

# The CBHSQ Report

Short Report

June 10, 2014\*

## A DAY IN THE LIFE OF YOUNG ADULTS: SUBSTANCE USE FACTS

### AUTHORS

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### INTRODUCTION

Substance use remains a behavioral health problem among young adults aged 18 to 25. In 2012, there were an estimated 35.6 million young adults aged 18 to 25 in the United States.<sup>1</sup> Of these young adults, more than one third reported binge alcohol use in the past month; about one fifth of young adults used an illicit drug in the past month.<sup>2</sup> The percentage of young adults reporting past month binge alcohol use declined between 2008 and 2012, but the percentage reporting past month illicit drug use increased between 2008 and 2012. The percentage of persons aged 18 to 25 receiving substance abuse treatment remained relatively stable between 2002 and 2012.<sup>3</sup> The number of young adults seen in an emergency department (ED) for the use of illicit drugs and the misuse or abuse of pharmaceuticals increased between 2005 and 2011.<sup>4</sup>

The Center for Behavioral Health Statistics and Quality (CBHSQ) in the Substance Abuse and Mental Health Services Administration (SAMHSA) collects, analyzes, and disseminates critical public health data. CBHSQ manages three national data collections that offer insight into substance use and treatment among young adults: the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the Drug Abuse Warning Network (DAWN).<sup>5,6,7</sup>

NSDUH collects data from a nationally representative sample of the population aged 12 or older. NSDUH data are collected through face-to-face, computer-assisted interviews at the respondent's place of residence. TEDS is a nationwide compilation of data on the demographic and substance abuse characteristics of admissions to substance abuse treatment. TEDS data are reported to SAMHSA by State substance abuse agencies. DAWN is a public health surveillance system that monitors drug-related morbidity and mortality.<sup>8</sup> DAWN uses a probability sample of hospitals to produce estimates annually of drug-related emergency department (ED) visits for the United States and selected metropolitan areas.

This issue of *The CBHSQ Report* presents facts about substance use among young adults, including initiation, receipt of treatment, and ED visits for substance use "on an average or typical day."<sup>9</sup> Data in this report are for persons aged 18 to 25.



### In Brief

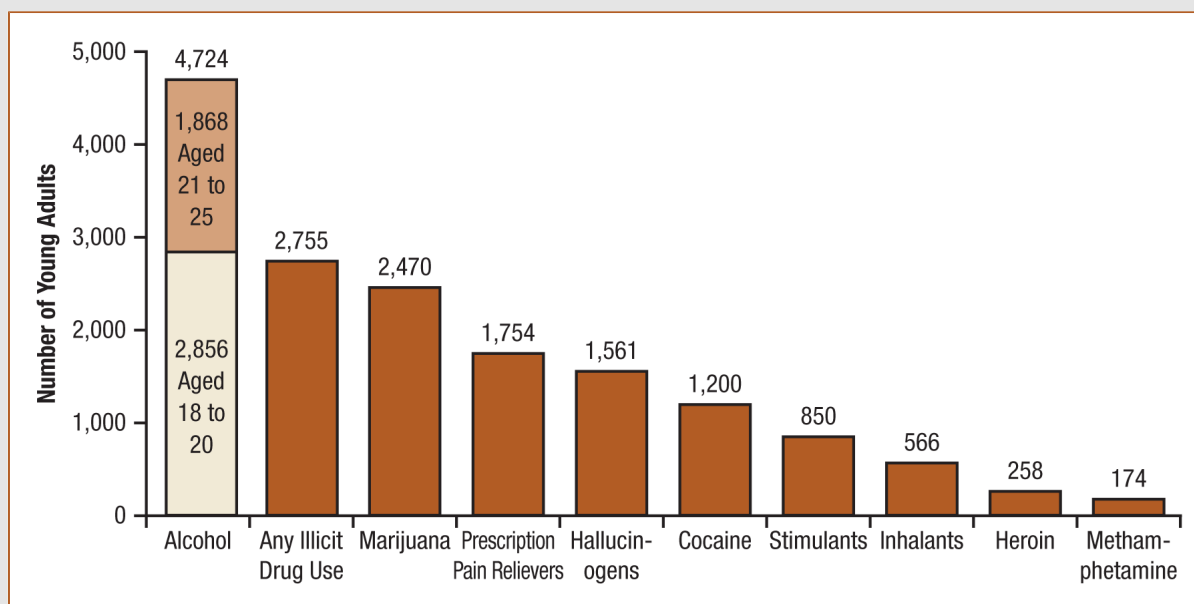
- This issue of *The CBHSQ Report* presents facts about young adults' substance use, including information on the initiation of substance use, past year substance use, emergency department visits, and receipt of substance use treatment.
- The data presented are from the combined 2011 and 2012 National Surveys on Drug Use and Health (NSDUHs), the 2011 Treatment Episode Data Set (TEDS), and the 2011 Drug Abuse Warning Network (DAWN).

## FIRST SUBSTANCE USE

According to combined 2011 and 2012 NSDUH data, 5.7 percent of young adults aged 18 to 25 drank alcohol for the first time in the past year (9.0 percent of those aged 18 to 20 and 3.6 percent of those aged 21 to 25). First past year use of an illicit drug<sup>10</sup> was reported by 3.3 percent of young adults aged 18 to 25. Combined 2011 and 2012 NSDUH data indicate that, on an average day<sup>9</sup> during the past year, the following numbers of young adults used these substances for the first time (Figure 1):

- 4,724 drank alcohol (2,856 aged 18 to 20 and 1,868 aged 21 to 25)<sup>11</sup>;
- 2,755 used an illicit drug;
- 2,470 used marijuana;
- 1,754 used prescription pain relievers nonmedically;
- 1,561 used hallucinogens;
- 1,200 used cocaine;
- 850 used licit or illicit stimulants nonmedically;
- 566 used inhalants;
- 258 used heroin; and
- 174 used methamphetamine.

**Figure 1. Number of Young Adults Aged 18 to 25 Who Used Alcohol or Illicit Drugs for the First Time on an Average Day: 2011 and 2012 NSDUHs**



Note: Annual averages based on combined 2011 and 2012 data.

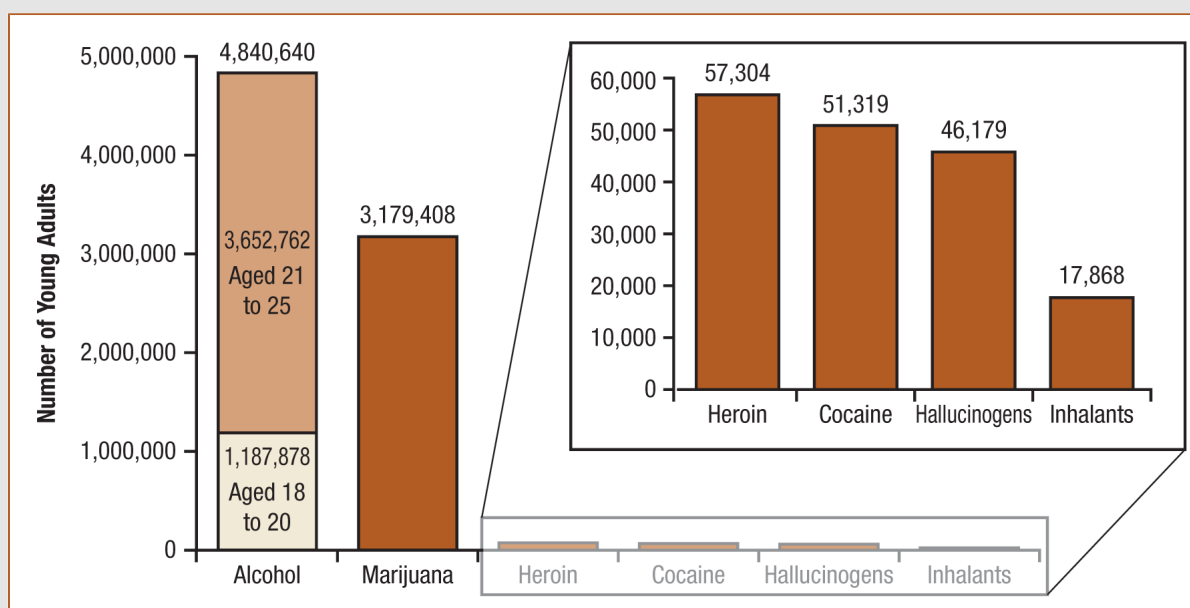
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 and 2012.

## ALCOHOL AND ILLICIT DRUG USE

According to combined 2011 and 2012 NSDUH data, nearly 27 million young adults aged 18 to 25 drank alcohol in the past year (9 million of those aged 18 to 20 and 18 million of those aged 21 to 25). Nearly 12 million young adults aged 18 to 25 used an illicit drug. In addition, on an average day during the past year, the following numbers of young adults used these substances (Figure 2):

- 4.8 million drank alcohol (1.2 million aged 18 to 20 and 3.7 million aged 21 to 25);
- 3.2 million used marijuana;
- 57,304 used heroin;
- 51,319 used cocaine;
- 46,179 used hallucinogens; and
- 17,868 used inhalants.

**Figure 2. Number of Young Adults Aged 18 to 25 Who Used Alcohol or Illicit Drugs on an Average Day: 2011 and 2012 NSDUHs**



Note: Annual averages based on combined 2011 and 2012 data.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2011 and 2012.

Combined 2011 and 2012 NSDUH data indicate that young adults who used alcohol in the past month drank an average of 4.1 drinks per day on the days they drank. On average:

- young adults aged 18 to 20 had 4.8 drinks per day on the days they drank; and
- young adults aged 21 to 25 had 3.9 drinks per day on the days they drank.

NSDUH data indicate that young adults aged 18 to 25 who used alcohol in the past month drank on an average of 7.0 days per month. On average:

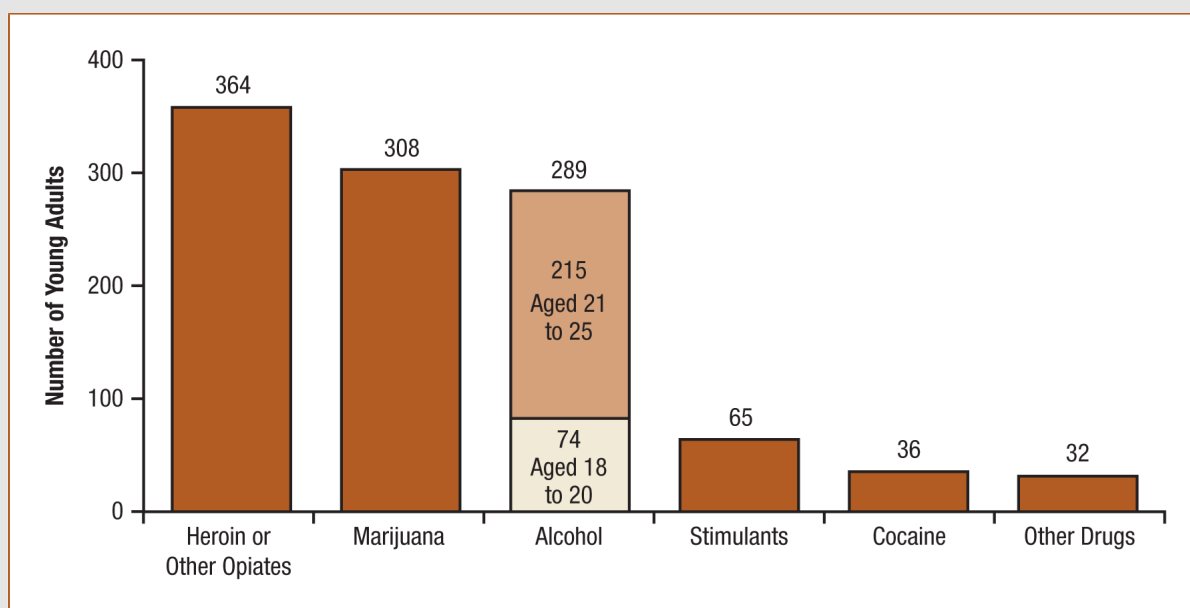
- young adults aged 18 to 20 who used alcohol in the past month drank on an average of 5.7 days per month; and
- young adults aged 21 to 25 who used alcohol in the past month drank on an average of 7.5 days per month.

## SUBSTANCE ABUSE TREATMENT

TEDS reported that there were 403,756 admissions aged 18 to 25 to substance abuse treatment programs in 2011. TEDS indicates that, on an average day<sup>9</sup> in 2011, young adult admissions to treatment reported the following substances as the primary substances of abuse<sup>12</sup> (Figure 3):

- 364 reported heroin or other opiates;
- 308 reported marijuana;
- 289 reported alcohol (74 aged 18 to 20 and 215 aged 21 to 25);
- 65 reported stimulants;
- 36 reported cocaine; and
- 32 reported other drugs.

**Figure 3. Number of Young Adults Aged 18 to 25 Admitted to Publicly Funded Substance Abuse Treatment Facilities on an Average Day, by Primary Substance of Abuse: 2011 TEDS**

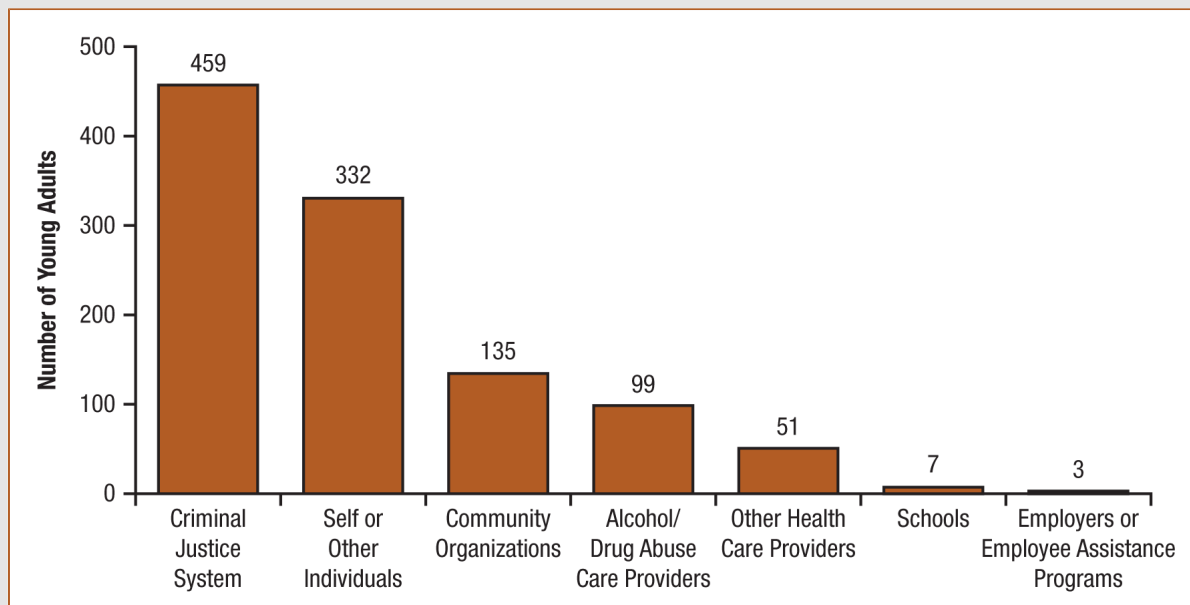


Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2011.

TEDS indicates that, on an average day in 2011, young adult admissions to substance abuse treatment were referred principally by the following sources<sup>13</sup> (Figure 4):

- 459 by the criminal justice system;
- 332 by self-referral or referral from other individuals;
- 135 by community organizations;
- 99 by alcohol/drug abuse care providers;
- 51 by other health care providers;
- 7 by schools; and
- 3 by employers or employee assistance programs.

**Figure 4. Number of Young Adults Aged 18 to 25 Admitted to Publicly Funded Substance Abuse Treatment Facilities on an Average Day, by Principal Source of Referral: 2011 TEDS**



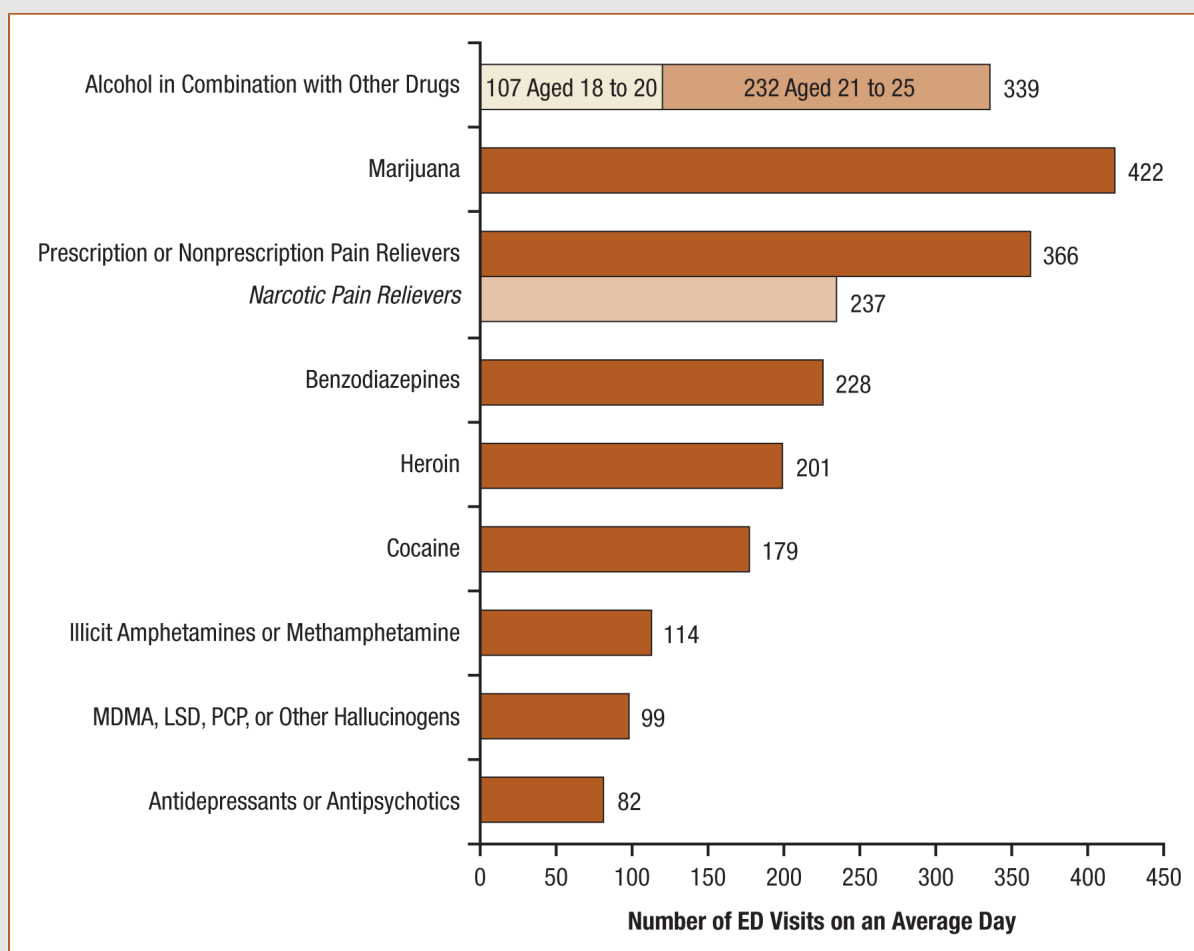
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2011.

## EMERGENCY DEPARTMENT VISITS

DAWN estimates that in 2011 there were about 845,000 drug-related ED visits by young adults aged 18 to 25, of which 488,937 visits involved the use of illicit drugs, alcohol in combination with other substances, or intentional misuse or abuse of pharmaceuticals (e.g., prescription medicines, over-the-counter remedies, dietary supplements).<sup>14</sup> On an average day in 2011, there were 2,317 drug-related ED visits for young adults aged 18 to 25, of which 1,340 involved the use of illegal drugs, the misuse or abuse of pharmaceuticals, or alcohol involved with other drugs. On an average day in 2011, these substances were involved in the following number of visits<sup>15</sup> (Figure 5):

- 339 involved alcohol in combination with other drugs (107 aged 18 to 20 and 232 aged 21 to 25);
- 422 involved marijuana;
- 366 involved prescription or nonprescription pain relievers, 237 of which involved narcotic pain relievers (e.g., hydrocodone, oxycodone);
- 228 involved benzodiazepines;
- 201 involved heroin;
- 179 involved cocaine;
- 114 involved illicit amphetamines or methamphetamine;
- 99 involved MDMA (i.e., Ecstasy), LSD, PCP, or other hallucinogens; and
- 82 involved antidepressants or antipsychotics.

**Figure 5. Number of Emergency Department (ED) Visits for Drug Misuse or Abuse on an Average Day for Patients Aged 18 to 25, by Selected Types of Drugs: 2011 DAWN**



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Drug Abuse Warning Network (DAWN), 2011.

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## END NOTES

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1. United States Census Bureau. (2013). *Annual estimates of the resident population by single year of age and sex for the United States: April 1, 2010 to July 1, 2012*. Retrieved from <http://factfinder2.census.gov/bkmk/table/1.0/en/PEP/2012/PEPSYASEXN>
2. Center for Behavioral Health Statistics and Quality. (2013). *Results from the 2012 National Survey on Drug Use and Health: Summary of national findings* (HHS Publication No. SMA 13-4795, NSDUH Series H-46). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.samhsa.gov/data/NSDUH/2012SummNatFindDetTables/Index.aspx>
3. Substance Abuse and Mental Health Services Administration. (2012). [Percentage of persons aged 18 to 25 receiving substance abuse treatment from the 2002 and 2012 National Surveys on Drug Use and Health]. Unpublished data.
4. Substance Abuse and Mental Health Services Administration. (2011). [Number of young adults seen in an emergency department for the use of illicit drugs and the misuse or abuse of pharmaceuticals from the Drug Abuse Warning Network, 2005 to 2011]. Unpublished data.
5. NSDUH is the Nation's primary source of information on the prevalence of illicit drug use among the civilian, noninstitutionalized population aged 12 or older, and it also provides estimates of alcohol and tobacco use and mental health problems. Begun in 1971 and conducted annually since 1990, NSDUH is sponsored by SAMHSA and collects data from a nationally representative sample of the population aged 12 or older. NSDUH data are collected through face-to-face, computer-assisted interviews at the respondent's place of residence. Items on sensitive topics such as drug use are self-administered to ensure privacy and promote accurate reporting.
6. TEDS is an annual compilation of data on the demographic characteristics and substance abuse problems of admissions to substance abuse treatment, primarily at facilities that receive some public funding. TEDS records represent admissions rather than individuals because a person may be admitted to substance abuse treatment more than once during a single year. For 2011, 1.8 million admissions aged 12 or older were reported to TEDS by 46 States, the District of Columbia, and Puerto Rico. Four States (Alabama, Georgia, Idaho, and Mississippi) either did not submit data or submitted less than a full calendar year of data by October 15, 2012, and are excluded from this report.
7. DAWN is a public health surveillance system that monitors drug-related morbidity and mortality. DAWN uses a probability sample of hospitals to produce estimates of drug-related emergency department (ED) visits for the United States and selected metropolitan areas annually. DAWN also produces annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and States. DAWN includes any ED visit related to recent drug use. All types of drugs—licit and illicit—are covered. Alcohol involvement is documented for patients of all ages if it occurs with another drug. Alcohol is considered an illicit drug for minors and is documented even if no other drug is involved. The classification of drugs used in DAWN is derived from the *Multum Lexicon*, copyright 2012 Lexi-Comp, Inc., and/or Cerner Multum, Inc. The Multum Licensing Agreement governing use of the *Lexicon* can be found at <http://www.samhsa.gov/data/sites/default/files/MultumLicenseAgreement/MultumLicenseAgreement.pdf>.
8. The last year of data collection for the Drug Abuse Warning Network (DAWN) was 2011.
9. For NSDUH, the number of young adults who used alcohol or illicit drugs “on an average day” is calculated by summing the weighted past month frequency of use (0 to 30 days) for each respective substance and dividing by 30. The number of young adults who used alcohol or illicit drugs for the first time in the past year “on an average day” is calculated by summing the weighted counts of respondents who both initiated substance use in the past year and were calculated to be between the ages of 18 and 25 at the time of first use and dividing by 365. The average number of alcoholic drinks consumed per day in the past month among past month users is calculated using a weighted average or mean of the number of drinks reported by past month users. For TEDS, admission totals “on an average day” were calculated by dividing the annual admission total by 365. For DAWN, ED visits “on an average day” were calculated by dividing the annual estimate of visits by 365.
10. For NSDUH, illicit drugs include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically. Nonmedical use is defined as the use of prescription-type drugs not prescribed for the respondent by a physician or used only for the experience or feeling they caused. Nonmedical use of any prescription-type pain reliever, sedative, stimulant, or tranquilizer does not include over-the-counter drugs. Nonmedical use of stimulants includes methamphetamine use.
11. Data for alcohol are presented separately for young adults aged 18 to 20 and aged 21 to 25 because alcohol use by persons under the age of 21 is illegal.
12. The primary substance of abuse is the main substance reported at the time of admission.
13. The principal source of referral is the person or agency referring the client to the alcohol or drug abuse treatment program.
14. The remaining balance primarily involved adverse reactions to and accidental ingestion of drugs.
15. Many ED visits involve multiple drugs. The sum of visits by drug will be greater than the total number of visits.

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## SUGGESTED CITATION

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Lipari, R.N., Crane, E.H., Cai, R., Strashny, A. and Dean, D. *A Day in the Life of Young Adults: Substance Abuse Facts*. The CBHSQ Report: June 10, 2014. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.

## SUMMARY

**Background:** Substance use is an public health issue among the nation's young adults. To understand the magnitude of the emerging issue, it is useful to put substance use among young adults into context by examining the number of young adults on an average day who use substances, go the emergency department for substance related issues, or enter substance use treatment. **Method:** To report estimates for adults aged 18 to 25, this report draws from three national data sources collected by the Center for Behavioral Health Statistics and Quality (CBHSQ) in the Substance Abuse and Mental Health Services Administration (SAMHSA). These data sources include the 2011 and 2012 National Survey on Drug Use and Health (NSDUH), the 2011 Treatment Episode Data Set (TEDS), and the 2011 Drug Abuse Warning Network (DAWN). **Results:** The findings in this report revealed that across all of the datasets used in this report, alcohol use emerges as a source of concern and drug use, particularly marijuana and prescription drug misuse may also be areas of concern. Although marijuana use is the most commonly used illicit drug in the United States by this age group, young adult admissions to treatment reported heroin or other opiates as the primary substances of abuse. **Conclusion:** Highlighting the number of young adults on an average day who are using substances, entering substance use treatment, or visiting the emergency department for substance related issues may help draw attention to this public health concern.

**Key words:** alcohol, marijuana, prescription drug misuse, methamphetamine, heroin, inhalants, National Survey on Drug Use and Health, NSDUH, Treatment Episode Data Set, TEDS, Drug Abuse Warning Network, DAWN, emergency department data

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## KEYWORDS

Short Report, Client-Level Data, Emergency Department Data, Population Data, Researchers

The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities.

The National Survey Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), the National Survey of Substance Abuse Treatment Services (N-SSATS), and the Drug Abuse Warning Network (DAWN) are four major data collections conducted by the Substance Abuse and Mental Health Services Administration's Center for Behavioral Health Statistics and Quality (SAMHSA/CBHSQ).

NSDUH is an annual survey that collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence. The combined 2011 and 2012 past year use data for this report are based on information obtained from 45,400 persons aged 18 to 25. Data related to past year substance initiation between the ages of 18 and 25 are based on information obtained from 47,200 persons aged 18 to 26.

TEDS data are collected through State administrative systems and then are submitted to SAMHSA. They include information on admissions to substance abuse treatment primarily from facilities that receive some public funding. The 2011 TEDS data presented in this report are based on data received through October 15, 2012, and include data from 404,000 admissions aged 18 to 25.

Trained DAWN staff reviewed medical records (charts) of emergency department (ED) visits on an ongoing basis at a nationally representative sample of hospitals to find drug-related ED visits that met the DAWN case criteria. The estimates presented in this report were based on the drug-related visits made by patients aged 18 to 25 found through a review of 5.2 million charts for ED visits occurring in calendar year 2011 in 233 hospitals.

For more information, see the following publications:

Center for Behavioral Health Statistics and Quality. (2013). Results from the 2012 National Survey on Drug Use and Health: Summary of national findings (HHS Publication No. SMA 12-4795, NSDUH Series H-46). Rockville, MD: Substance Abuse and Mental Health Services Administration. Also Available online : <http://www.samhsa.gov/data/population-data-nsduh>

Center for Behavioral Health Statistics and Quality. (2013). Treatment Episode Data Set (TEDS): 2001-2011. National admissions to substance abuse treatment services (HHS Publication No. SMA 13-4772, BHSIS Series S-65). Rockville, MD: Substance Abuse and Mental Health Services Administration. <http://www.samhsa.gov/data/client-level-data-teds/reports>

Center for Behavioral Health Statistics and Quality. (2013). Drug Abuse Warning Network: Detailed tables of national estimates of drug-related emergency department visits, 2004-2011. Rockville, MD: Substance Abuse and Mental Health Services Administration. <http://www.samhsa.gov/data/emergency-department-data-dawn/reports>

The CBHSQ Report is prepared by the Center for Behavioral Health Statistics and Quality (CBHSQ), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

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



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