABILITY OF SUBSTANCE USE AMONG FULL-TIME COLLEGE STUDENTS

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INTRODUCTION

In the United States, the transition to adulthood occurs in the late teens and early twenties and is often characterized by moving out of the parental home and making decisions without direct parental oversight, which can be exciting and overwhelming. The transition to adulthood may cause many young adults to feel invincible, while their newfound freedom may also leave them vulnerable to making poor choices, such as engaging in substance use. For example, in 2014, nearly 1 in 5 young adults aged 18 to 22 were current illicit drug users, roughly 1 in 4 were current cigarette smokers, and 1 in 3 were binge drinkers.¹

Many young adults make decisions regarding substance use without complete information about the risks associated with their choices. In addition, the perception of invincibility may make it easy for many young adults to dismiss the known risks of substance use. Historically, an individual's perception of the risks associated with substance use has been an important determinant of whether he or she engages in substance use.² For example, youths who perceive high risk of harm are less likely to use drugs than youths who perceive low risk of harm.² Thus, providing young adults with credible, accurate, and relevant information about the harm associated with substance use is a key component in prevention programming.³ If risk factors differ between young adults attending or not attending college, then prevention programs may consider whether different approaches may be more successful in preventing substance use and substance use initiation. Understanding the trends in risk perceptions and perceived availability of substances during young adulthood may help to better target health promotion messages and increase the effectiveness of prevention and intervention programs.

The National Survey on Drug Use and Health (NSDUH) asks people aged 12 or older how much people risk harming themselves physically and in other ways when they smoke one or more packs of cigarettes a day (i.e., heavy cigarette use), drink five or more alcoholic drinks once or twice a week (i.e., weekly binge drinking), have four or five drinks nearly every day (i.e., daily binge drinking), use marijuana once or twice a week (i.e., weekly marijuana use),

use cocaine once a month (i.e., monthly cocaine use), try LSD once or twice, and try heroin once or twice. Response choices are (1) no risk, (2) slight risk, (3) moderate risk, and (4)

great risk. Respondents are also asked how easy it would be for them to obtain marijuana, cocaine, crack, LSD, and heroin if they wanted these drugs. Response choices are "very easy," "fairly easy," "fairly difficult," "very difficult," and "probably impossible." In addition, respondents are asked whether they have been approached by someone selling drugs in the past month.

This issue of *The CBHSQ Report* presents estimates of young adults aged 18 to 22 who thought there would be "great risk" of harm from using the various substances and those who thought it would be "fairly easy" or "very easy" to obtain the various substances. The first section of this report provides 2014 estimates of past month substance use among young adults aged 18 to 22 overall and by college enrollment status (full-time college students vs. young adults who were not full-time college students).⁴ The next two sections of this report provide estimates of perceptions of risk and availability in 2014 for young adults aged 18 to 22 overall and by college enrollment status.⁴ The last two sections examine trends in perceptions of risk and availability between 2002 and 2014 among full-time college students aged 18 to 22.

SUBSTANCE USE, BY COLLEGE ENROLLMENT STATUS

NSDUH respondents were asked to report on their past month (i.e., current) use of alcohol, cigarettes, marijuana, cocaine, crack, LSD, and heroin. In 2014, about 5.9 million young adults aged 18 to 22 (26.7 percent of this population) smoked cigarettes in the past month, 12.0 million (54.8 percent of this population) drank alcohol in the past month, and nearly 7.8 million engaged in binge drinking (35.3 percent) (Table S1). More than 4.5 million young adults aged 18 to 22 used marijuana (20.7 percent) in the past month, 299,000 used cocaine (1.4 percent), 19,000 used crack (0.1 percent), 74,000 used LSD (0.3 percent), and 38,000 used heroin (0.2 percent).

Young adults aged 18 to 22 were asked to indicate whether they were full-time college students.⁴ Young adults who were not full-time college students include high school students, part-time college students, those not attending any school, and those enrolled with no information on level of education. Full-time college students aged 18 to 22 were more likely than same-aged young adults who were not full-time college students to have drunk alcohol in the past month (59.8 vs. 51.5 percent), to have engaged in past month binge drinking (37.9 vs. 33.5 percent), and to have used cocaine in the past month (1.8 vs. 1.1 percent). However, full-time college students aged 18 to 22 were less likely than same-aged young adults who were not full-time college students to have smoked cigarettes in the past month (17.9 vs. 32.6 percent) or to have used heroin in the past month (less than 0.1 percent vs. 0.3 percent). There were no differences between the two groups of young adults aged 18 to 22 in regard to past month use of marijuana (20.3 percent among full-time college students and 21.0 percent among those who were not full-time college students), crack (0.1 and 0.1 percent), and LSD (0.2 and 0.4 percent).

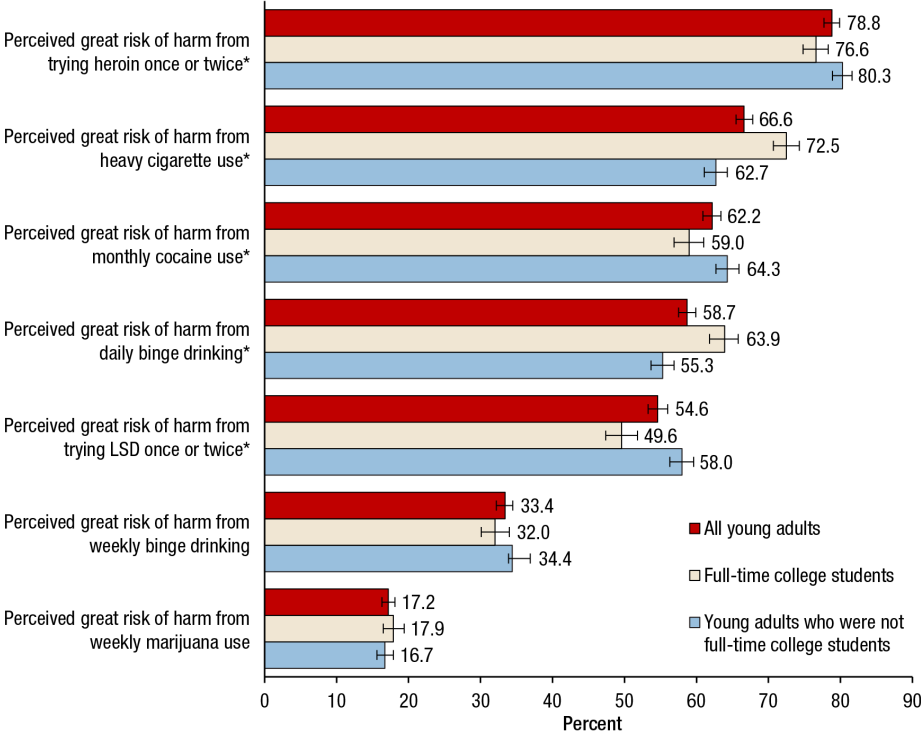
PERCEPTIONS OF RISK, BY COLLEGE ENROLLMENT STATUS

Many young adults are aware of the risks associated with substance use. As shown in Figure 1, in 2014, 78.8 percent of young adults aged 18 to 22 perceived great risk of harm from trying heroin once or twice, 66.6 percent perceived great risk of harm from heavy cigarette use, 62.2 percent perceived great risk of harm from monthly cocaine use, 58.7

perceived great risk of harm from daily binge drinking, and 54.6 percent perceived great risk of harm from trying LSD once or twice. Fewer young adults perceived great risk of harm from weekly binge drinking (33.4 percent) or weekly marijuana use (17.2 percent).

Full-time college students aged 18 to 22 may differ from young adults who are not full-time college students in their perceptions of whether there is great risk of harm from using substances. Differences in risk perception between these two groups may arise from many factors, including familiarity with the substances, the dangers associated with the frequency or amount of substance used, and knowledge of negative outcomes experienced by people who have used specific substances. As shown in Figure 1, full-time college students aged 18 to 22 were more likely than same-aged young adults who were not full-time college students to perceive great risk of harm from heavy cigarette use (72.5 vs. 62.7 percent) and from daily binge drinking (63.9 vs. 55.3 percent); however, they were less likely to perceive great risk of harm from monthly cocaine use (59.0 vs. 64.3 percent), trying heroin once or twice (76.6 vs. 80.3 percent), and trying LSD once or twice (49.6 vs. 58.0 percent). There were no significant differences between the two groups of young adults with regard to their perception of great risk of harm from weekly marijuana use or weekly binge drinking.

Figure 1. Perceptions of substance use risk among young adults aged 18 to 22, by college enrollment status: 2014



* Difference between young adult full-time college students and young adults who were not full-time college students is statistically significant at the .05 level.

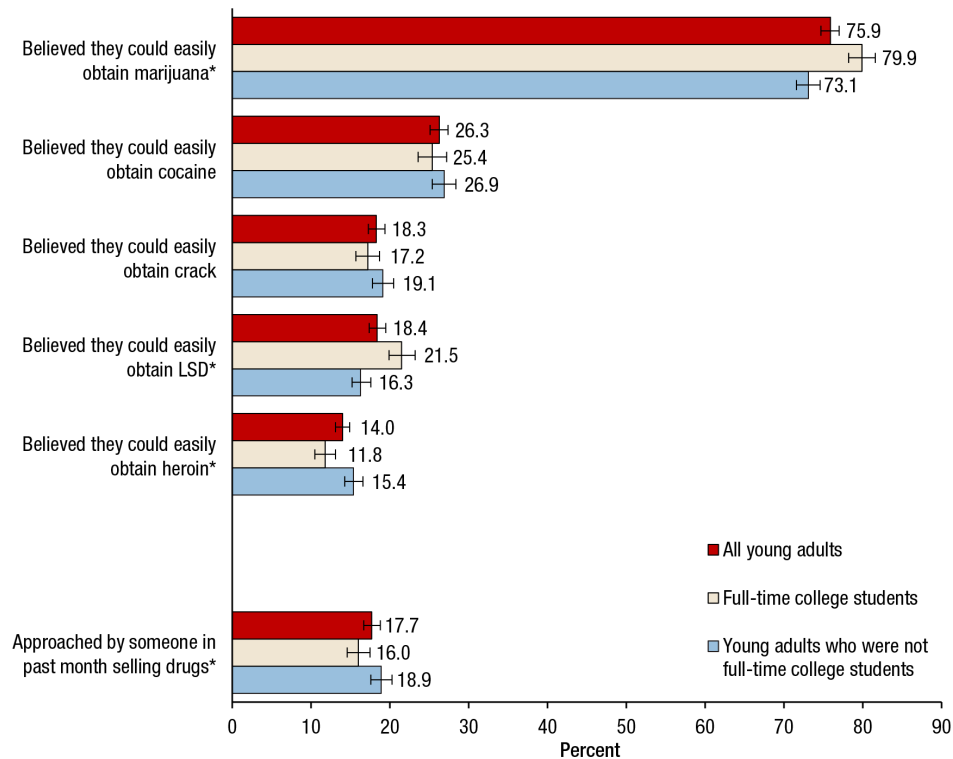
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

PERCEIVED AVAILABILITY OF SUBSTANCES, BY COLLEGE ENROLLMENT STATUS

Many studies have demonstrated that the availability of drugs (i.e., ease of obtaining drugs) is associated with drug initiation and use.^{5,6,7} As shown in Figure 2, in 2014, 75.9 percent of young adults aged 18 to 22 believed they could easily obtain marijuana if they wanted some, 26.3 percent believed they could easily obtain cocaine, 18.4 percent believed they could easily obtain LSD, 18.3 percent believed they could easily obtain crack, and 14.0 percent believed they could easily obtain heroin. About 1 in 6 young adults (17.7 percent) aged 18 to 22 indicated that they had been approached by someone selling drugs in the past month.

Among young adults aged 18 to 22, full-time college students were more likely than those who were not full-time college students to believe they could easily obtain marijuana (79.9 vs. 73.1 percent) or LSD (21.5 vs. 16.3 percent); however, they were less likely to believe they could easily obtain heroin (11.8 vs. 15.4 percent). There were no significant differences between the two groups of young adults with regard to their perception of easily obtaining cocaine or crack. Full-time college students aged 18 to 22 were less likely than same-aged young adults who were not full-time college students to have been approached by someone selling drugs in the past month (16.0 vs. 18.9 percent).

Figure 2. Perceptions of substance availability among young adults aged 18 to 22, by college enrollment status: 2014



* Difference between young adult full-time college students and young adults who were not full-time college students is statistically significant at the .05 level.

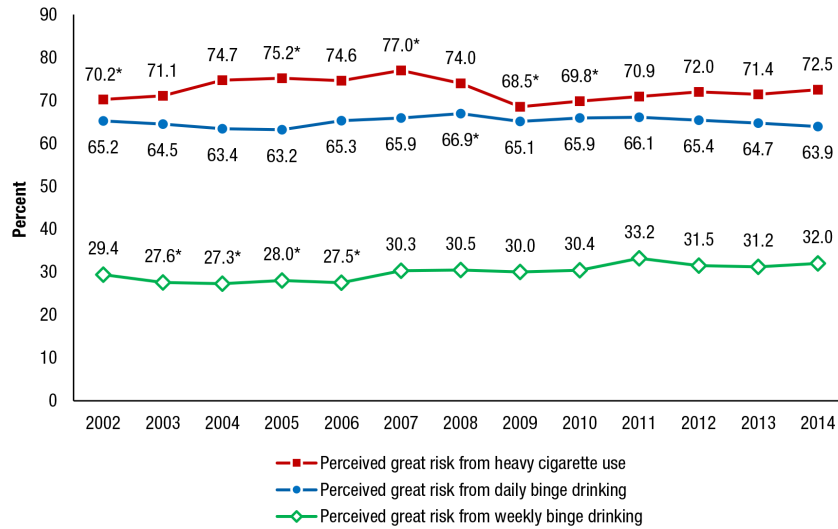
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

TRENDS IN PERCEPTIONS OF RISK AMONG FULL-TIME COLLEGE STUDENTS

In the previous sections of this report, 2014 NSDUH estimates of risk perceptions among full-time college students were compared with estimates of risk perceptions by their peers who were not full-time college students to help provide context for evaluating college students' perceptions of risk and where there may be gaps in college students' understanding of the risks associated with substance use. Another way of providing context for evaluating college students' perceptions of substance use is to compare the current (i.e., 2014) estimates with the long-term trends from 2002 to 2013. The percentage of full-time college students aged 18 to 22 who perceived great risk of harm from daily binge drinking was relatively stable between 2002 and 2014 (Figure 3). However, some differences were seen in trends in perceptions of great risk of harm from weekly binge drinking and heavy cigarette use. Specifically, the percentage of full-time college students aged 18 to 22 who perceived great risk of harm from weekly binge drinking was higher in 2014 than the percentages from 2003 to 2006, but the percentage in 2014 was similar to the percentages in 2007 to 2013. Although there are some statistical differences across time, more than 68 percent of full-time college students perceived great risk of harm from heavy cigarette use in every year from 2002 to 2014. For example, the 2014 percentage (72.5 percent) of full-time college students who perceived great risk of harm from heavy cigarette use was higher than the percentages in 2009 and 2010 (68.5 and 69.8 percent, respectively) but similar to the percentages in recent years (ranging from 70.9 to 72.0 percent).

Differences were also seen in trends of perceptions of great risk of harm from using various illicit drugs. The percentage of full-time college students aged 18 to 22 who perceived great risk of harm from weekly marijuana use was lower in 2014 than the percentages from 2002 to 2013 (Figure 4). The percentage of full-time college students aged 18 to 22 who perceived great risk of harm from trying LSD once or twice was lower in 2014 than the percentages from 2002 to 2012, but the percentage in 2014 was similar to the percentage in 2013. The percentage of full-time college students aged 18 to 22 who perceived great risk of harm from monthly cocaine use in 2014 was similar to the percentages in most years between 2004 and 2013 but was lower than the percentages in 2002, 2003, 2007, and 2012. Between 2002 and 2014, roughly 3 out of 4 full-time college students perceived great risk of harm from trying heroin; however, examining the long-term trends identified a slight statistical shift. For example, the percentage who perceived great risk of harm from heroin use was higher in 2014 (76.6 percent) than the percentages for most years from 2002 to 2010 (ranging from 72.3 to 75.2 percent) but was similar to the percentages from 2011 to 2013 (ranging from 74.8 to 77.2 percent).

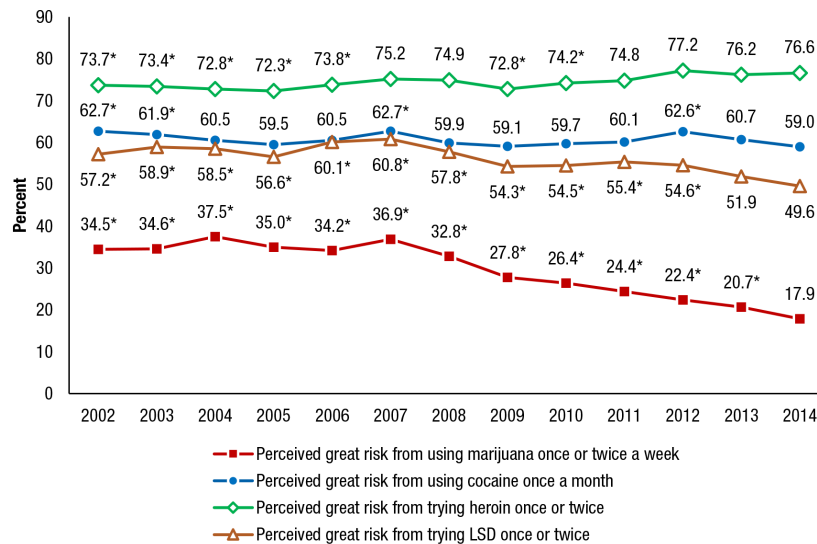
Figure 3. Trends in perceptions of substance use risk among full-time college students aged 18 to 22: 2002 to 2014



* Difference between this estimate and the estimate for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

Figure 4. Trends in perceptions of illicit drug use risk among full-time college students aged 18 to 22: 2002 to 2014



* Difference between this estimate and the estimate for 2014 is statistically significant at the .05 level.

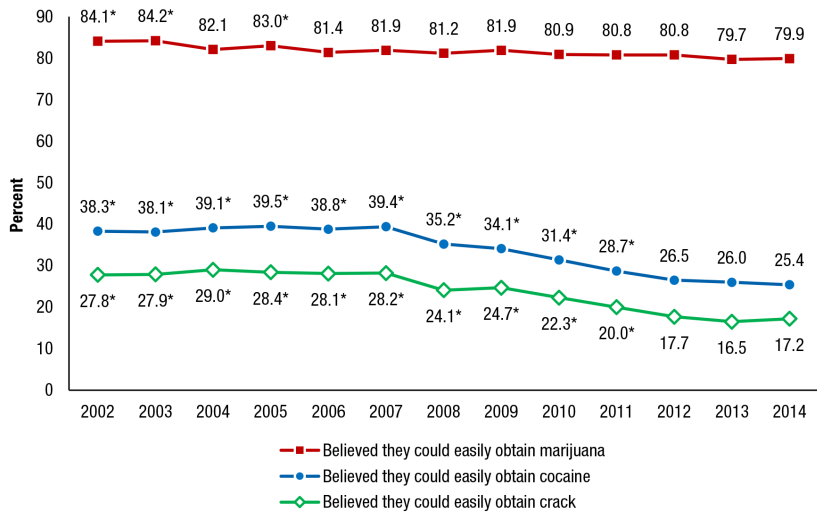
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

TRENDS IN PERCEPTION OF SUBSTANCE AVAILABILITY AMONG FULL-TIME COLLEGE STUDENTS

Similar to the previous section on trends in risk perceptions, this portion of the report focuses on the long-term trends in full-time college students' perceptions of the availability of substances by comparing the 2014 estimates with the estimates from 2002 to 2013. These comparisons may be helpful for gauging the overall effectiveness of prevention efforts on a broad national level and for tracking factors that may signal changes in the extent of substance use in the population. The percentage of full-time college students aged 18 to 22 who believed they could easily obtain marijuana in 2014 (79.9 percent) was similar to the percentages in all years from 2006 to 2013 but was lower than the percentages in most years from 2002 to 2005 (Figure 5). In 2014, the percentages of full-time college students aged 18 to 22 who believed they could easily obtain cocaine and crack were lower than the percentages from 2002 to 2011 but similar to percentages in 2012 and 2013.

The percentage of full-time college students aged 18 to 22 who believed they could easily obtain heroin in 2014 was similar to the percentages from 2011 to 2013 but was lower than the percentages from 2002 to 2010 (Figure 6). The percentage of full-time college students aged 18 to 22 who believed they could easily obtain LSD was similar to the percentages from 2005 to 2013 but lower than the percentages from 2002 to 2004. The percentage of full-time college students aged 18 to 22 who had been approached by someone selling drugs in the past month was lower in 2014 than the percentages from 2008 to 2012 but was similar to the estimate in 2013.

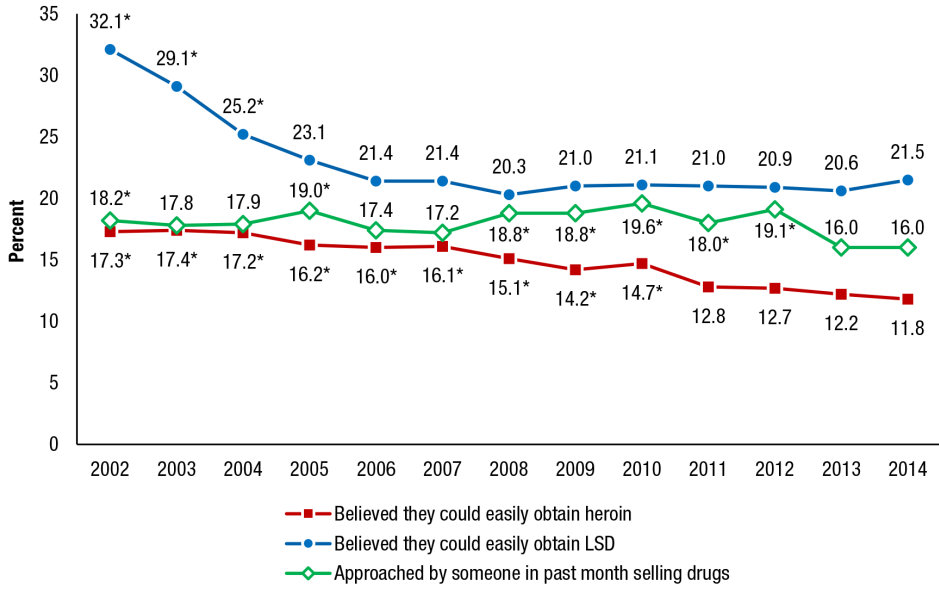
Figure 5. Trends in perceptions of availability of marijuana, cocaine, and crack among full-time college students aged 18 to 22: 2002 to 2014



* Difference between this estimate and the estimate for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

Figure 6. Trends in perceptions of availability of heroin and LSD, and in being approached by someone selling drugs in the past month among full-time college students aged 18 to 22: 2002 to 2014



* Difference between this estimate and the estimate for 2014 is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2002 to 2014.

DISCUSSION

Many parents worry about substance use when their children are making the transition to adulthood. Young adulthood is a time when many young people decide to experiment with substance use; therefore, it is important to determine whether these young adults are aware of the risks associated with substance use. The findings in this report reinforce the importance of teaching young adults about the dangers associated with substance use.

The results presented in this report indicate that many full- and part-time college students are aware of the risks of substance use; however, a large percentage of young adults still did not believe that they would have great risk of harm from substance use. For example, about a quarter of young adults did not perceive a great risk of harm from trying heroin, and more than one-third did not perceive great risk of harm from daily binge drinking. Additionally, there were significant differences in the perception of great risk of harm from using specific substances when comparing responses from young adults who were full-time college students and those who were not full-time college students. Full-time college students were more likely to be aware of the risks of heavy cigarette use than young adults who were not full-time college students; however, full-time college students were less likely than young adults who were not full-time college students to perceive great risk of harm from monthly cocaine use, trying heroin, or trying LSD. For example, more than three-fourths of young adults in both populations perceived monthly heroin use as a great

risk. In addition, college students were less likely than young adults who were not full-time college students to have been approached by someone selling drugs in the past month. With regard to alcohol, a substance commonly associated with excessive use during college, college students were more likely than young adults who were not full-time college students to perceive great risk of harm from daily binge drinking; however, there was no significant difference by college enrollment in perception of risk of weekly binge drinking.

The long-term trends in full-time college students' perceptions of the risk associated with substance use and the availability of substances are useful to monitor because these factors may signal changes in the extent of substance use in the population. Although there have been declines

in the perceptions of risk for many substances when 2014 estimates are compared with estimates from the early 2000s, the most notable declines in full-time college students' perception of risk have been with regard to LSD and marijuana. Overall, the trends indicate that fewer full-time college students believed they could easily obtain most substances, with the exception of marijuana and LSD, where perceptions of easy availability have been fairly stable since the mid-2000s. Although alcohol use among college students remains a concern, these results suggest that prevention specialists may also want to address the risks of LSD and marijuana use when working with college students.

The purpose of this report is to provide estimates of substance use among full-time college students. To add context for evaluating the estimates for full-time college students, comparisons are made with estimates for young adults who are not full-time college students; however, some limitations should be considered. Understanding risk perceptions can be complicated because young adults aged 18 to 22 who are not full-time college students constitute a heterogeneous population. Young adults aged 18 to 22 who are not full-time college students include high school students, part-time college students, and those not attending any school. In addition, young adults who are not full-time college students may also differ from each other with regard to their labor force participation, as well as many other factors. Also, as with all studies based on NSDUH data, the results presented in this report do not include young adults who are homeless and not living in shelters, those who are on active military duty, and those who reside in institutions.

The results in this report indicate that although many young adults are aware of the risks of harm from substance use, a segment of this population does not recognize the dangers that substance use can represent. Providing young adults, including college students, with credible and accurate information about the harm associated with substance use is crucial to prevention programs. Understanding trends in the perception of risk from using varying substances may be useful to policymakers, educators, and prevention program staff in making decisions about deploying prevention messages. During the transition to adulthood, young adults, including college students, can benefit from prevention interventions from the adults in their lives, including parents, college campus administrators, and employers. To learn about the Substance Abuse and Mental Health Services Administration's efforts to promote behavioral health and prevent substance use among college students, go to <http://www.samhsa.gov/school-campus-health/>.

ENDNOTES

1. Center for Behavioral Health Statistics and Quality. (2015). *Results from the 2014 National Survey on Drug Use and Health: Detailed tables*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
2. Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the Future national survey results on drug use, 1975–2011: Volume I, Secondary school students*. Ann Arbor: Institute for Social Research, The University of Michigan. Retrieved from http://monitoringthefuture.org/pubs/monographs/mtf-vol1_2011.pdf
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4. Respondents were classified as full-time college students if they reported that they were in their first through fourth years (or higher) at a college or university and that they were enrolled full time; respondents who were on break were considered enrolled if they intended to return to college or university when the break ended. Young adults who were not full-time college students includes respondents aged 18 to 22 who were not enrolled in school, enrolled in college part time, enrolled in other grades either full or part time, or enrolled with no other information available.
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SUGGESTED CITATION

Lipari, R. and Jean-Francois, B. *Trends in perception of risk and availability of substance use among full-time college students*. The CBHSQ Report: August 16, 2016. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.

SUPPORTING TABLE

Table S1. Past month substance use among young adults aged 18 to 22, by college enrollment status: 2014

Substance	Total			Full-time college students aged 18 to 22			Young adults aged 18 to 22 who were not full-time college students		
	Number	Percent	Standard Error	Number	Percent	Standard Error	Number	Percent	Standard Error
Cigarettes*	5,873,000	26.7	0.62	1,568,000	17.9	0.81	4,305,000	32.6	0.82
Alcohol*	12,033,000	54.8	0.71	5,240,000	59.8	1.22	6,794,000	51.5	0.84
Binge alcohol*	7,750,000	35.3	0.71	3,323,000	37.9	1.23	4,427,000	33.5	0.80
Marijuana	4,543,000	20.7	0.55	1,774,000	20.3	0.86	2,769,000	21.0	0.70
Cocaine*	299,000	1.4	0.14	154,000	1.8	0.26	145,000	1.1	0.16
Crack	19,000	0.1	0.04	8,000	0.1	0.07	11,000	0.1	0.04
LSD	74,000	0.3	0.06	21,000	0.2	0.08	53,000	0.4	0.09
Heroin*	38,000	0.2	0.05	4,000	< 0.1	0.04	35,000	0.3	0.20

* Difference between young adult full-time college students and young adults who were not full-time college students is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2014.

SUMMARY

Background: Attitudes about the risks associated with substance use have historically been closely related to their use. Because college is a period of life when many young adults are exposed to or engage in substance use, examining college students' attitudes about the risks associated with using substances and their perception of the availability of substances provides needed prevention information. **Method:** The 2014 National Survey on Drug Use and Health (NSDUH) estimates of perceptions of great risk of harm from substance use and perceptions of availability of substances among young adults aged 18 to 22 were analyzed by full-time college student status. Additionally, the 2014 estimates for full-time college students were compared with estimates from 2002 to 2013 to examine changes in these measures over time. **Results:** Findings in this report indicate that college students were less likely than young adults who were not full-time college students to perceive great risk of harm from monthly cocaine use, trying heroin, or trying LSD. The long-term trend analysis also suggests that college student perceptions of risk and availability have been relatively stable since the late 2000s, with the exception of LSD and marijuana. **Conclusion:** Monitoring college student attitudes regarding the risk and availability of substances, as well as changes over time, may help address substance use on college campuses, including efforts to raise awareness about the consequences of substance use and to improve prevention efforts.

Keywords: alcohol, availability, cigarettes, heroin, LSD, marijuana, National Survey on Drug Use and Health, NSDUH, risk

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KEYWORDS

Education, Short Report, Population Data, College Students as Audience, Researchers, Binge Drinking, College Students as Population Group, Young Adults as Population Group, Drug Use Trends, Alcohol, Heroin, LSD, Marijuana, Tobacco, Multi-Year Trend, All US States Only, Risk & Protective Factors