In the United States, about 75 percent of youths who enter public high school as freshmen eventually graduate from high school in 4 years (or average freshman graduation rate). This is an important public health issue because, in general, adults who do not graduate from high school tend to have lower paying jobs than those who do and thus are at greater risk for living in poverty, lacking health insurance, and suffering from poor health. Moreover, high school dropouts typically have higher rates of substance use than high school graduates.

The National Survey on Drug Use and Health (NSDUH) asks respondents about their age, current school enrollment status, last grade completed, and age when they last attended school. For this report, these respondent characteristics are used to identify 12th grade aged youths and whether they have dropped out of school. Youths aged 16 to 18 are categorized into three groups:

1. 12th grade students—youths aged 16 to 18 who were either in or entering the 12th grade;
2. 12th grade aged dropouts—youths aged 16 to 18 who had not completed high school or a Graduate Equivalent Degree (GED), were not currently attending or on vacation from school, and were considered 12th grade aged based on the last grade they had completed and their age when they stopped attending school;
3. Other—youths aged 16 to 18 who completed high school or a GED, youths aged 16 to 18 in grade 11 or lower, and youths aged 16 who were not considered “12th grade aged” (based on criteria discussed in group 2).

This issue of The NSDUH Report focuses on the first two of these groups, which are collectively referred to as “12th grade aged youths”; comparisons of past month (current) substance use between 12th grade students and 12th grade aged dropouts are provided. All findings in this report are annual averages from the 2002 to 2010 NSDUH data.
Dropout Status

Nearly one in seven (13.2 percent) 12th grade aged youths had dropped out of school, with males having been more likely than females to have dropped out (14.7 vs. 11.6 percent). About one quarter of Hispanic and American Indian or Alaska Native 12th grade aged youths (23.0 and 25.5 percent, respectively) had dropped out of school compared with 12.6 percent of youths of two or more races, 12.1 percent of black or African American youths, 11.2 percent of white youths, and 1.5 percent of Asian youths.

Substance Use by Dropout Status

Twelfth grade aged youths who had dropped out of school were more likely than similarly aged youths who were still in school to engage in current cigarette use, alcohol use, binge alcohol use, marijuana use, nonmedical use of psychotherapeutic drugs, and use of any illicit drugs (Figure 1). For example, 56.8 percent of dropouts were current cigarette users compared with 22.4 percent of those still in school, and 27.3 percent of dropouts were current marijuana users compared with 15.3 percent of those still in school.

Substance Use by Dropout Status and Gender

Current substance use rates among 12th grade aged male dropouts were higher than the rates among similar aged males who were still in school (Figure 2). For example, 60.1 percent of male dropouts were current cigarette users compared with 23.8 percent of males who were still in school, and 32.0 percent of male dropouts were current marijuana users compared with 17.9 percent of males who were still in school.

Current substance use rates among 12th grade aged female dropouts were generally higher than the rates for similar aged females who were still in school (Figure 3). One exception was current alcohol use, for which there was no statistical difference between the rates among female dropouts and females who were still in school (34.2 and 33.4 percent, respectively).

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Figure 1. Past Month Substance Use among 12th Grade Aged Youths, by Dropout Status: 2002 to 2010

* Difference between 12th grade students and 12th grade aged youths who had dropped out of school is significant at the .05 level.

Figure 2. Past Month Substance Use among 12th Grade Aged Male Youths, by Dropout Status: 2002 to 2010

* Difference between 12th grade students and 12th grade aged youths who had dropped out of school is significant at the .05 level.


Figure 3. Past Month Substance Use among 12th Grade Aged Female Youths, by Dropout Status: 2002 to 2010

* Difference between 12th grade students and 12th grade aged youths who had dropped out of school is significant at the .05 level.

Substance Use by Dropout Status and Race/Ethnicity

Current substance use rates by dropout status varied among racial groups. For both white and black youths, rates of current substance use were consistently higher among 12th grade aged dropouts than among those who were still in school (Figures 4 and 5). For example, current cigarette use was more than 2 times higher among white dropouts than among white students (69.3 vs. 26.6 percent) and more than 4 times higher among black dropouts than black students (50.3 vs. 11.5 percent). By contrast, the substance use rates between 12th grade aged Hispanic dropouts and those who were still in school did not differ significantly, with the exception of cigarette use, for which dropouts were more likely than those still in school to be current users (38.0 vs. 18.4 percent) (Figure 6).9

Discussion

Dropping out of high school is related to a number of negative socioeconomic and health outcomes. This report shows that one in seven 12th grade aged youths had dropped out of high school and that 12th grade aged dropouts (with a few exceptions) had higher rates of current substance use (e.g., cigarettes, alcohol, binge alcohol, marijuana, nonmedical use of psychotherapeutic drugs, any illicit drugs) than similar aged peers who were still in school. Substance use is a public health problem that is preventable. Thus, prevention efforts targeted to adolescents generally and to those at risk of dropping out of high school more specifically might improve the educational, employment and financial, and health outcomes of many youths.
**Figure 5. Past Month Substance Use among 12th Grade Aged Black Youths, by Dropout Status: 2002 to 2010**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Dropout Status</th>
<th>In School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>50.3</td>
<td>11.5</td>
</tr>
<tr>
<td>Alcohol</td>
<td>38.8</td>
<td>21.5</td>
</tr>
<tr>
<td>Binge Alcohol</td>
<td>29.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Any Illicit Drug</td>
<td>37.0</td>
<td>15.6</td>
</tr>
<tr>
<td>Marijuana</td>
<td>34.3</td>
<td>13.4</td>
</tr>
<tr>
<td>Nonmedical Use of Prescription-Type Drugs</td>
<td>5.8</td>
<td>2.8</td>
</tr>
</tbody>
</table>

* Difference between estimate and estimate for 2011 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 2011 (revised March 2012).

**Figure 6. Past Month Substance Use among 12th Grade Aged Hispanic Youths, by Dropout Status: 2002 to 2010**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Dropout Status</th>
<th>In School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>38.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Alcohol</td>
<td>32.6</td>
<td>33.0</td>
</tr>
<tr>
<td>Binge Alcohol</td>
<td>26.4</td>
<td>22.3</td>
</tr>
<tr>
<td>Any Illicit Drug</td>
<td>16.8</td>
<td>16.1</td>
</tr>
<tr>
<td>Marijuana</td>
<td>13.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Nonmedical Use of Prescription-Type Drugs</td>
<td>4.1</td>
<td>3.9</td>
</tr>
</tbody>
</table>

* Difference between estimate and estimate for 2011 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 2011 (revised March 2012).
End Notes


6. To determine whether 16 year olds were 12th grade aged, the age of the respondent was added to the number of grades completed; the age at which the youth last attended school was then subtracted, and “1” was added to the total. The “1” was added to account for late birth dates.

7. Estimates of the percentage of 12th grade aged youths who dropped out of school is higher than reported by the National Center for Education Statistics. This is likely due to differences in the definitions of “dropout,” with the NSDUH definition being broader in scope. Although the NSDUH rates are higher, the results from the two surveys both show similar patterns in dropout rates by gender and race/ethnicity. For information on the definitions used by NCES, see http://nces.ed.gov/pubs2011/2011312.pdf.

8. NSDUH defines illicit drugs as marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically.

9. The sample size from other racial/ethnic subgroups does not allow examination of differences in their prevalence of substance use by dropout status.

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