

The CBHSQ Report

Short Report

May 11, 2017

A DAY IN THE LIFE OF OLDER ADULTS: SUBSTANCE USE FACTS

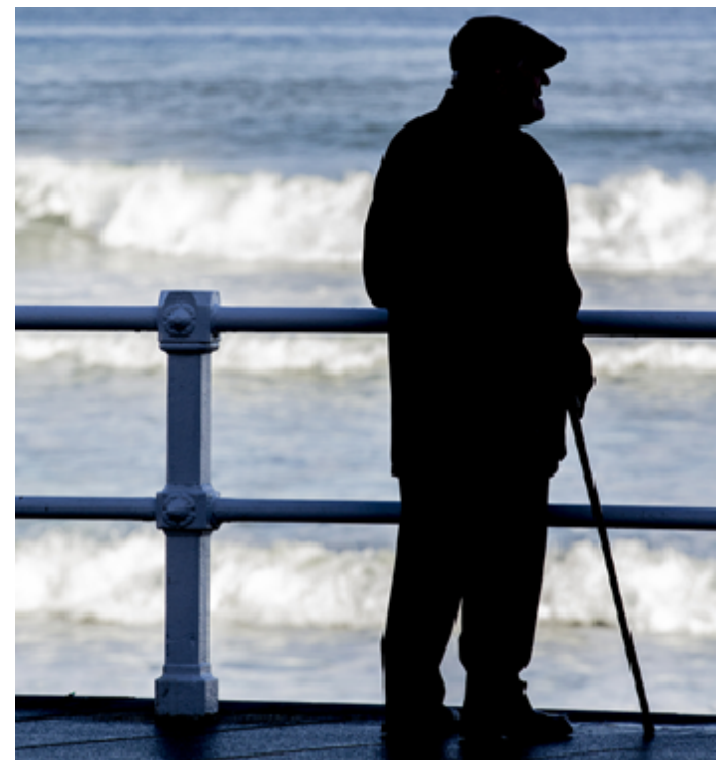
AUTHORS

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INTRODUCTION

Illicit drug use generally declines as individuals move through young adulthood and into middle adulthood. Although the percentage of people with substance use disorder (SUD) reflects the decline in use as people age, more than 1 million individuals aged 65 or older ("older adults") had an SUD in 2014, including 978,000 older adults with an alcohol use disorder and 161,000 with an illicit drug use disorder.¹ Research suggests that substance use is an emerging public health issue among the nation's older adults. Illicit drug use among adults aged 50 or older is projected to increase from 2.2 percent to 3.1 percent between 2001 and 2020.² For example, the number of older Americans with SUD is expected to rise from 2.8 million in 2002–2006 to 5.7 million by 2020.³ The emergence of SUD as a public health concern among older adults reflects, in part, the relatively higher drug use rates of the baby boom generation (people born between 1946 and 1964) compared with previous generations.³ Thus, there is a cohort of older adults who may experience the negative consequences of substance use, including physical and mental health issues, social and family problems, involvement with the criminal justice system, and death from drug overdose.³ Older adults are more likely than people in other age groups to have chronic health conditions and to take prescription medication, which may further complicate adverse effects of substance use.⁴

This issue of *The CBHSQ Report* presents information about substance use in older adults from several data sources, including information on use of substances, admissions to treatment, and emergency department (ED) visits for substance use on a typical or average day.⁵ Data in this report are for adults aged 65 or older and are drawn from three national data sources collected by the Center for Behavioral Health Statistics and Quality in the Substance Abuse and Mental Health Services Administration (SAMHSA). These data sources include the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the Drug Abuse Warning Network (DAWN).^{6,7,8}



In Brief

- This issue of *The CBHSQ Report* presents facts about substance use among adults aged 65 or older, information on substance use on an average day, receipt of substance use treatment, & emergency department (ED) visits. This report draws on three Substance Abuse and Mental Health Services Administration data collections.
- Combined data from the 2007 to 2014 National Surveys on Drug Use and Health indicate that on an average day during the past month, 6.0 million older adults drank alcohol, 132,000 older adults used marijuana, and 4,300 older adults used cocaine.
- According to the 2012 Treatment Episode Data Set, there were 14,230 admissions aged 65 or older to substance abuse treatment programs. TEDS indicates that on an average day in 2012, there were 29 admissions to treatment by adults aged 65 or older for alcohol use and 6 admissions to treatment for use of heroin or other opiates.
- Drug Abuse Warning Network data indicate that on an average day in 2011, there were 2,056 drug-related ED visits for older adults. Of these, 290 involved illegal drug use, nonmedical use of pharmaceuticals, or use of alcohol combined with other drugs.

Different years of NSDUH, TEDS, and DAWN data were used in this analysis because they are the latest years of data available. All NSDUH estimates in this report are annual averages based on combined 2007 to 2014 NSDUH data. Combining multiple years of NSDUH data allows substance use among older adults to be examined in greater detail by improving the precision of estimates for making statistical comparisons. TEDS data provide information on admissions to substance abuse treatment in 2012, and DAWN data provide information on drug-related ED visits in 2011.

NSDUH collects data from a nationally representative sample of the U.S. civilian, noninstitutionalized 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 use characteristics of admissions to substance abuse treatment. TEDS data are reported to SAMHSA by state substance abuse agencies and include information on admissions aged 12 and older to facilities that receive some public funding. DAWN was a public health surveillance system that monitored drug-related morbidity and mortality.⁹ DAWN used a probability sample of hospitals to produce annual estimates of drug-related ED visits for the United States and selected metropolitan areas.

ALCOHOL USE AND ILLICIT DRUG USE AMONG OLDER ADULTS

According to combined 2007 to 2014 NSDUH data, nearly 16.2 million adults aged 65 or older drank alcohol in the past month, with 3.4 million reporting binge alcohol use and 772,000 reporting heavy alcohol use (data not shown). In the 2007 to 2014 NSDUHs, binge alcohol use was defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other), and heavy alcohol use was defined as binge drinking on 5 or more days in the past 30 days. This threshold for binge drinking is higher than the threshold that is sometimes used for older adults—having more than two drinks for women and three drinks for men on a single occasion.⁴

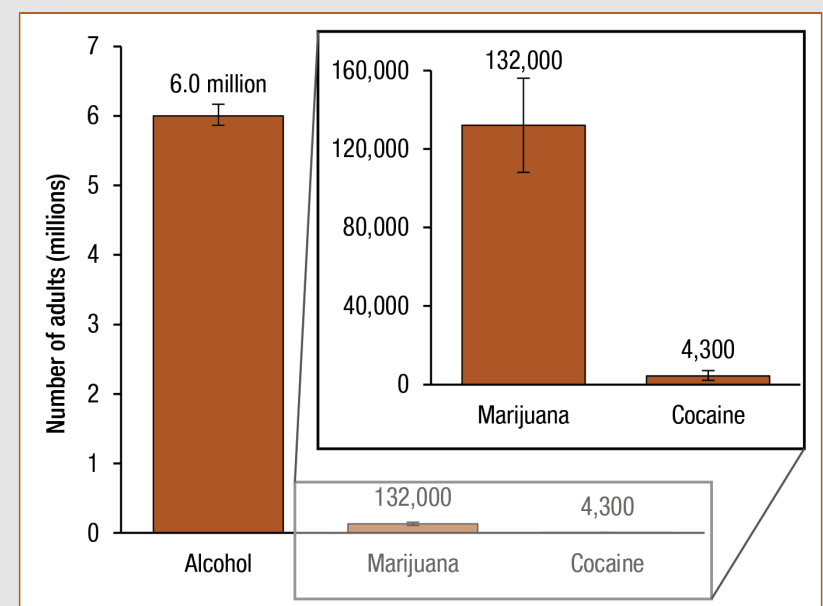
Combined 2007 to 2014 NSDUH data indicate that, on an average day, 6.0 million older adults used alcohol (Figure 1).⁵ Older adults who used alcohol in the past month drank an average of 1.8 drinks per day on the days they drank. NSDUH data indicate that older adults who used alcohol in the past month drank on an average of 11.1 days per month.

The combined 2007 to 2014 NSDUH data indicate that nearly 469,000 older adults used an illicit drug in the past month (data not shown). NSDUH includes nine illicit drug categories: marijuana, cocaine (including crack), heroin, hallucinogens, and inhalants, as well as the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives.¹⁰ Although the laws regarding marijuana use have changed in several states over the past decade, marijuana is categorized as an illicit drug because marijuana use remains illegal under federal laws in all states (under the Controlled Substances Act:

<http://www.fda.gov/regulatoryinformation/legislation/ucm148726.htm>).

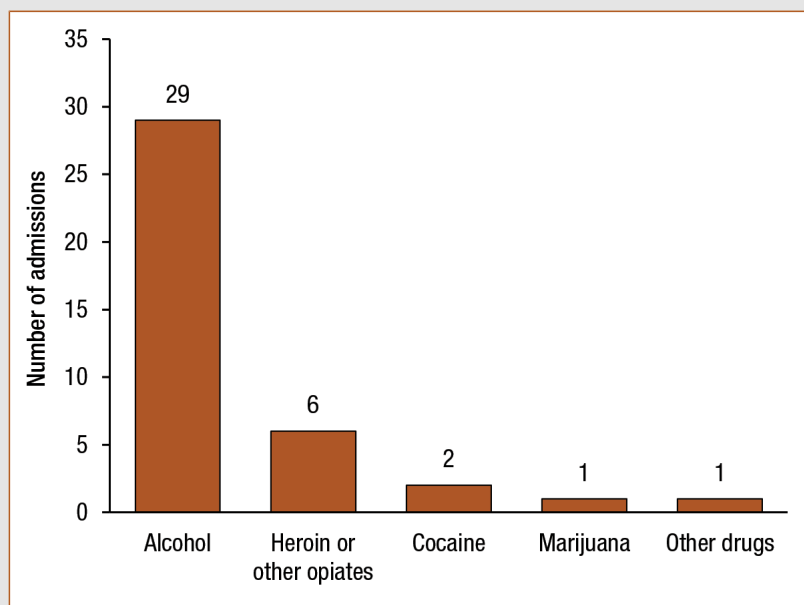
On an average day during the past month, 132,000 older adults used marijuana and 4,300 used cocaine (Figure 1). In this report, the "average day" estimates are presented for only marijuana and cocaine. Because of small sample sizes, "average day" estimates of crack, heroin, hallucinogens, and inhalants could not be produced. The data used in the "average day" estimates are not collected for the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives; therefore, those estimates are also not presented.

Figure 1. Number of adults aged 65 or older who used alcohol, marijuana, or cocaine on an average day: annual averages, 2007 to 2014 NSDUHs



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2007 to 2014.

Figure 2. Number of admissions aged 65 or older admitted substance abuse treatment, by primary substance of abuse: 2012 TEDS



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2012.

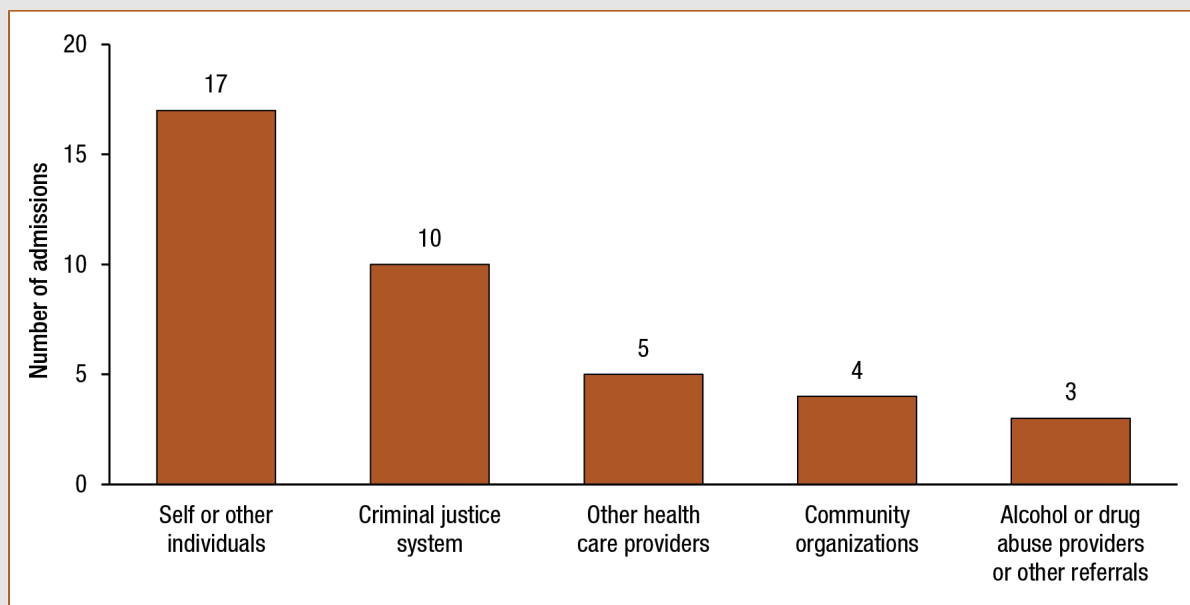
TEDS reported that there were 14,230 admissions aged 65 or older to substance abuse treatment programs in 2012 (data not shown). TEDS indicates that, on an average day⁵ in 2012, admissions to substance use treatment aged 65 or older reported the following substances as the primary substances of abuse (Figure 2):¹¹

- 29 reported alcohol
- 6 reported heroin or other opiates,
- 2 reported cocaine,
- 1 reported marijuana, and
- 1 reported other drugs.

TEDS indicates that, on an average day in 2012, admissions to substance abuse treatment aged 65 or older were referred primarily by the following sources (Figure 3):¹²

- 17 by self-referral or referral from other individuals,
- 10 by the criminal justice system,
- 5 by other health care providers,
- 4 by community organizations, and
- 3 by alcohol or drug abuse care providers or other referrals.

Figure 3. Number of admissions aged 65 or older admitted to substance abuse treatment, by principal source of referral: 2012 TEDS



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Treatment Episode Data Set (TEDS), 2012.

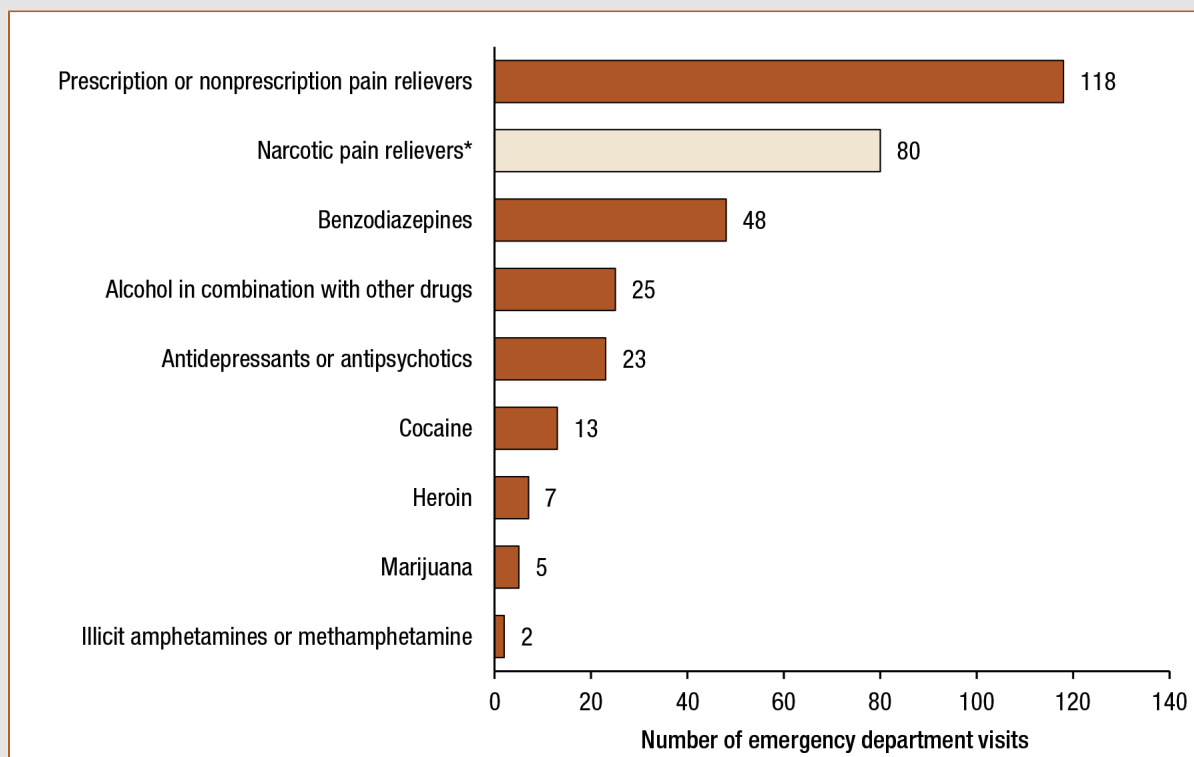
EMERGENCY DEPARTMENT VISITS

In 2011, DAWN estimates showed 750,529 drug-related ED visits by adults aged 65 or older, where 105,982 visits involved illicit drug use, use of alcohol in combination with other substances, or nonmedical use of pharmaceuticals (e.g., prescription medications, over-the-counter remedies, dietary supplements) (data not shown). The remaining 644,547 ED visits by older adults primarily involved adverse reactions to and accidental ingestion of drugs. DAWN does not collect information on alcohol-only ED visits among adults.

On an average day in 2011, there were 2,056 drug-related ED visits by older adults, of which 290 involved illegal drug use, alcohol in combination with other drugs, or nonmedical use of pharmaceuticals. Nonmedical use includes ED visits where the patient misused a medication, took more than the prescribed dose of a medication, took a medication prescribed for another individual, or was poisoned by another person. On an average day in 2011, these substances were involved in the following numbers of visits (Figure 4):⁵

- 118 involved prescription or nonprescription pain relievers, 80 of which involved narcotic pain relievers specified by name (e.g., hydrocodone, oxycodone);
- 48 involved benzodiazepines;
- 25 involved alcohol in combination with other drugs;
- 23 involved antidepressants or antipsychotics;
- 13 involved cocaine;
- 7 involved heroin;
- 5 involved marijuana; and
- 2 involved illicit amphetamines or methamphetamine.

Figure 4. Number of emergency department visits for drug misuse on an average day for patients aged 65 or older, by selected types of drugs: 2011 DAWN



* Narcotic pain relievers are a subset of prescription or nonprescription pain relievers.

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

DISCUSSION

Substance use among older adults is a public health concern that could increase in the future, especially as the baby boom generation ages. To provide information on older adults' substance use, this report used three national datasets that highlight the need to continue to monitor this aging population. Although older adulthood is not typically associated with substance use, the findings in this report revealed that there are some areas of concern for this population. For example, regarding use of two of the most common substances in the United States, this report shows that on an average day, 6.0 million older adults used alcohol and 132,000 older adults used marijuana.

This report did not provide comparable information on frequency of prescription drug misuse. Because prescription drug misuse is the second most common form of illicit drug use in the United States, prescription drug misuse among older adults is an issue to examine with NSDUH prescription drug questions that were added in 2015, although this analysis will require pooled years of data. The DAWN results are evidence that prescription drug misuse does result in high numbers of older adults visiting the ED.

Across all of the datasets used in this report, alcohol use emerges as a source of concern. Alcohol use by older adults is legal; however, it can also be problematic. The TEDS data show that most substance use admissions for people aged 65 or older were primarily for alcohol. The largest numbers of admissions were self-referrals or referrals from other individuals, followed by referrals from the criminal justice system. People aged 65 years or older are more sensitive to the effects of alcohol; levels that were once consumed safely earlier in the life course may be unhealthy when consumed by those aged 65 or older.⁴ Binge drinking for older adults is sometimes defined as drinking more than two drinks for women and more than three drinks for men on a single occasion, which is a lower threshold for binge alcohol use than for adults overall.⁴ NSDUH data from 2007 to 2014 reveal that older adults who used alcohol in the past month drank an average of 1.8 drinks per day on the days they drank. Alcohol use can negatively affect a person's sense of balance and can increase the likelihood of a fall, which may result in more serious injuries among older adults than younger adults.¹³

Alcohol can interact dangerously with medications taken by older adults, including over-the-counter drugs, herbal remedies, and prescriptions. Alcohol can also exacerbate common medical conditions in older adults, including stroke, high blood pressure, diabetes, osteoporosis, memory loss, and mood disorders.¹⁴ Combining several medications or pairing medications with alcohol may affect older adults more strongly than younger adults and may necessitate visits to the ED.

According to the 2011 DAWN data, there were an estimated 105,982 ED visits by adults aged 65 or older that involved illicit drug use, alcohol used in combination with other substances (visits for alcohol alone were not included for adults), or nonmedical use of pharmaceuticals (e.g., prescription medications, over-the-counter remedies, dietary supplements). Although this was not the chief cause of drug-related ED visits for this age group, use of illicit drugs, use of drugs combined with alcohol, and nonmedical use of pharmaceuticals resulted in nearly 300 ED visits each day.

Despite the fact that illicit drug use generally declines after young adulthood, more than 1 million older adults had an SUD in 2014.¹ Emerging data suggest that substance use among older adults is a public health issue.^{2,3} Findings in this report show that on an average day in the past month, older adults were using alcohol more frequently than they were using illicit drugs such as marijuana and cocaine. For example, on an average day in the past month for older adults, there were 29 admissions to treatment for alcohol use and 6 admissions to treatment for heroin or opiate use. Policymakers can use this information to help inform their assessments of substance use problems. Increasing demands for substance abuse treatment may require the development of new facilities and programs to address drug use among older adults.³

Signs of possible substance misuse among older adults may include physical symptoms such as injuries, increased tolerance to medication, blackouts, and cognitive impairment. Psychiatric symptoms that may suggest a problem with substance misuse include sleep disturbances, anxiety, depression, and mood swings. Finally, problematic substance use may be signaled by social symptoms such as legal, financial, and family problems; loss of a spouse; and needing extra supplies of medication.¹⁴ For more information on how family, caregivers, and professionals can recognize and prevent substance use among older adults, the following websites provide information and tools:

- Get Connected! toolkit: <http://store.samhsa.gov/product/Linking-Older-Adults-With-Medication-Alcohol-and-Mental-Health-Resources/SMA03-3824>
- Substance Abuse Among Older Adults: Treatment Improvement Protocol (TIP) Series 26: <http://adaiclearinghouse.org/downloads/TIP-26-Substance-Abuse-Among-Older-Adults-67.pdf>
- Talking with Your Adult Patients about Alcohol, Drug, and/or Mental Health Problems: <http://store.samhsa.gov/product/Talking-with-Your-Adult-Patients-about-Alcohol-Drug-and-or-Mental-Health-Problems/SMA15-4584>
- Older American Behavioral Health: Alcohol Misuse and Abuse Prevention: <https://www.ncoa.org/resources/issue-brief-2-alcohol-misuse-and-abuse-prevention/>
- Too Many Prescription Drugs Can Be Dangerous, Especially for Older Adults: http://publichealth.hsc.wvu.edu/media/3331/polypharmacy_pire_2_web_no-samhsa-logo.pdf

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. Retrieved from <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs2014/NSDUH-DetTabs2014.pdf>
2. Colliver, J. D., Compton, W. M., Gfroerer, J. C., & Condon, T. (2006). Projecting drug use among aging baby boomers in 2020. *Annals of Epidemiology*, 16(4), 257–265.
3. Wu, L. T., & Blazer, D. G. (2011). Illicit and nonmedical drug use among older adults: A review. *Journal of Aging and Health*, 23(3), 481–504. doi:10.1177/0898264310386224
4. National Institute on Aging. (2011, June). *Older adults and alcohol: You can get help*. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services. Retrieved from <https://www.nia.nih.gov/health/publication/older-adults-and-alcohol/whats-inside>
5. For NSDUH, the number of older 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. Frequency of nonmedical use of prescription drugs in the past month is not collected on NSDUH. 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.
6. 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 provides estimates of alcohol and tobacco use and mental health issues. 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 to promote accurate reporting.
7. TEDS is an annual compilation of data on the demographic characteristics and substance use 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 2012, 1.7 million admissions aged 12 or older were reported to TEDS by 47 states, the District of Columbia, and Puerto Rico. Three states (Mississippi, Pennsylvania, and West Virginia) did not submit data or submitted less than a full calendar year of data by October 17, 2013, and are excluded from this report.
8. DAWN was a public health surveillance system that monitored drug-related morbidity and mortality and collected data on drug-related reasons for ED visits from 2004 to 2011. DAWN used a probability sample of hospitals to produce annual estimates of drug-related ED visits for the United States and selected metropolitan areas annually. DAWN also produced annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and states. DAWN included any ED visit related to recent drug use. All types of drugs—licit and illicit—were covered. Alcohol involvement was documented for patients of all ages if it occurred with another drug. Alcohol was considered an illicit drug for minors and was documented even if no other drug was involved. The classification of drugs used in DAWN was derived from the Multum *Lexicon*, © 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>.
9. The last year of data collection for DAWN was 2011.
10. NSDUH includes nonmedical use of prescription drugs within the category of illicit drug use. In this report, nonmedical use of prescription drugs is reported separately from overall illicit drugs, which also includes nonmedical use of prescription drugs.
11. The primary substance of use is the main substance reported at the time of admission.
12. The principal source of referral is the person or agency referring the client to the alcohol or drug abuse treatment program.
13. National Institutes of Health. (2015, August). *Alcohol use and older adults: How alcohol affects safety*. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services. Retrieved from <http://nihseniorhealth.gov/alcoholuse/howalcoholaffectssafety/01.html>
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SUMMARY

Background: Substance use is an emerging public health issue among the nation's older adults. To understand the magnitude of this emerging issue, it is useful to examine the number of older adults on an average day who use substances, visit the emergency department for substance-related issues, or enter substance use treatment. **Method:** To report estimates for adults aged 65 or older, 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): the National Survey on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the Drug Abuse Warning Network (DAWN). **Results:** Although historically, older adulthood is not associated with substance use, the findings in this report reveal 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 an area of concern. **Conclusion:** Highlighting the number of older adults on an average day who use substances, enter substance use treatment, or visit the emergency department for substance-related issues may help draw attention to this emerging issue.

Keywords: alcohol, marijuana, prescription drug misuse, methamphetamine, heroin, inhalants, National Survey on Drug Use and Health, NSDUH

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KEYWORDS

Short Report, Client-Level Data, Emergency Department Data, Population Data, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, Mature Adults as Audience, Binge Drinking, Substance Abuse, Mature Adults as Population Group, Alcohol, Marijuana, All US States Only

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 on Drug Use and Health (NSDUH), the Treatment Episode Data Set (TEDS), and the Drug Abuse Warning Network (DAWN) are three major data collections conducted by SAMHSA's Center for Behavioral Health Statistics and Quality (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 2007 and 2014 past year use data for this report are based on information obtained from 23,300 adults aged 65 or older.

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 2012 TEDS data presented in this report are based on data received through October 17, 2013, and include data from 14,000 admissions aged 65 and older.

Trained Drug Abuse Warning Network (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 65 or older 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>

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Other substance abuse reports:

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