Current Trends In Substance Use

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http://chcs.uncg.edu/current-trends
1. About how many people in the United States die every year from overdosing on opioids?
   a) 10,000
   b) 20,000
   c) 40,000
   d) 80,000

2. Which is a protective factor that reduces effects of stressful life events?
   a) Poverty
   b) Parental Incarceration
   c) Parent Engagement
   d) Drug Use

3. True or false - researchers have found that 40% of people who start drinking before age 15 develop alcohol dependence later in life.

4. Which is a barrier for seeking treatment for opioid use disorder?
   a) Stigma
   b) Lack of Health Insurance
   c) Resistance Against Medically Assisted Treatment
   d) Lack of Capacity

5. True or false - more than half a million people have died from opioid overdose since 2000.
Trauma and Behavioral Risk Factors

The original ACEs study (Felitti et al., 1998) identified a series of traumatic adverse childhood experiences:

- physical, emotional, or sexual abuse;
- physical or emotional neglect;
- parental separation or divorce;
- incarcerated household member;
- substance abuse or mental illness within the household;
- witnessing domestic violence.
Adults with childhood exposure to ACEs were more likely to have social, emotional, and cognitive impairments which led to the adoption of health risk behaviors.
ACEs and Negative Health Outcomes

ACEs have been linked to substance use (Ford et al., 2011; Anda et al., 2008; Dube et al., 2006).

ACEs are often interrelated, and that the presence of one adverse childhood experience significantly increases the likelihood of having multiple ACEs (Donga et al., 2004).
Protective factors

“...individual or environmental characteristics, conditions, or behaviors that reduce the effects of stressful life events.”

(CDC, 2017)

- Parent engagement
- School connectedness
ACEs & Substance Use

Students experiencing homelessness used substances at 1.6 times the rate of students who lived at home with their parent guardian.

Students with at least one incarcerated parent used substances at 1.5 times the rate of students without an incarcerated parent.

Students who experienced violence at home on a monthly basis used substances at more than twice the rate of students who did not.

(analysis of 11th grade Delaware Secondary School Surveys from 2013-2016)
Prescription painkillers and homelessness (DSS 2016-11th grade)

- At home: 94%
- Homeless: 85%

Ever use prescription painkillers

- No: 6%
- Yes: 15%
Marijuana use and homelessness (DSS 2016 - 11th grade)

- **At Home**
  - No: 79%
  - Yes: 21%

- **Homeless**
  - No: 59%
  - Yes: 41%
National and Statewide Trends in Substance Use and Other Risk Factors
Data Sources

Monitoring the Future (MTF)
- Annual survey of 8th, 10th, and 12th graders conducted by researchers at the Institute for Social Research at the University of Michigan, Ann Arbor, under a grant from the National Institute on Drug Abuse, part of the National Institutes of Health. Since 1975, the survey has measured how teens report their drug and alcohol use and related attitudes in 12th graders nationwide; 8th and 10th graders were added to the survey in 1991.

Youth Risk Behavior Survey (YRBS)
- School-based surveys of representative samples of 9th through 12th grade students. These surveys are conducted every two years, usually during the spring semester. The national survey, conducted by CDC, provides data representative of 9th through 12th grade students in public and private schools in the United States. Developed in 1990 to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States.
Data Sources

National Survey on Drug Use and Health (NSDUH)

- Annual survey of non-institutionalized U.S. population over 12 years of age, administered by the Center for Behavioral Health Statistics and Quality at SAMHSA. Measures use of illegal drugs, prescription drugs, alcohol, and tobacco; as well as mental disorders, treatment, and co-occurring substance use and mental disorders.

Behavioral Risk Factor Surveillance System (BRFSS)

- Annual survey administered by the CDC that collects state data about health-related risk behaviors, chronic health conditions, and use of preventive services among U.S. residents. This is the largest continuously conducted health survey in the world (over 400,000 adults interviews completed each year). The BRFSS does NOT ask about illicit drugs, but does track information related to alcohol consumption.
Alcohol
Researchers have found that among people who start drinking before age 15, approximately 40% develop alcohol dependence later in life. However, among those who begin drinking at age 21 or older, only about 10% will develop alcohol dependence later in life.

Grant and Dawson, 1997; USDHHS, 2000

2017 Youth Risk Behavior Survey
Trends in NC High School Student Alcohol Use (as %)

- Past month use:
  - 2007: 37.70%
  - 2009: 35.00%
  - 2011: 34.30%
  - 2013: 32.20%
  - 2015: 29.20%
  - 2017: 26.50%

- First drink before 13:
  - 2007: 19.70%
  - 2009: 19.00%
  - 2011: 18.20%
  - 2013: 14.30%
  - 2015: 14.00%
  - 2017: 15.60%
## Adults in NC (BRFSS 2016)

<table>
<thead>
<tr>
<th></th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
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<tbody>
<tr>
<td>Past month alcohol use</td>
<td>51.2</td>
<td>62.4</td>
<td>57.1</td>
<td>49.9</td>
<td>46.1</td>
<td>32.8</td>
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<tr>
<td>Binge drinking</td>
<td>25.0</td>
<td>26.2</td>
<td>16.2</td>
<td>12.2</td>
<td>10.3</td>
<td>3.3</td>
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<tr>
<td>Heavy drinking*</td>
<td>7.1</td>
<td>10.1</td>
<td>7.6</td>
<td>5.5</td>
<td>6.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>

* Heavy drinking = 7 drinks for females or 14 drinks for males in one week
Marijuana
Most recent estimates from the Monitoring the Future Survey indicate that for the first time, more 12th grade students are daily marijuana users than cigarette users.

Trend data from MTF also suggests that marijuana usage among teens has not significantly changed over the past year.

Students also report relatively low perceptions of risk associated with regular marijuana use.
Past month marijuana use (NSDUH 2015-2016)

- **Total U.S.**
  - 12-17: 6.75%
  - 18-25: 20.30%
  - 26 or older: 6.88%

- **South**
  - 12-17: 6.13%
  - 18-25: 17.74%
  - 26 or older: 5.40%

- **North Carolina**
  - 12-17: 5.80%
  - 18-25: 19.92%
  - 26 or older: 5.98%
Perceptions of Great Risk from Monthly Marijuana Use (NSDUH 2015-2016)

- **12-17 years old**: 29.75% (Total U.S.), 27.17% (South), 29.52% (North Carolina)
- **18-25 years old**: 16.68% (Total U.S.), 16.4% (South), 16.74% (North Carolina)
- **26 or older**: 34.94% (Total U.S.), 34.44% (North Carolina)

Legend:
- Red: Total U.S.
- Blue: South
- Yellow: North Carolina
Opiates
Limited trend data or past month data for many indicators of prescription misuse, since this has become a concern in recent years.

2017 YRBS

Prescription Misuse

15% of NC high school students report misusing prescription pain medicine at least once in their lifetime
Past Year Pain Reliever Misuse (NSDUH 2015-2016)

- **Total U.S.**
  - 12-17: 3.72%
  - 18-25: 7.82%
  - 26 or older: 4.00%

- **South**
  - 12-17: 3.94%
  - 18-25: 7.61%
  - 26 or older: 3.96%

- **North Carolina**
  - 12-17: 4.11%
  - 18-25: 8.57%
  - 26 or older: 4.10%
Past Year Heroin Use (NSDUH 2015-2016)

- **Total U.S.**
  - 12-17: 0.07%
  - 18-25: 0.64%
  - 26 or older: 0.31%

- **South**
  - 12-17: 0.04%
  - 18-25: 0.58%
  - 26 or older: 0.26%

- **North Carolina**
  - 12-17: 0.07%
  - 18-25: 0.71%
  - 26 or older: 0.32%
Other Illicit Drugs
(excluding marijuana)
Past month illicit drug use (NSDUH 2015-2016 averages)

- **Total U.S.**
  - 12-17: 2.71%
  - 18-25: 7.32%
  - 26 or older: 2.86%

- **South**
  - 12-17: 2.88%
  - 18-25: 6.95%
  - 26 or older: 2.75%

- **NC**
  - 12-17: 2.99%
  - 18-25: 7.17%
  - 26 or older: 3.00%
The rate of students who report ever drinking or using other illicit drugs** has been steadily declining over the past decade, while lifetime marijuana use has remained relatively constant.
Where do we see disparities?
White students report past month alcohol use and binge drinking* at higher rates than other racial and ethnic groups of high school students in 2017.

*Binge drinking is defined by the YRBS as 4 or more drinks in one occasion for women, and 5 or more drinks in one occasion for men.
Bullying and Substance Use (YRBS 2017)

- Alcohol (past month): Bullied 35.30%, Not bullied 27.60%
- Marijuana (past month): Bullied 23.10%, Not bullied 19.10%
- Rx Painkillers (ever): Bullied 22.40%, Not bullied 12.10%
Suicide Attempts and Substance Use (YRBS 2017)

- Alcohol (past month): 49.50% Attempted Suicide, 28.10% No Attempt
- Marijuana (past month): 41.80% Attempted Suicide, 18.20% No Attempt
- Rx Painkillers (ever): 39.10% Attempted Suicide, 11.90% No Attempt
Rape and Substance Use (YRBS 2017)

- Alcohol (past month): 49.60% (Raped), 27.30% (Never raped)
- Marijuana (past month): 40.50% (Raped), 18.20% (Never raped)
- Rx Painkillers (ever): 33.10% (Raped), 12.50% (Never raped)