Preventing Youth Substance Misuse in Tennessee

Key Points

- Adolescent substance misuse is widespread and costly.
- Substance misuse prevention works and is cost-effective.
- Prevention represents a long-term investment rather than an on-going expenditure.
- Tennessee needs to scale-up and sustain evidence-based prevention interventions.

Adolescent substance misuse and its consequences continue to be a challenge in Tennessee communities. To address the problem of substance misuse in Tennessee’s youth and young adults, it is helpful to look at how widespread the issue is; what factors contribute to use; and how it affects communities, families, and individuals. When reviewing these factors, it is important to remember that brain development continues until approximately 25 years of age, so prevention of misuse prior to adulthood is essential to preventing more severe consequences later. Importantly, additional evidence-based substance misuse preventive interventions are needed in Tennessee to prevent young people from becoming part of the substance misuse cycle.

This brief will highlight the nature of the youth substance misuse problem in Tennessee. It will also outline recommendations on how the state can move forward with further investments to help address youth substance use prevention.

Substance Use Among Youth in Tennessee

In 2018, Tennessee adopted a comprehensive plan to address the opioid crisis in the state, the TN Together initiative. Among its activities, the initiative gathers data on youth alcohol, tobacco, and other drug use. The TN Together Student Survey captures substance use attitudes and behaviors in public school students from 8th, 10th, and 12th grades. For the 2018-2019 survey year, there were more
than 21,000 respondents. Rates of use among the youth population in Tennessee are shown in Figure (1). Additional data are available for specific illicit drug use in Tennessee. National data for comparison of 8th, 10th, and 12th grades are available in Monitoring the Future reports, on-going epidemiological surveys of substance use in secondary school students from 1975 – 2020.

Based on national trends, alcohol remains the most widely used substance by today’s teens; 61.5% have used alcohol by the end of high school and 26% by the end of 8th grade. For young adults (aged 18-25 years old), in 2018, approximately 35% reported episodes of binge drinking (drinking more than 5 alcoholic drinks in a single sitting). It was also found that 24% of young adults used illicit drugs in the past month. The Centers for Disease Control and Prevention (CDC) and the Office of the Surgeon General report that the majority of adults who have substance use disorders started using in their teen and young adult years. Average ages for first-time use of various substances (e.g., alcohol, tobacco) range from 13.5 to 14.4 years.

**Consequences of Youth Substance Misuse**

Substance misuse during adolescence can lead to disruptions in ongoing brain maturation and psychosocial functioning, which, in turn, can lead to diminished school performance or an increase in mental health disorders. An increased likelihood of substance use disorders later in life may also be seen. Substance use also often plays a role in the three most common forms of mortality among adolescents: homicides, suicides, and accidents, especially motor vehicle accidents.

**Contributing Factors**

It is well-established that there are specific environmental, social, and biological influences that can predict the likelihood that a young person may misuse substances, such as alcohol or illicit drugs. These influences, or risk factors, increase the likelihood of substance misuse. Some of these include:

- Family/parental history of substance misuse
- Favorable parental attitudes toward substance use
- Poor parental monitoring
- Family rejection of sexual orientation or gender identity
- Association with delinquent or substance using peers
- Lack of school connectedness
• Low academic achievement
• Childhood sexual abuse
• Mental health issues

Protective factors, which reduce the likelihood of substance misuse, also have been identified. **Examples of protective factors** are parental or family engagement, parental monitoring and disapproval of substance use, and school connectedness. Risk and protective factors give prevention strategists an idea of which groups of individuals may need the most focused interventions and how to build resilience against substance misuse.

**Effective Substance Misuse Prevention**

Information about risk and protective factors for substance misuse has been used to develop effective **universal and targeted (selective, indicated) preventive interventions**, as illustrated below:

- **Universal**: addresses an entire population; the goal is to prevent the problem; all members share the same general risk.
  
  *Targeted Population Examples* - national, state, local community, school, or neighborhood
  
  *Evidence-Based Service Examples* - minimum drinking laws, public service announcements, and school programs, such as the [Botvin LifeSkills Training](#)

- **Selective**: targets subsets of the population that are at risk for substance misuse
  
  *Targeted Population Examples* - children of adults with substance use disorder, students who are struggling academically
  
  *Evidence-Based Service Example* - [Brief Alcohol Screening and Intervention for College Students (BASIC)](#)

- **Indicated**: targets those with early symptoms or already presenting with problems; goal is to identify these individuals and target them with specialized programs
  
  *Targeted Population Examples* - youth with emerging substance related problems, conduct disorders, and depression/anxiety
  
  *Evidence-Based Service Example* - [Treatment Foster Care Oregon Model](#)

**Economic Impact of Substance Use Prevention**

The economic impact that substance misuse has on our state in areas, such as hospitalizations, incarcerations, and infants born with drug or alcohol exposure, is considerable. Former chair of preventive medicine at the University of Tennessee Health Science Center, Dr. Teresa Waters, reported
on the economic impacts of substance misuse (specifically, opioids) in Tennessee. In 2017, substance misuse cost Tennessee more than $2 billion. According to Dr. Waters, some of those costs were as follows:

- $46 million for infants treated for neonatal abstinence syndrome.
- Over $550 million for hospital admissions associated with opioid and alcohol misuse.
- $1.3 billion in lost income from approximately 31,000 people without employment.
- $123 million spent in adult incarceration for drug and alcohol related offenses.

Estimates from the CDC indicate that opioid use disorder, alone, cost the state of Tennessee $9.7 million in health care, treatment, incarceration and other expenses in 2017. The estimates of savings from prevention range from $4.60 to $18 for every $1 spent. The Community Prevention Initiative (CPI) provides the perspective that “investing in prevention is a cost-effective way to maximize limited resources. Prevention represents a long-term investment rather than an on-going expenditure.”

**Tennessee Initiative to Address Youth Substance Misuse Prevention**

Tennessee is implementing strategies and policies to address substance misuse among youth and young adults. The Tennessee Commission on Children and Youth has developed the Building Strong Brains Initiative to address adverse childhood experiences (ACEs) in Tennessee's youth by encouraging and funding local and community projects that address ACEs. Addressing ACEs is important because the greater exposure to childhood trauma, the more likely an individual is to develop a substance use or mental health disorder and chronic illnesses.

**Best Practices**

Commitment to support evidence-backed prevention strategies is important for influencing rates of substance misuse. The following policy options that closely follow those supported by the Prevention Research Institute offer suggestions that are effective and attainable.

- **Support policies that require more equitable funding for effective prevention and transparency of distribution of federal block grants.** According to a report published by the Substance Abuse and Mental Health Services Association (SAMHSA), priority is currently given to more costly treatment over prevention. A redirection of focus onto prevention may
alleviate the need for more economically burdensome interventions following the aftermath of chronic misuse. For FY 2021, Tennessee received nearly $26 million as a Substance Abuse Block Grant (SABG) from SAMHSA to be used for both prevention and treatment programs with the allocation left to the state's discretion. SAMHSA requires grantees to spend no less than 20% of their allotment on primary prevention strategies.

- **Partner with organizations that can provide implementation support to providers delivering local prevention services.** Many communities lack training and organizational support to deliver high-quality prevention programs. Organizations specializing in providing support and assistance to localities are beginning to emerge. Pennsylvania’s [Evidence-based Prevention and Intervention Support Center (EPISCenter)](https://www.episcenter.org) is a university-based intermediary organization that connects research, policy, and practice to improve outcomes for children and families across Pennsylvania by offering technical assistance and interventional support to communities at no cost. In Tennessee, the [Prevention Alliance of Tennessee](https://www.preventtnc.org) has created a collective of county coalitions that provide guidance to one another on the best ways to support prevention interventions in their communities. The organization works with counties to start anti-drug coalitions and implement various prevention activities within their communities. In 2017, these Tennessee coalitions implemented over 6,000 evidence-based programs and strategies.

- **Support state and national information campaigns that illustrate the power of prevention.** Implementing media campaigns that generate public support for substance misuse prevention may have similar effects as non-smoking campaigns. Research following the implementation of the U.S Food and Drug Administration’s 2013-2016 national public tobacco education campaign, *The Real Cost*, found that the campaign [prevented an estimated 380,000-587,000 youths aged 11-19 years from smoking](https://www.realcost.com/). Implementing similar campaigns related to substance use might yield similar results.

- **Ongoing monitoring to ensure funding supports high-quality programs.** Continuous collection and evaluation of data from implemented prevention programs is needed to support highly effective interventions or to adapt those that are less productive to ensure efficient use of funding with maximum outcomes.
Sunbright School: Collaboration for Change

Sunbright is a small and somewhat isolated community in rural Morgan County, Tennessee with a 2019 population of 426. Sunbright School is a one-building facility that serves students in Grades pre-K through 12. According to Sunbright School administrators, many of the students have been displaced from the home and are living with grandparents, other relatives, or foster families due to substance use or incarceration of the parents. Because of the challenges this community faces, the lack of resources for families and children, and high rates of substance use in the community, the school was selected to be the first rural University of Tennessee University Assisted Community School (UACS). The school principal requested a substance use awareness and prevention curriculum as part of the UACS programing. This has been arranged through UT Extension and the 4H program with the facilitation of the 4-H Health Rocks! curriculum. Health Rocks! is a Healthy Living program for children ages 8-14 years that applies 4-H’s Positive Youth Development model with life skills development and decision-making philosophy to the challenge of reducing tobacco, alcohol, vaping, and drug use. When surveyed, program participants reported high levels of emotional and social thinking with intent to avoid risky behaviors while pursuing healthy ones. The curriculum will be presented to all Sunbright School students in Grades 4 through 8 by UT Extension and 4-H agents during monthly 4-H meetings and during their Health and Wellness class at no cost to the school. This is a powerful example of a strategic university-community partnership focused on engaging vulnerable youth in effective substance use prevention programming in Tennessee.

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