

The TEDS Report

February 2, 2012

Marijuana Admissions Reporting Daily Use at Treatment Entry

In Brief

- Marijuana was reported as a substance of abuse by approximately 740,800 treatment admissions in 2009; of these, 170,100 (23.0 percent) reported daily marijuana use at treatment entry
- Daily marijuana admissions were primarily male (72.2 percent) and never married (77.1 percent); they were also predominately non-Hispanic White (55.1 percent) and either young or middle-aged adults (34.2 percent were aged 18 to 25, and 46.3 percent were aged 26 to 49)
- Nearly one fifth (17.3 percent) of daily marijuana admissions indicated that marijuana was their primary and only substance of abuse, but the majority (82.7 percent) reported marijuana and an additional substance of abuse
- One third (33.0 percent) of daily marijuana admissions had a co-occurring psychiatric problem

Marijuana use, especially long-term frequent use, can have serious adverse effects on physical and mental health, and negatively affect functioning within the context of school, work, and family.¹ Marijuana use has been associated with cognitive problems, such as distorted perceptions, impaired coordination, difficulty with thinking and problem solving, and problems with judgment, learning, and memory.² Because the effects of marijuana use on learning and memory can last for days or weeks after the acute effects have worn off, frequent users may be continually functioning at reduced cognitive levels.^{3,4} The effects of frequent marijuana use on adolescents and older adults are of particular concern. Because the adolescent brain is still developing, frequent use by persons in this age group may lead to lasting consequences on cognitive processes and may affect functional and structural development in areas of the brain that are critical for the development of higher intellectual capabilities.^{4,5} Among older adults in particular, daily marijuana use may

exacerbate cardiac or other health problems.^{6,7} Among adults in general, heavy cannabis use is associated with several unhealthy behaviors, such as a high-calorie diet, tobacco smoking, and other illicit drug use.⁸

Marijuana use can also lead to dependence; it has been estimated that about 9 percent of marijuana users become dependent, and this proportion increases among individuals who initiate use at a young age (17 percent) and among daily users (25 to 50 percent).¹ Individuals who are addicted to marijuana often have a difficult time quitting on their own and need substance abuse treatment.⁹ However, relatively little is known about the characteristics of substance abuse treatment admissions that use marijuana on a daily basis. Gaining a better understanding of these admissions may assist treatment providers in developing services that focus on the specific needs of these clients and may help guide the development of and/or improve existing prevention and early intervention programs.

The Treatment Episode Data Set (TEDS) collects data—including frequency of use—on the primary substance of abuse at the time of admission to treatment and up to two additional substances of abuse (subsequently referred to as secondary substances of abuse). TEDS data show that marijuana was reported as a primary or secondary substance of abuse by approximately 740,800 treatment admissions in 2009; of these, 170,100 (23.0 percent) reported daily marijuana use at treatment entry. This report examines the characteristics of substance abuse treatment admissions reporting daily marijuana use (hereafter referred to as “daily marijuana admissions”) at treatment entry.

Demographic Characteristics

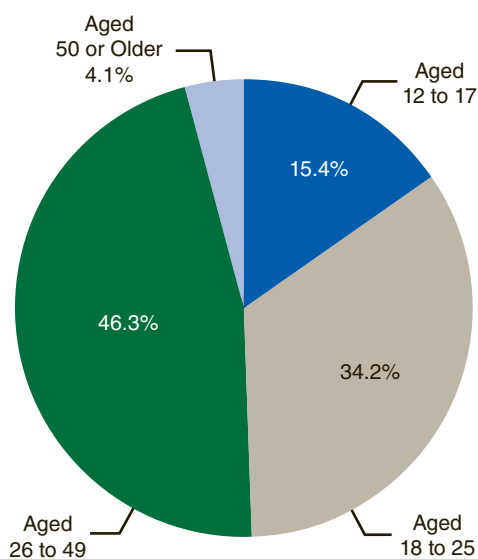
Daily marijuana admissions were primarily male (72.2 percent) and never married (77.1 percent). They were more likely to be non-Hispanic White than other races/ethnicities: about half of daily marijuana admissions were non-Hispanic White (55.1 percent), 27.3 percent were non-Hispanic Black, 12.8 percent were Hispanic, and

4.8 percent were another race/ethnicity. Most daily marijuana admissions aged 18 or older were unemployed or not in the labor force (81.8 percent), and about 41.3 percent of those aged 18 or older had less than a high school education.

Most daily marijuana admissions were middle-aged or young adults. Nearly half (46.3 percent) were aged 26 to 49, and about one third (34.2 percent) were young adults aged 18 to 25; adolescents aged 12 to 17 and older adults aged 50 or older represented smaller proportions (15.4 and 4.1 percent, respectively) (Figure 1).

The characteristics of daily marijuana admissions often differed by age group; these differences are highlighted throughout this report. In particular, the racial/ethnic composition of daily marijuana admissions aged 50 or older differed from that of the other age groups. Non-Hispanic Whites comprised a smaller proportion of admissions aged 50 or older (45.2 percent) than of 18 to 25 year-old admissions (64.3 percent) or of 26 to 49 year-old admissions (50.1 percent) (Figure 2). By contrast, non-Hispanic Blacks comprised a larger proportion of admissions aged

Figure 1. Age Distribution of Marijuana Admissions Reporting Daily Use at Treatment Entry: 2009



Source: SAMHSA Treatment Episode Data Set (TEDS), 2009.

50 or older (41.8 percent) than of 18 to 25 year-old admissions (20.5 percent) or of 26 to 49 year-old admissions (32.8 percent).

Substances of Abuse

Nearly one fifth (17.3 percent) of daily marijuana admissions indicated that marijuana was their primary and only substance of abuse, but the majority (82.7 percent) reported marijuana and at least one additional substance of abuse. Of this latter group, about one third (32.1 percent) reported primary abuse of marijuana (with secondary abuse of another substance), and approximately half (50.6 percent) reported secondary abuse of marijuana (with primary abuse of another substance).

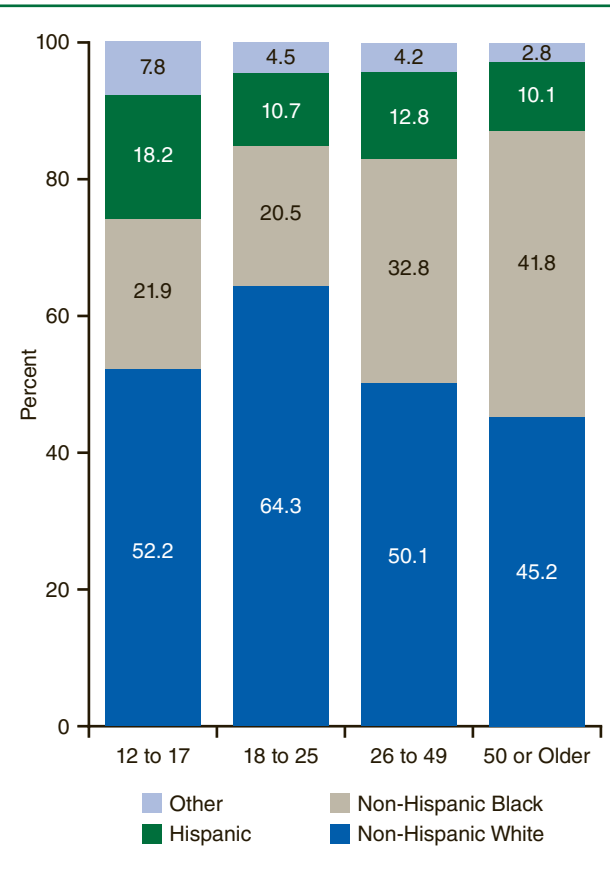
The proportion of daily marijuana admissions that reported an additional substance of abuse increased by age. Admissions aged 12 to 17 were much less likely than those in older age groups to report multiple substances of abuse. That is, about two thirds (68.5 percent) of daily marijuana admissions aged 12 to 17 reported other substances of abuse compared with 80.3 percent of those aged 18 to 25, 88.3 percent of those aged 26 to 49, and 92.2 percent of those aged 50 or older.

The types of substances used in combination with marijuana varied by age. Additional substances of abuse frequently mentioned by daily marijuana admissions in all age groups included alcohol (52.3 percent), cocaine (24.4 percent), heroin (12.1 percent), and non-heroin opiates (i.e., prescription pain relievers; 13.2 percent). Daily marijuana admissions aged 12 to 17 were less likely than other age groups to indicate cocaine or heroin as an additional substance of abuse (Figure 3). Compared with admissions in other age groups, those aged 50 or older were more likely to report alcohol as another substance of abuse, while those aged 18 to 25 were more likely to report non-heroin opiates.

Co-occurring Psychiatric Disorders

One third (33.0 percent) of daily marijuana admissions had a co-occurring psychiatric problem.¹⁰ Similar proportions of daily marijuana

Figure 2. Marijuana Admissions Reporting Daily Use at Treatment Entry, by Age Group and Race/Ethnicity: 2009*



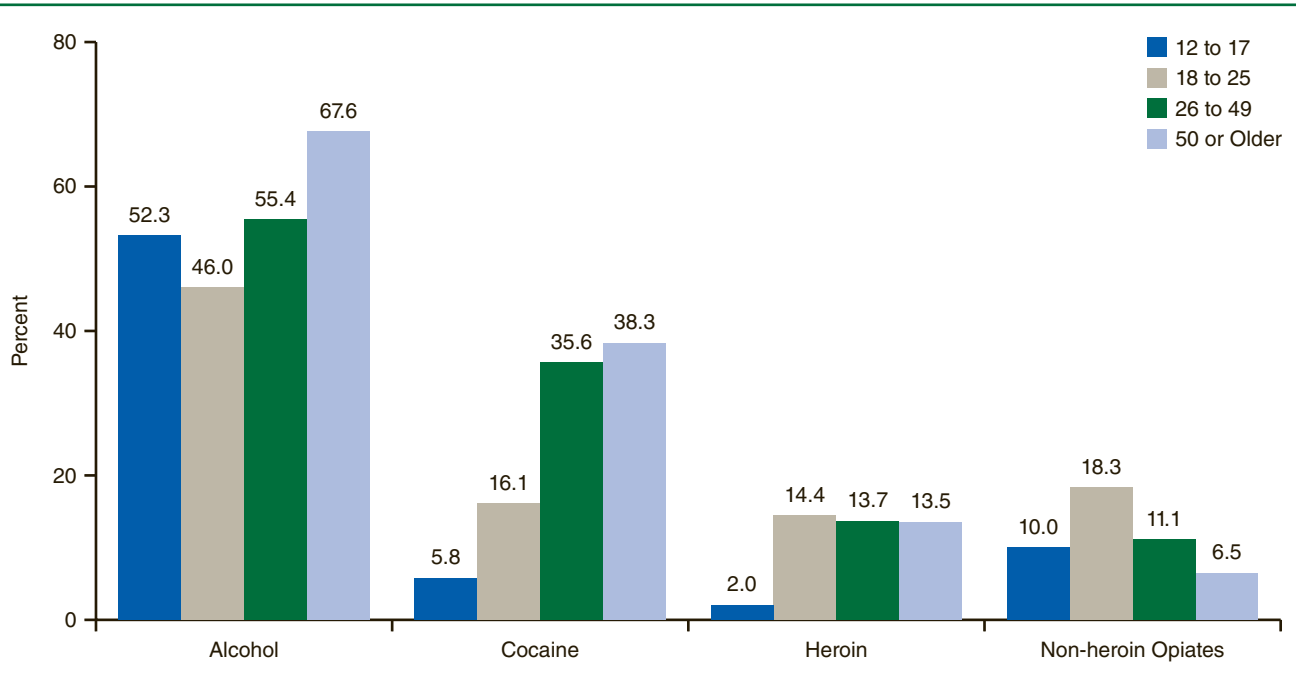
* Percentages may add to more than 100 percent due to rounding.
Source: SAMHSA Treatment Episode Data Set (TEDS), 2009.

admissions aged 12 to 17, 18 to 25, and 26 to 49 reported a co-occurring psychiatric problem (32.5, 31.2, and 34.1 percent, respectively); however, the proportion was higher among admissions aged 50 or older (38.5 percent).

Treatment Characteristics

Among daily marijuana admissions, the most frequently reported type of treatment was regular outpatient care (43.1 percent), followed by detoxification (17.8 percent) and short-term residential care (15.4 percent). The finding related to detoxification may be due to the detoxification admissions that reported use of other substances in addition to marijuana at treatment entry (29,031 out of 30,274 daily marijuana admissions).

Figure 3. Other Substances of Abuse among Marijuana Admissions Reporting Daily Use at Treatment Entry, by Age Group: 2009



Source: SAMHSA Treatment Episode Data Set (TEDS), 2009.

The use of these services varied by age group; regular outpatient admissions decreased from 49.2 percent among 12 to 17 year-old daily marijuana admissions to 37.5 percent of those aged 50 years or older.

The most common sources of referral to treatment were the criminal justice system (34.3 percent) and self-referral (33.9 percent), followed by substance abuse care providers (11.7 percent) and other community organizations (11.6 percent). About half (54.3 percent) of daily marijuana admissions reported having at least one prior treatment episode; nearly 1 in 10 (8.9 percent) reported five or more. Over one third (37.4 percent) of daily marijuana admissions that reported at least one prior treatment episode were aged 12 to 17. Across the adult age groups, similar proportions had been in treatment at least once before, ranging from 45.1 percent among admissions aged 18 to 25 to 48.6 percent among admissions aged 26 to 49. About 2 in 10 (18.2 percent) daily marijuana admissions aged 50 or older reported five or more prior treatment admissions.

Discussion

Overall, the findings presented in this report show that unemployment, low educational attainment, multiple substances of use, and co-occurring mental health problems were common characteristics of substance abuse treatment admissions that reported daily marijuana use. However, there were differences between the age groups.

These differences signal a need for an array of treatment and support services that address the specific problems of daily marijuana users in various age groups. The increase by age in the proportion of admissions that report the use of other substances in addition to marijuana suggests that marijuana use in general and especially daily marijuana use may be a marker for heavier and more varied drug use later in life. This connotes a need for prevention programs that target preteens and younger adolescents before they initiate marijuana use and highlights the importance of

continued interventions for youth already using marijuana.

Age-targeted treatment for older daily marijuana admissions may address, for example, the risks associated with using marijuana when certain chronic diseases or conditions are present (e.g., mental illness, heart disease, Hepatitis C, stroke history, or hypertension), and the interactions marijuana could have with certain prescription medications. Moreover, it may not be enough to treat this population's marijuana dependence alone: concurrently providing needed mental health services and addressing other substances of abuse may be just as important, especially if marijuana (and/or other drugs) is used to self-medicate mental health problems. Renewed public awareness programs may help dispel the misconception that marijuana is a "natural" or "harmless" drug by emphasizing the potential acute and long-term consequences of its use.

End Notes

- ¹ National Institute on Drug Abuse. (2010, November). *NIDA InfoFacts: Marijuana*. National Institute on Drug Abuse, U.S. Department of Health and Human Services. Washington, DC. Retrieved from http://www.drugabuse.gov/sites/default/files/marijuana_0.pdf
- ² Pope, H. G., Gruber, A. J., Hudson, J. I., Huestis, M. A., & Yurgelun-Todd, D. (2001). Neuropsychological performance in long-term cannabis users. *Archives of General Psychiatry*, 58(10), 909-915.
- ³ Solowij, N., Stephens, R. S., Roffman, R. A., Babor, T., Kadden, R., Miller, M., Christiansen, K., McRee, B., & Vendetti, J. (2002). Cognitive functioning of long-term heavy cannabis users seeking treatment. *Journal of the American Medical Association*, 287(9), 1123-1651.
- ⁴ Schweinsburg, A., Brown, S., & Tapert, S. (2008). The influence of marijuana use on neurocognitive functioning in adolescents. *Current Drug Abuse Reviews*, 1(1), 99-111.
- ⁵ Lisdahl Medina, K., Nagel, B. J., & Tapert, S. F. (2008). Abnormal cerebellar morphometry in abstinent adolescent marijuana users. *Neuroimaging*, 182(2), 152-159.
- ⁶ Mukamal, K. J., Maclure, M., Muller, J. E., & Mittleman, M. A. (2008). An exploratory prospective study of marijuana use and mortality following acute myocardial infarction. *American Heart Journal*, 155(3), 465-470.
- ⁷ Rodondi, N., Pletcher, M. J., Liu, K., Hulley, S. B., & Sidney, S. (2006). Marijuana use, diet, body mass index, and cardiovascular risk factors (from the CARDIA Study). *The American Journal of Cardiology*, 98, 478-484.
- ⁸ Silveri, M. M., Jensen, J. E., Rosso, I. M., Sneider, J. T., & Yurgelun-Todd, D. A. (2011). Preliminary evidence for white matter metabolite differences in marijuana-dependent young men using 2D J-resolved magnetic resonance spectroscopic imaging at 4 Tesla. *Neuroimaging*, 191(3), 201-211.
- ⁹ McRae, A. L., Budney, A. J., & Brady, K. T. (2003). Treatment of marijuana dependence: A review of the literature. *Journal of Substance Abuse Treatment*, 24(4), 369-376.
- ¹⁰ *Psychiatric problem in addition to alcohol or drug problem is a Supplemental Data Set item.*

Suggested Citation

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (February 2, 2012). *The TEDS Report: Marijuana Admissions Reporting Daily Use at Treatment Entry*. Rockville, MD.

For change of address, corrections, or to be removed from this list, please e-mail: shortreports@samhsa.hhs.gov.

Findings from SAMHSA's Treatment Episode Data Set (TEDS) for 2009

Marijuana Admissions Reporting Daily Use at Treatment Entry

- Marijuana was reported as a substance of abuse by approximately 740,800 treatment admissions in 2009; of these, 170,100 (23.0 percent) reported daily marijuana use at treatment entry
- Daily marijuana admissions were primarily male (72.2 percent) and never married (77.1 percent); they were also predominately non-Hispanic White (55.1 percent) and either young or middle-aged adults (34.2 percent were aged 18 to 25, and 46.3 percent were aged 26 to 49)
- Nearly one fifth (17.3 percent) of daily marijuana admissions indicated that marijuana was their primary and only substance of abuse, but the majority (82.7 percent) reported marijuana and an additional substance of abuse
- One third (33.0 percent) of daily marijuana admissions had a co-occurring psychiatric problem

The Treatment Episode Data Set (TEDS) is a compilation of data on the demographic characteristics and substance abuse problems of those aged 12 or older admitted for substance abuse treatment. TEDS is one component of the Drug and Alcohol Services Information System (DASIS), an integrated data system maintained by the Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration (SAMHSA). TEDS information comes primarily from facilities that receive some public funding. Information on treatment admissions is routinely collected by State administrative systems and then submitted to SAMHSA in a standard format. TEDS records represent admissions rather than individuals, as a person may be admitted to treatment more than once. State admission data are reported to TEDS by the Single State Agencies (SSAs) for substance abuse treatment. There are significant differences among State data collection systems. Sources of State variation include completeness of reporting, facilities reporting TEDS data, clients included, and treatment resources available. See the annual TEDS reports for details. TEDS received approximately 2.0 million treatment admission records from 49 States and Puerto Rico for 2009.

Definitions for demographic, substance use, and other measures mentioned in this report are available in the following publication: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (December 11, 2009). *The TEDS Report: TEDS Report Definitions*. Rockville, MD.

The TEDS Report is prepared by the Center for Behavioral Health Statistics and Quality, SAMHSA; Synectics for Management Decisions, Inc., Arlington, VA; and RTI International, Research Triangle Park, NC. **Information and data for this issue are based on data reported to TEDS through November 3, 2010.**

Access the latest TEDS reports at:
<http://www.samhsa.gov/data/DASIS.aspx#TEDS>

Access the latest TEDS public use files at:
<http://www.datafiles.samhsa.gov>

Other substance abuse reports are available at:
<http://www.samhsa.gov/data/>



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Substance Abuse & Mental Health Services Administration
Center for Behavioral Health Statistics and Quality
www.samhsa.gov