

# The NSDUH Report

July 2, 2012

## Monthly Variation in Substance Use Initiation among Adolescents

### In Brief

- First-time use of most substances peaks during the summer months of June and July
- On an average day in June, July, or December, more than 11,000 youths used alcohol for the first time; in other months, the daily average ranged from about 5,000 to 8,000 new users per day
- On an average day in June or July, more than 5,000 youths smoked cigarettes for the first time; in other months, the daily average ranged from about 3,000 to 4,000 new users per day
- On an average day in June or July, more than 4,800 youths used marijuana for the first time, whereas the daily average ranged from about 3,000 to 4,000 in other months

Estimates of substance use initiation, also known as first-time use, provide an important measure of the Nation's substance use problem and can help identify patterns of substance use. Although there has been substantial research on age at substance use initiation, few studies collect or examine information on month of initiation. Identifying periods of heightened risk for initiation could inform the development and release of media prevention campaigns. Additionally, this information could help parents, prevention providers, and communities take positive steps toward preventing use among their children.

The National Survey on Drug Use and Health (NSDUH) asks respondents aged 12 or older who reported using various substances to indicate the year and month of first use of each substance. This issue of *The NSDUH Report* examines the average number of adolescents using substances for the first time per day for the year as a whole and for each month of the year. Specifically, this report focuses on

adolescents who recently initiated the use of substances (i.e., in the 12 months prior to the interview) and who were aged 17 or younger at the time of initiation. All findings are based on annual averages from 2002 to 2010 NSDUH data.<sup>1</sup>

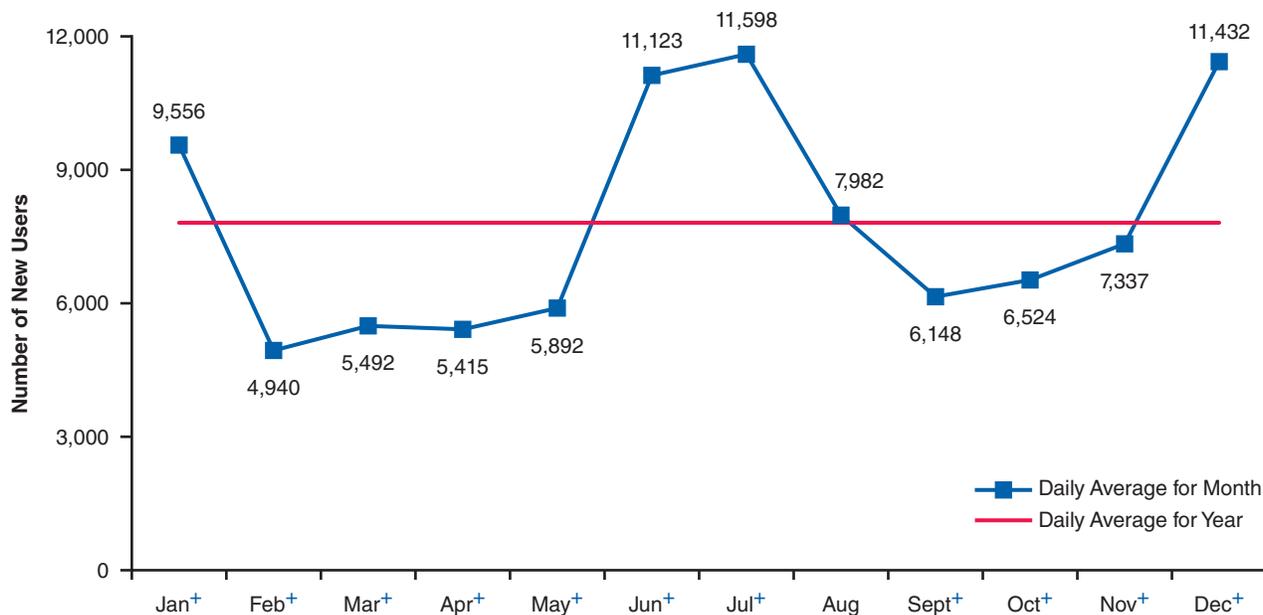
### First Alcohol Use

An annual average of 2.9 million adolescents used alcohol for the first time within the past 12 months; this averages to about 7,800 new users per day.<sup>2</sup> The daily average for first use of alcohol peaked in June, July, and December, with a secondary peak in January (Figure 1). On an average day in June, July, or December, more than 11,000 youths used alcohol for the first time; on an average day in January, about 9,600 youths used alcohol for the first time. In other months, the daily average ranged from about 5,000 to 8,000 new users per day (Figure 1).

### First Tobacco Use

Approximately 1.4 million adolescents used cigarettes for the first time within the past 12 months, 1.3 million used cigars for the first time, and 600,000 used smokeless tobacco for the first time; these average to 3,800, 3,600, and 1,700 new users per day, respectively. The daily averages of new users for all three tobacco measures peaked in June and July (Figures 2-4). On an average day in June or July, more than 5,000 youths smoked cigarettes for the first time; in other months, the daily average ranged from about 3,000 to 4,000 new users per day. More than 5,000 youths smoked cigars for the first time on an average day in June or July; the daily average ranged from about 2,500 to 4,000 new users per day in other months. On an average day in June or July, more than 2,000 youths used smokeless tobacco for the first time; in other months, the daily average ranged from about 1,300 to 1,800 new users per day.

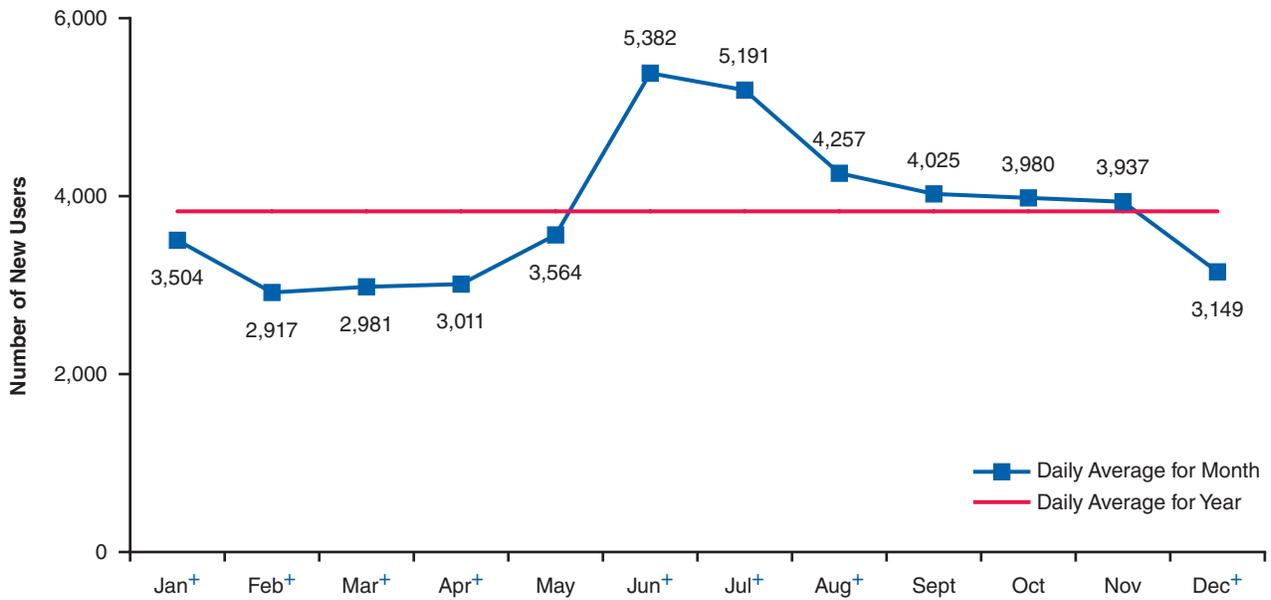
**Figure 1. Number of Adolescents Younger than 18 Using Alcohol for the First Time on An Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

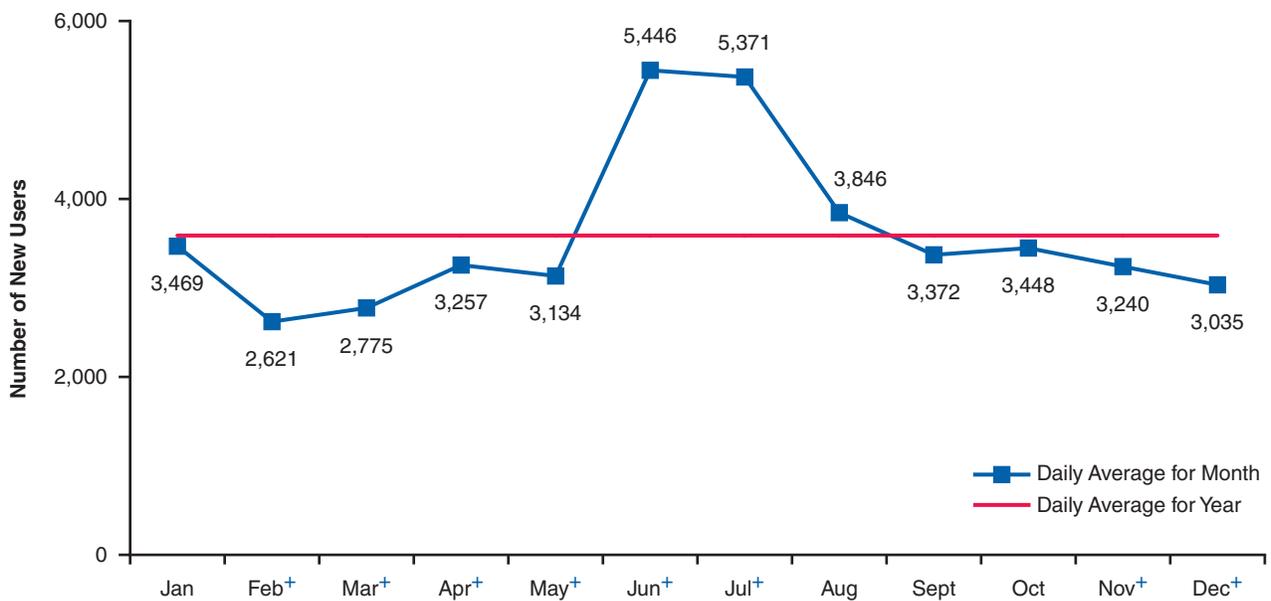
**Figure 2. Number of Adolescents Younger than 18 Using Cigarettes for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

**Figure 3. Number of Adolescents Younger than 18 Using Cigars for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

## First Marijuana Use

An annual average of 1.4 million adolescents used marijuana for the first time within the past 12 months; this averages to about 3,700 new users per day. As with alcohol and tobacco, the daily average for first use of marijuana peaked in June and July (Figure 5). On an average day in June or July, more than 4,800 youths used marijuana for the first time, whereas the daily average ranged from about 3,000 to 4,000 in other months.

## First Nonmedical Use of Prescription-Type Drugs

Approximately 900,000 adolescents used prescription-type pain relievers nonmedically for the first time within the past 12 months, 300,000 used prescription-type tranquilizers nonmedically for the first time, 300,000 used prescription-type stimulants nonmedically for the first time, and 70,000 used prescription-type sedatives

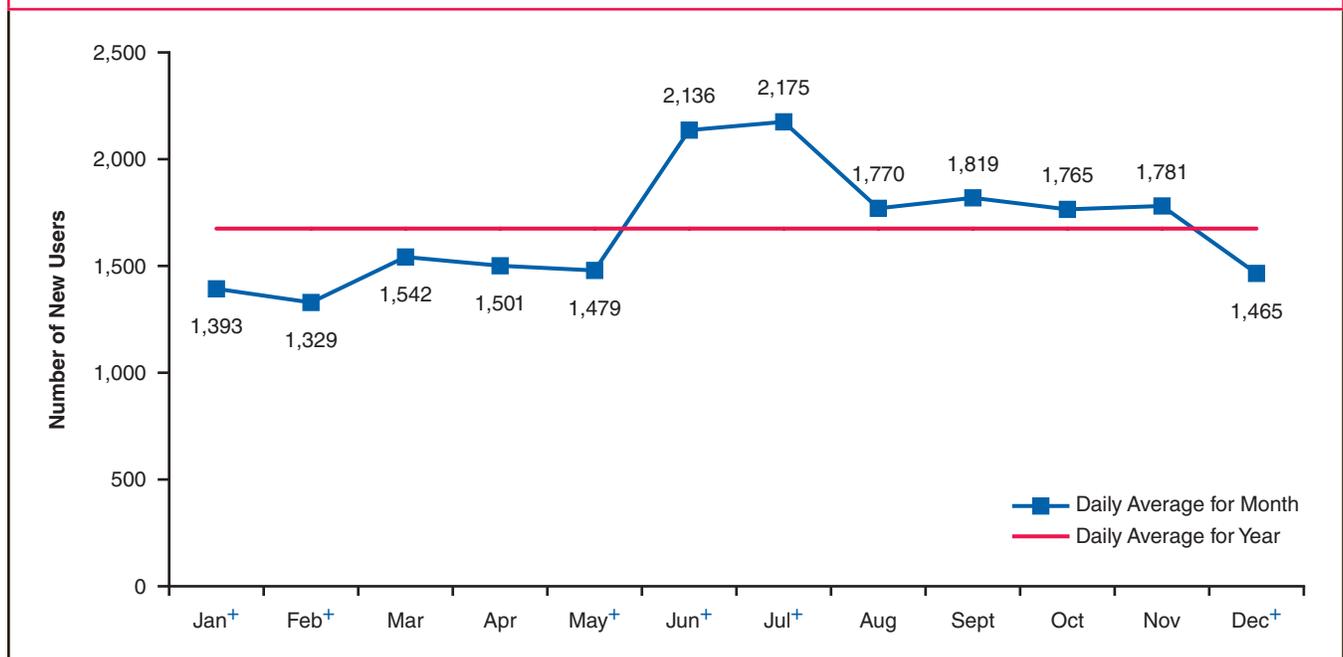
nonmedically for the first time.<sup>3</sup> These numbers translate to an average of about 2,500 new pain reliever users per day, 900 new tranquilizer users per day, 800 new stimulant users per day, and 200 new sedative users per day.

For nonmedical use of prescription-type pain relievers, small peaks were seen in the daily average for first use in January and September (Figure 6); small peaks were seen in the daily average for February and September for nonmedical use of prescription-type tranquilizers (Figure 7). Daily averages for first nonmedical use of stimulants and sedatives were relatively stable by month (Figures 8-9).

## First Inhalant Use

Approximately 600,000 adolescents used inhalants for the first time within the past 12 months; this averages to about 1,500 new users per day. The daily average for first use of inhalants was at its highest in July, with about 1,800 youths using inhalants for the first time on

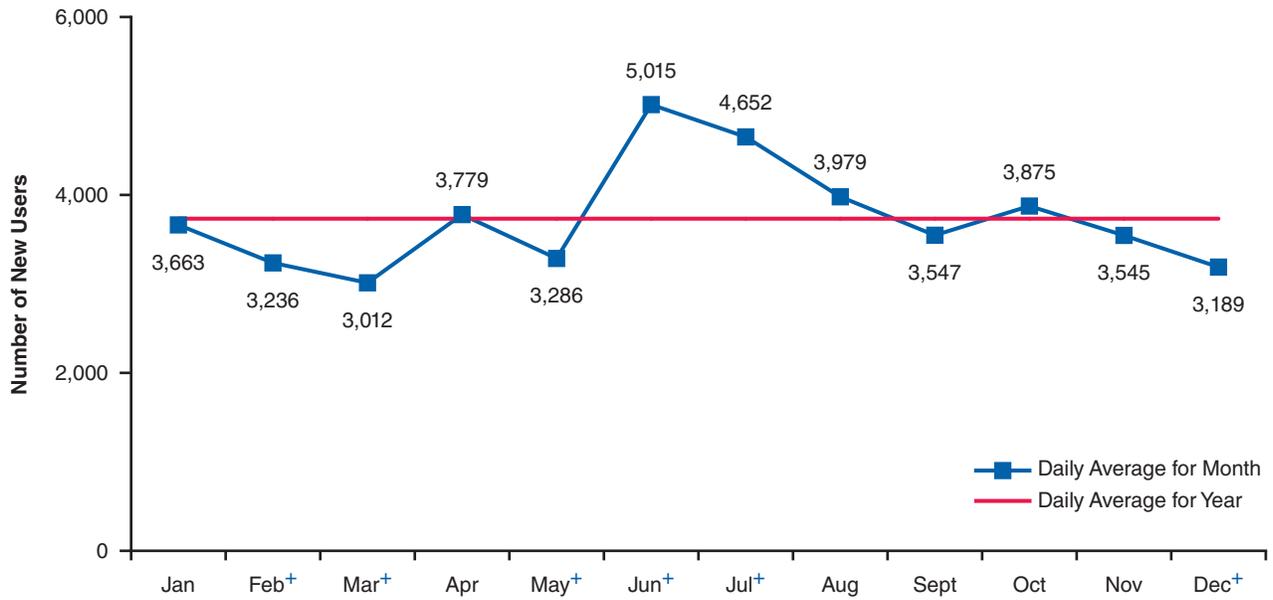
**Figure 4. Number of Adolescents Younger than 18 Using Smokeless Tobacco for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

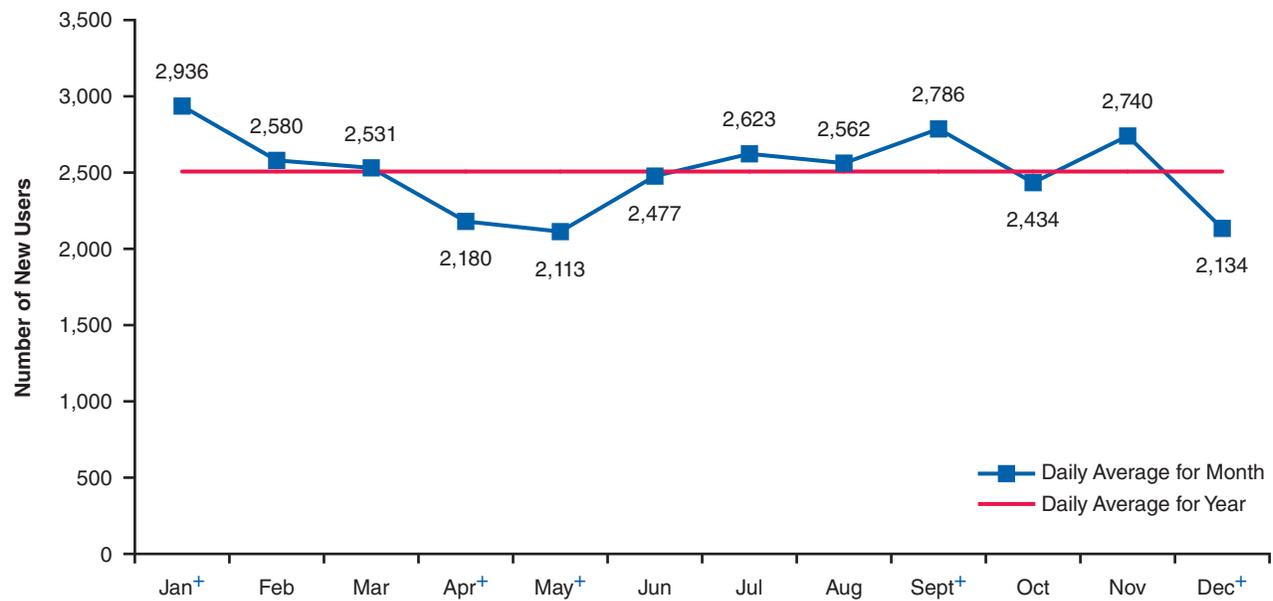
**Figure 5. Number of Adolescents Younger than 18 Using Marijuana for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

**Figure 6. Number of Adolescents Younger than 18 Using Prescription-Type Pain Relievers Nonmedically for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

an average day in July; in other months, the daily average ranged from about 1,100 to 1,700 new users per day (Figure 10).

### First Hallucinogen Use

Approximately 500,000 adolescents used hallucinogens for the first time within the past 12 months; this averages to about 1,400 new users per day. The daily average for first use of hallucinogens peaked in June and July, with secondary peaks in October and January (Figure 11). On an average day in these peak months, more than 1,500 youths used hallucinogens for the first time; in other months, the daily average ranged from 1,100 to 1,400 new users per day.

### First Cocaine Use

Approximately 300,000 adolescents used cocaine for the first time within the past 12 months; this averages to about 800 new users per day. For cocaine, a small peak was seen in the daily

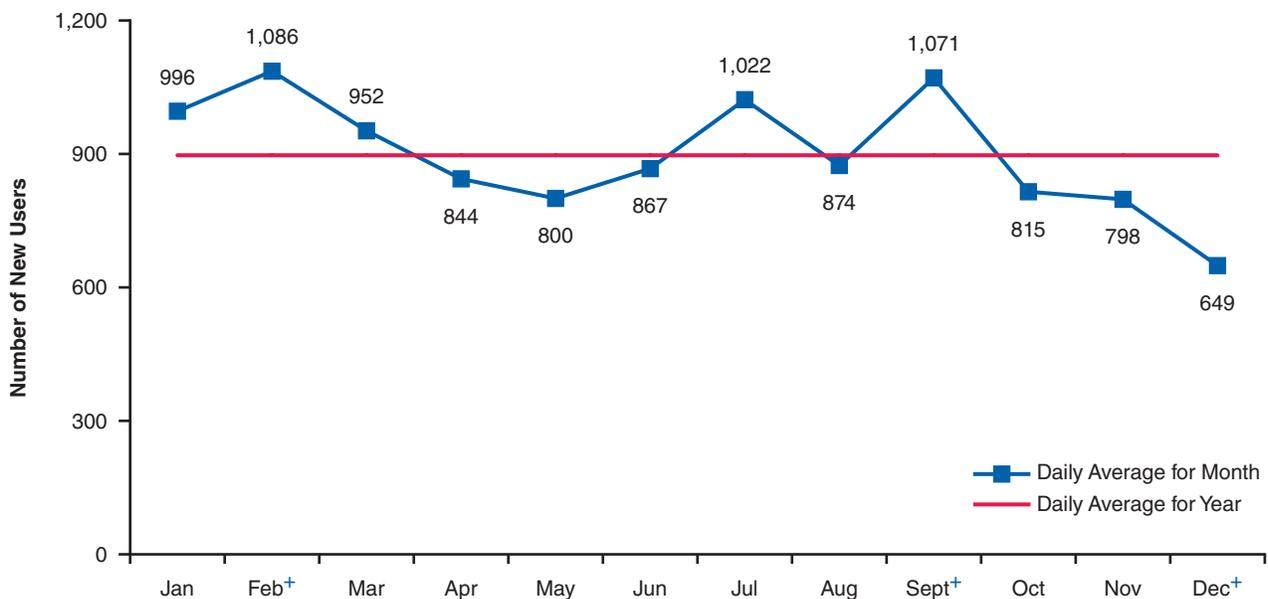
average for first use in January (Figure 12). On an average day in January, about 1,000 youths used cocaine for the first time; in other months, the daily average ranged from 700 to 900 new users per day.

### Discussion

Although initiation of substance use can occur at any time, findings in this report indicate that first-time use of many substances (e.g., alcohol, tobacco products, and marijuana) peaked during the months of June and July. These months include periods when adolescents are on break from school and may have more idle time, fewer responsibilities, and less adult supervision. First use of other substances (e.g., nonmedical use of prescription-type stimulants and sedatives), however, remained relatively constant over the course of a year.

A number of implications can be drawn from these report findings. First, although ongoing public service announcements (PSAs)

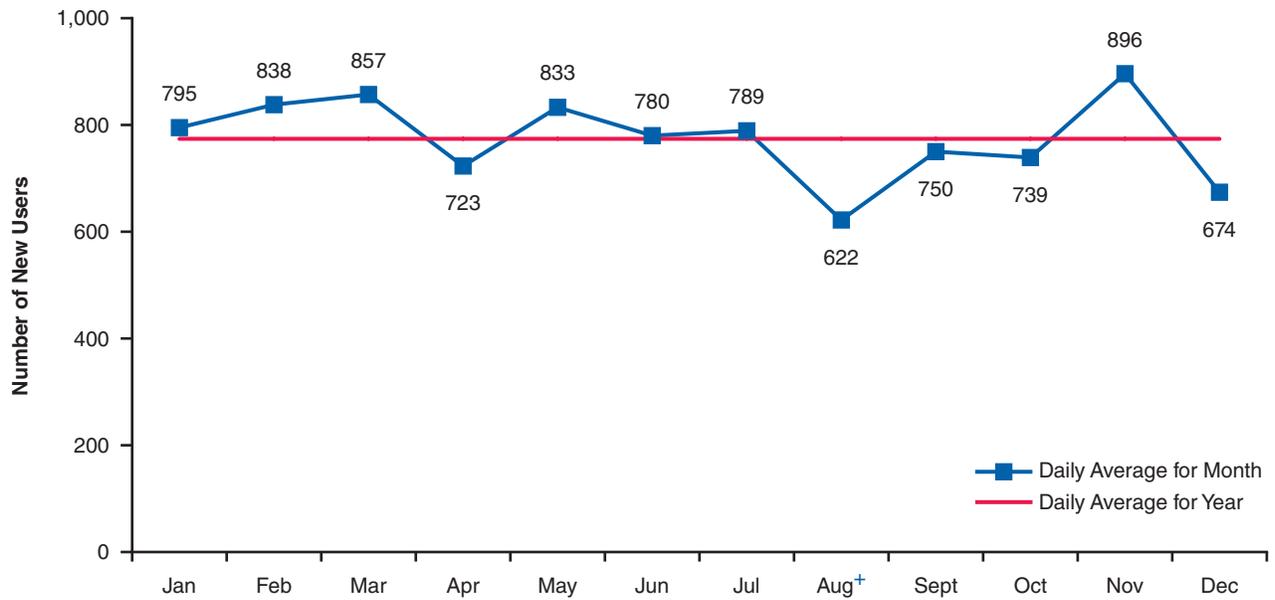
**Figure 7. Number of Adolescents Younger than 18 Using Prescription-Type Tranquilizers Nonmedically for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

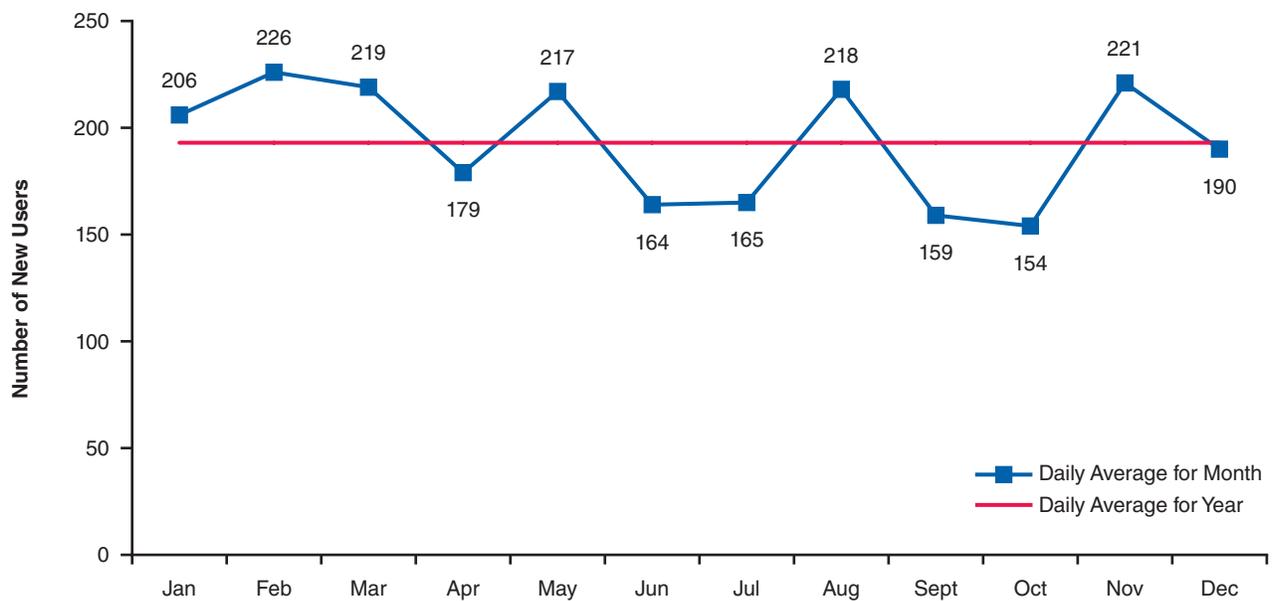
**Figure 8. Number of Adolescents Younger than 18 Using Prescription-Type Stimulants Nonmedically for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

**Figure 9. Number of Adolescents Younger than 18 Using Prescription-Type Sedatives Nonmedically for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

and media campaigns targeting adolescents are important for deterring youth alcohol and drug use in general, intensifying these efforts during June and July may amplify their impact; messages focusing on preventing initiation may be particularly important during these months. Second, in communities with limited prevention resources, the findings may point toward critical opportunities during the summer to implement activities and events that are attractive alternatives to drug use initiation or continued use. Third, the law enforcement community may find that targeted efforts toward preventing tobacco and alcohol sales to minors are more effective during these particular months. Finally, these findings underscore the importance of parents and caregivers reinforcing messages about the risks involved with using alcohol and drugs to their children year-round, while consistently restricting access to these substances.

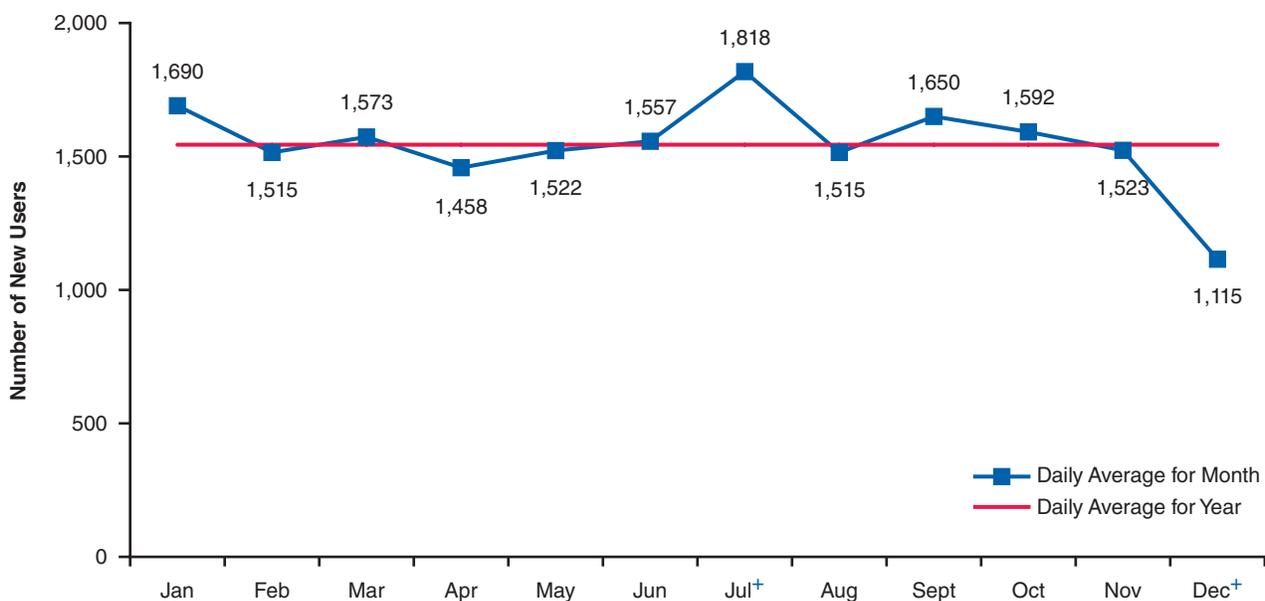
**End Notes**

- <sup>1</sup> Due to the structure of the NSDUH questionnaire, only respondents who indicated an age of first use that was equal to or 1 year less than their current age were asked to indicate the month in which they initiated use. This analysis focuses on respondents who reported an age at first use that was younger than 18 years and who were asked the question on the month of first use. Consequently, the estimates approximately represent initiation of use among persons younger than 18 that occurred between 2002 and 2010.
- <sup>2</sup> Daily averages are calculated by dividing the estimated total number of first-time users in a time period by the total number of days in that respective time period (365.25 for an entire year or the total days in a month for each individual month).
- <sup>3</sup> 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.

**Suggested Citation**

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (July 2, 2012). *The NSDUH Report: Monthly Variation in Substance Use Initiation among Adolescents*. Rockville, MD.

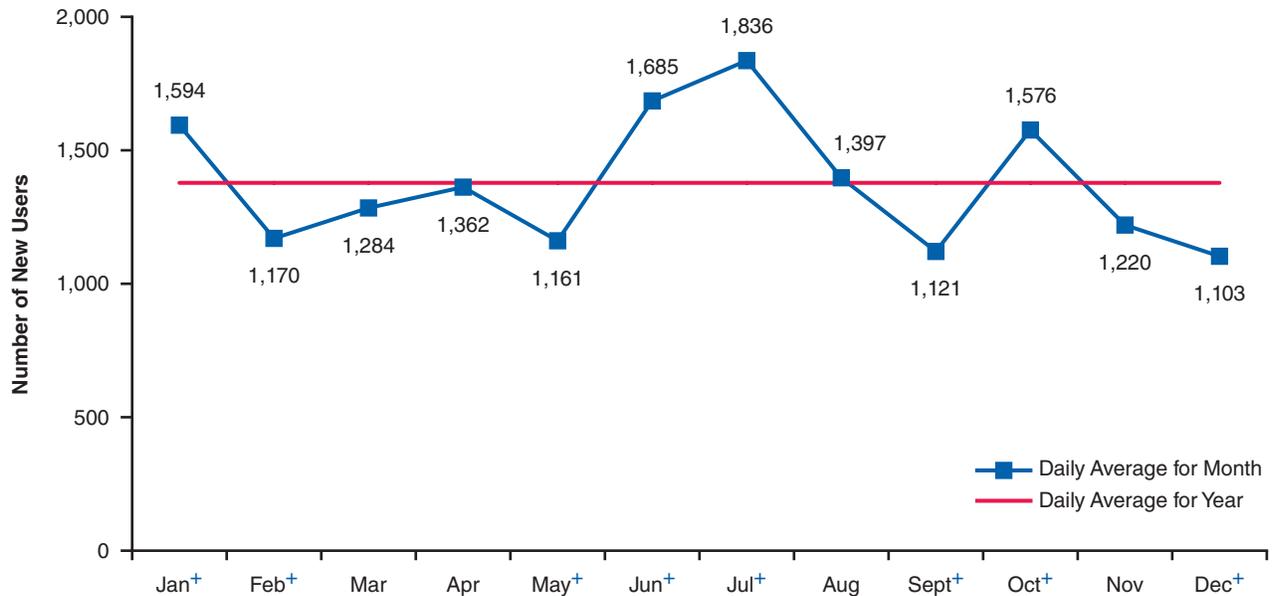
**Figure 10. Number of Adolescents Younger than 18 Using Inhalants for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

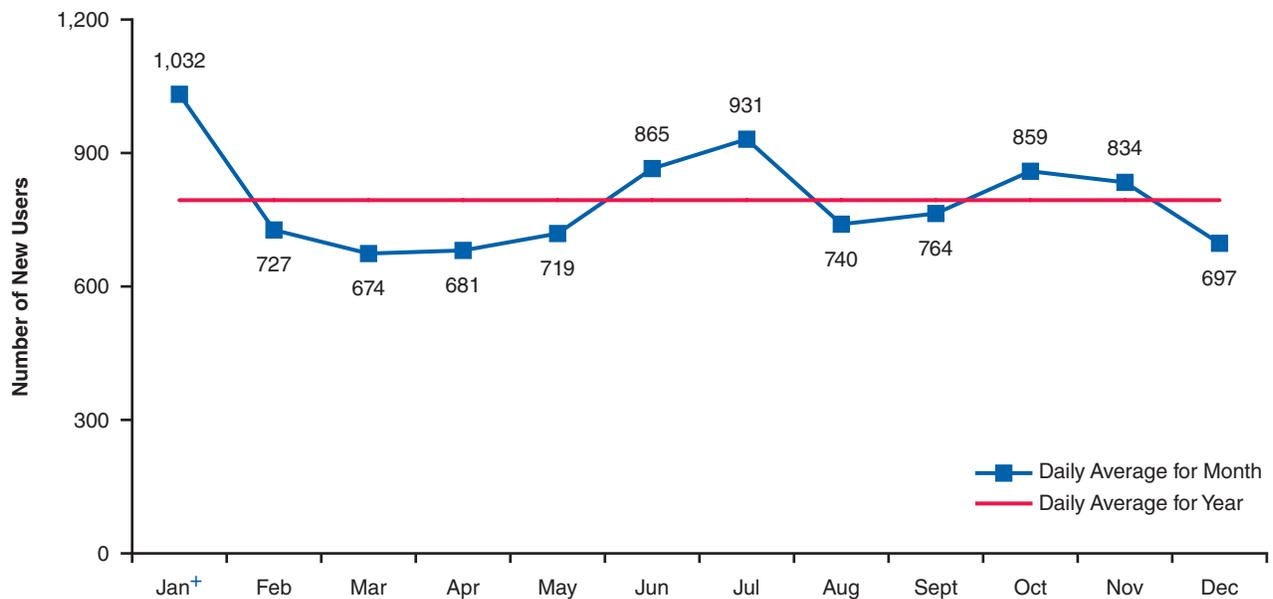
**Figure 11. Number of Adolescents Younger than 18 Using Hallucinogens for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

**Figure 12. Number of Adolescents Younger than 18 Using Cocaine for the First Time on an Average Day, by Month: 2002 to 2010**



<sup>+</sup> Difference between the daily average for the month and the daily average for the year 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 2005 and 2006 to 2010 (revised March 2012).

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Findings from SAMHSA's 2002 to 2010 National Surveys on Drug Use and Health (NSDUHs)

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- On an average day in June or July, more than 5,000 youths smoked cigarettes for the first time; in other months, the daily average ranged from about 3,000 to 4,000 new users per day
- On an average day in June or July, more than 4,800 youths used marijuana for the first time, whereas the daily average ranged from about 3,000 to 4,000 in other months

The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The 2002 to 2010 data used in this report are based on information obtained from 231,500 persons aged 12 to 18. The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

*The NSDUH 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.)

Information on the most recent NSDUH is available in the following publication:

Center for Behavioral Health Statistics and Quality. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of national findings* (NSDUH Series H-41, HHS Publication No. SMA 11-4658). Rockville, MD: Substance Abuse and Mental Health Services Administration.

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