School-Based Substance Use Disorder (SUD) Prevention Strategies & Programs

Authors: Wendy Chu, MA; Alexia Ferguson, BA; Jenna Russo, MS; Diana Fishbein, PhD; Nathaniel Riggs, PhD; S. Ali Shafiee, MD, PhD; Mark Van Ryzin, PhD; Alex Mason, PhD; & Mary Mackesy-Amiti, PhD. **Contributors:** Jessica Beiler, MPH; Melissa Hamilton, PhD; & Patrick Tyler, PhD. **Editor:** Emily Warthman, JD, MPH

May 2024

National data reveal that most youth engage in substance use by the time they graduate high school, but most desist and do not develop a SUD. Substance use and overdose rates vary across substances (e.g., nicotine, cocaine, opioid, fentanyl), demographic groups, and states.[1] While rates have changed over time, accidental overdose rates among youth have risen.[2]

As a primary setting for youth development, **schools can play a key role in substance misuse prevention**. From school *contexts* (e.g., in the classroom, after school programs) to *facilitators* (e.g., teachers, nurses, peer mentors), there are strategies policymakers can consider to maximize youths' access to and participation in school-based substance misuse prevention programs.

Prevention programs aim to:

(1) reduce risk factors & enhance protective factors of substance misuse,

(2) avoid/delay the start of use or development of SUDs, &

(3) reduce harm related to misuse.

Key Features of Effective Substance Misuse Prevention Programs for Youth

Prevention strategies can improve awareness, knowledge, and attitudes related to substance misuse, and build individual, interpersonal, family, and community skills, resilience, and competencies. Effective prevention has extensive, cross-cutting effects on different types of substance use and other areas of behavioral health.

Effective prevention programs include the following key features:

- **Utilizes evidence-based content and delivery**. Evidence-based prevention content targets social influences and comprehensive life and academic skills through structured activities. Evidence-based delivery prioritizes interactive teaching and skill building rather than passive information dissemination.
- **Uses effective universal, targeted (selective), and indicated approaches**. Effective universal prevention strategies can be implemented efficiently and do not require individual tailoring (e.g., cooperative/peer learning, fostering a positive school climate). Given the complexities in addressing substance use, there are also opportunities to tailor approaches to the needs of well-defined at-risk subgroups through developmentally age appropriate targeted or selective interventions.[3]
    - Multi-level systems of support are the most comprehensive forms of programs.
    - Increased efforts may be needed to adapt programs and reach youth from minority and low-income families and those in rural communities.
- **Involves the community, school, and family system**. Community, family, and school engagement, and positive pro-social youth development are critical for all prevention programs. Programs may engage others to strengthen drug protective factors and weaken risk factors.
    - Community efforts (e.g., substance misuse prevention media campaigns) may be supplemented by partnerships between schools, parents, and community organizations.
    - School connectedness can decrease substance misuse. Cooperative/peer learning can promote positive relationships while reducing substance use.
    - Known family protective factors include strong relationships, effective parent behavior management, and high family functioning, among others. The strength of these protective factors can vary by age.
- **Uses strengths-based and empowerment approaches**. Strengths-based programs build on youth's strengths and empower them to make healthy decisions. Empowerment factors reduce substance misuse among youth of color.

[1] There are many complexities when considering variations in these rates and state dashboards provide the most precise information. As an example, in Arkansas, Black and Hispanic students are about equally likely to have ever used cannabis. In Colorado, significantly more Hispanic students have used cannabis than Black students.

[2] Additionally, increases in prescribed opioids (e.g., fentanyl and oxycodone) has increased exposure to these medications in homes. Accidental or intentional use of these medications has led to increased overdoses and related deaths in young people.

[3] Targeted prevention approaches can be used for individuals with risk factors that increase their chances of developing a SUD (e.g., truancy, failing academic grades, juvenile depression, suicidal ideation, and early signs of substance use).

Considerations for Policymakers

The motivations, patterns, and risk factors of substance use are diverse, as are approaches to prevent drug use. Supporting the widespread, sustainable scale-up of established, evidence-based prevention programs that are culturally-tailored and developmentally appropriate holds promise for **improving youth engagement and health outcomes, while reducing health disparities**.

Strategies to strengthen school-based prevention programs include:

- **Expand high-quality evidence-based prevention programs in schools** shown to prevent substance misuse. Participation in programs has been declining due to decreases in funding and availability of school- and community-based prevention programs, despite research suggesting they are cost-effective. With hundreds of existing programs, it is important to prioritize evidence-based programs and high quality implementation.
- **Support substance misuse prevention research**. Translational research is needed to understand what works best for whom and under what circumstances. Few evidence-based substance use prevention programs have been developed with health equity in mind.
- **Establish school district prevention leaders**. School district substance use prevention coordinators and district level coalitions play a large role in the adoption and implementation of effective programs. Information, training, and resources about evidence-based prevention programs should be disseminated to these local leaders.
- **Train prevention professionals in schools**. Creating professional competencies and certifications can help ensure all school-based professionals are appropriately trained in substance misuse prevention, such as learning to identify the signs/symptoms of using substances, situations that expose students to substances, and factors that heighten risk for substance use.
- **Promote collaborations between schools and other organizations**. School-based prevention programs, combined with community programs, can promote sustained positive youth development. Assistance may be needed to support community organizations in partnering with schools and implementing effective programs with fidelity as these partners are often unaware of best practices for adapting programs.[4] Bringing in graduate students[5] could help bridge gaps in funding, services, and exposure to evidence-based prevention strategies.

Glossary of Terms

- Substance: A substance that, when ingested, affects mental processes (e.g., cognition or affect),” including those that are legal and illicit.
- SUD: A generic term for “classifying diseases for various conditions and illnesses associated with the use of any psychoactive drug. It includes both problematic and dependent drug use.”
- Misuse: The “use of a substance for a purpose not consistent with legal or medical guidelines, as in the non-medical use of prescription medications.” The term is preferred by some to “abuse,” as it is less stigmatizing. It may also refer to high-risk use, e.g., excessive use of alcohol in situations where this is not illegal.
- SUD prevention: Broadly, “an intervention designed to change the social and environmental determinants of drug and alcohol abuse, including discouraging the initiation of drug use and preventing the profession to more frequent or regular use among at-risk populations.”

[4] Some academic units (e.g., Penn State EPIS and project ECHO, Colorado State University Prevention Research Center, among others), the SAMHSA Prevention Technology Transfer Centers, and local training and technical assistance providers provide a wide range of such supports.
[5] This can include students studying counseling, psychology, social work, public health and prevention science who can collaborate with other professionals (e.g., educators, law enforcement) on interventions that mobilize local resources and have a preventive effect on adolescents.