Addictive Substance Use of Hamilton County Youth

Seven out of ten high schools students in Hamilton County have used at least one addictive substance in their lifetime. Sixty-three percent have drunk alcohol; 43% have smoked cigarettes; 37% have used marijuana; and 5% have used cocaine.

Within the past month, 41% of students had used one or more of these substances and are classified as current substance users. Alcohol is the most commonly used addictive substance, with one-third of students drinking within the past month, followed by marijuana (20%) cigarettes (17%), and cocaine (2%). Current substance use increases with grade in school, rising from 29% of ninth graders to 52% of twelfth graders, and is higher among male students (45%) than female students (38%).

Almost one in five students had engaged in binge drinking (having five or more drinks within a few hours). Twelfth grade boys report more binge drinking than students in other grades (26% versus a range of 7% to 15% among other grade/sex combinations).

Fifteen percent of students reported that they have ever used prescription drugs, such as OcyContin, Percocet, Demerol, Adderall, Ritalin, or Xanax, without a prescription. The majority of these students get prescription drugs for free, having been given them by a friend or taken from relatives.

Students who smoke cigarettes are 5.5 times more likely to use marijuana, 3.5 times more likely to drink alcohol, and 7.4 times more likely to have used prescription drugs than non-smokers.

HEALTHY TRENDS: Decline in Teen Substance Use

Since 1998, there have been substantive positive changes in the use of one or more addictive substances.

- **Ever tried one or more addictive substances:** Decreased from 84% in 1998 to 71% in 2011
- **Currently use one or more addictive substances:** Decreased from 55% in 1998 to 41% in 2011

![Percent of High School Students Using Addictive Substances](chart.png)

*Includes one or more of the following: alcohol, cigarettes, marijuana, and cocaine*
CURRENT SUBSTANCE USE

41% of students had used alcohol, cigarettes, marijuana, or cocaine within the past month.

- Current substance use increases by grade in school, rising from 29% of 9th graders to 52% of 12th graders.
- Male students were more likely to report being current substance users than female students (45% vs. 38%).
- White students and black students were equally likely to report being current substance users (42%), which was somewhat higher than substance use among Latino students (38%).

* Includes past month use of one or more of the following: alcohol, tobacco, marijuana, and cocaine

SUBSTANCE USE

Alcohol is the most commonly used addictive substance; one-third of students are current drinkers.

- Use of tobacco products, alcohol, and prescription drugs is highest among white students. Black students were more likely to use marijuana (25%) than white (18%) or Latino (16%) students.
- One in five students (19%) reported that they have ever been offered, sold, or given drugs on school property in the past year.
- Fewer students reported using substances while on school property: smokeless tobacco (8%), cigarettes (6%), alcohol (5%), and marijuana (5%).

PRESCRIPTION DRUG USE

15% of students have ever taken prescription drugs without a prescription.

- Among substances students have tried, prescription drugs ranked fourth (15%), after alcohol (63%), cigarettes (43%), and marijuana (37%).
- White students were four times more likely to have used prescription drugs than black students (20% vs. 5%).
- Students using prescription drugs most often said the drugs were given to them (35%); other sources included purchasing from a dealer (23%), or taking from friend or relative (21%).
### BINGE DRINKING

18% of all students engage in binge drinking; binge drinking is highest among 12th grade boys.

- Within the past month, one in four 12th grade boys had engaged in binge drinking (having 5 or more drinks within a few hours). One in five students had their first drink before the age of 13.
- Binge drinking was significantly higher among white students (20%) than black students (11%) or Latino students (15%).
- Teens are more likely to drink to get drunk than adults. In Hamilton County, high school students who drink are more than twice as likely to binge as adults who drink (55% vs. 22%). (2007 BRFSS)

![Binge Drinking](image)

### TOBACCO USE

43% of all students have ever tried smoking, but white students were more likely to continue.

- 21% of white students were current smokers, compared to 8% of black students and 14% of Latino students.
- Among smokers under the age of 18, the legal age to purchase tobacco, black students were twice as likely as white students to report purchasing cigarettes in a store (25% vs. 13%).
- 26% of students used one or more tobacco products in the past 30 days, including cigarettes (17%), cigars (14%), or smokeless tobacco (11%).

![Cigarette Smoking](image)

### SUBSTANCE USE AND CIGARETTE SMOKING

Substance use is significantly higher among smokers than non-smokers.

- Compared with non-smokers, current smokers are 3.5 times more likely to drink (77% vs. 22%), 5.5 times more likely to use marijuana (61% vs. 11%), and 7.4 times more likely to have tried prescription drugs (52% vs. 7%).
- Current drinkers are 6.4 times more likely to smoke marijuana (45% vs. 7%) and 7.2 times more likely to have used prescription drugs (36% vs. 5%) than non-drinkers.
- Two-thirds (66%) of youth who currently both smoke and drink report using marijuana within the past month.

![Substance Use by Smoking Status](image)
ECONOMIC IMPACTS OF ADDICTIVE BEHAVIORS

Smoking

Hamilton County residents’ state and federal tax burden from smoking-related government expenditures is estimated at $81.5 million annually. A 2011 report from the Campaign for Tobacco Free Kids estimates that the state and federal tax burden at $596 per household. If we assume that this figure applies at the county level, this translated to $81.5 million state and federal tax burden for smoking related expenditures. (Campaign for Tobacco Free Kids, U.S. Census)

More than 90 percent of adult smokers started when they were teens. (World Health Organization)

Cigarette smoking by young people leads to immediate and serious health problems including respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of other drug use. The younger people begin smoking cigarettes, the more likely they are to become strongly addicted to nicotine. Young people who try to quit suffer the same nicotine withdrawal symptoms as adults who try to quit. (CDC)

Use of smokeless tobacco causes cancers of the mouth, pharynx and esophagus; gum recession; and an increased risk for heart disease and stroke. (CDC)

Alcohol and Drug Use

Underage drinking cost the citizens of Hamilton County an estimated $58.6 million in 2009. These costs include medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youth. The Underage Drinking Enforcement Center (UDEC) calculated that underage drinking costs Tennessee residents $1.3 billion in 2009, or $2,182 for each youth in the state. If we assume that this figure applies at the county level, this translates to $58.6 million in costs associated with underage drinking. (UDEC)

Among youth, the use of alcohol and other drugs has been linked to unintentional injuries, physical fights, academic and occupational problems, and illegal behavior. (Substance Abuse and Mental Health Services Association)

The human brain continues to develop through the 20s. One of the last areas to mature is the prefrontal cortex, the area of the brain required for planning, judgment, impulse control and foreseeing consequences. Research suggests that since the teen brain is still developing, addictive substances may physically alter the structure and function of teen brain faster and more intensely than adults, further impairing judgment and increasing the risk of addiction. (National Center on Addiction and Substance Abuse at Columbia University)

### 2011 ADDICTIVE SUBSTANCE USE BY DEMOGRAPHIC CHARACTERISTICS

<table>
<thead>
<tr>
<th>Tobacco Use</th>
<th>All Students</th>
<th>Female</th>
<th>Male</th>
<th>White</th>
<th>Black</th>
<th>Latino</th>
<th>9th grade</th>
<th>10th grade</th>
<th>11th grade</th>
<th>12th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever tried cigarettes</td>
<td>43%</td>
<td>41%</td>
<td>45%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>33%</td>
<td>43%</td>
<td>46%</td>
<td>52%</td>
</tr>
<tr>
<td>Ever smoked cigarettes daily</td>
<td>10%</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
<td>4%</td>
<td>9%</td>
<td>7%</td>
<td>10%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Current smoker (past 30 days)</td>
<td>17%</td>
<td>15%</td>
<td>20%</td>
<td>21%</td>
<td>8%</td>
<td>14%</td>
<td>11%</td>
<td>16%</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>Current frequent smoker (20 out of past 30 days)</td>
<td>7%</td>
<td>5%</td>
<td>8%</td>
<td>9%</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
<td>7%</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Smoked &gt; 10 cigarettes/day- current smokers (past mo)</td>
<td>12%</td>
<td>5%</td>
<td>17%</td>
<td>14%</td>
<td>3%</td>
<td>N/A</td>
<td>12%</td>
<td>10%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>Tried to quit smoking - current smokers (past year)</td>
<td>49%</td>
<td>54%</td>
<td>45%</td>
<td>47%</td>
<td>N/A</td>
<td>N/A</td>
<td>50%</td>
<td>52%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>Bought cigarettes retail &lt;18 current smoker (past mo)</td>
<td>14%</td>
<td>6%</td>
<td>21%</td>
<td>13%</td>
<td>25%</td>
<td>N/A</td>
<td>4%</td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Smokeless tobacco - current user (past 30 days)</td>
<td>11%</td>
<td>3%</td>
<td>20%</td>
<td>16%</td>
<td>2%</td>
<td>8%</td>
<td>9%</td>
<td>12%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Cigar-current user (past 30 days)</td>
<td>14%</td>
<td>9%</td>
<td>19%</td>
<td>16%</td>
<td>11%</td>
<td>11%</td>
<td>8%</td>
<td>14%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Use any tobacco product (past 30 days)</td>
<td>26%</td>
<td>19%</td>
<td>33%</td>
<td>31%</td>
<td>16%</td>
<td>20%</td>
<td>17%</td>
<td>25%</td>
<td>28%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Drug and Alcohol Use

| Ever drank alcohol | 63% | 64% | 63% | 65% | 61% | 58% | 52% | 62% | 71% | 70% |
| Current alcohol use (past 30 days) | 32% | 29% | 35% | 34% | 28% | 28% | 22% | 29% | 35% | 42% |
| Binge drinking - 5+ drinks in a row (past 30 days) | 18% | 13% | 22% | 20% | 11% | 15% | 10% | 16% | 18% | 27% |
| Ever use marijuana | 37% | 32% | 41% | 34% | 44% | 28% | 23% | 39% | 42% | 45% |
| Current marijuana use (past 30 days) | 20% | 16% | 24% | 18% | 25% | 16% | 12% | 22% | 23% | 25% |
| Ever use cocaine | 5% | 3% | 6% | 6% | 1% | 7% | 3% | 5% | 5% | 6% |
| Current cocaine use (past 30 days) | 2% | 1% | 3% | 2% | 1% | 5% | 1% | 2% | 2% | 2% |
| Ever use Rx drugs without a prescription | 15% | 13% | 17% | 20% | 5% | 12% | 9% | 16% | 16% | 20% |
| Ever use inhalants | 11% | 11% | 10% | 12% | 7% | 11% | 11% | 12% | 10% | 10% |
| Ever use ecstasy | 6% | 3% | 9% | 8% | 3% | 8% | 3% | 6% | 7% | 8% |
| Ever use methamphetamine | 3% | 2% | 4% | 4% | 1% | 6% | 2% | 3% | 4% | 3% |
| Ever use steroids without a prescription | 3% | 2% | 4% | 3% | 1% | 6% | 2% | 3% | 3% | 3% |