

Public Policy Statement on Prevention

Introduction

The American Society of Addiction Medicine supports a wide variety of effective measures to prevent substance use-related problems, especially among youth.¹⁻⁴ Although not widely adopted,⁵ effective prevention measures can reduce serious injury and death associated with substance use, misuse, and substance use disorder (SUD)^{6-8*} and improve quality of life⁸⁻¹⁰ and productivity.¹¹ Utilization of effective prevention measures also has major economic implications. Opioid and excessive alcohol use and related deaths alone cost the nation almost \$2 trillion annually in recent years, or nearly a tenth of the nation's gross domestic product.^{12,13}

Background

ASAM is committed to increasing access to high-quality, evidence-based prevention measures, which not only prevent substance use and related harms, but also promote health, wellbeing, and advance equity in society. Although most people who use substances do not develop addiction, any use can have potentially negative consequences for individuals and their communities. This is especially true for adolescents for whom any nonmedical substance use has more potential to have harmful and long-lasting effects on the still-developing brain,^{14–16} and substance use, misuse, and SUD vary and can lead to early and long-term morbidity and mortality.¹⁷ Moreover, moderate to severe SUD symptoms in adolescence often carry over to adulthood.¹⁸ Due to magnitude of the implications above, the wider adoption of effective prevention measures is imperative.

Early initiation of substance use, family history of substance use, mental health problems, or experiences of trauma create a high risk of transition to SUD.^{19–21} Of particular concern is a graded, dose-response relationship between risk for development and severity of SUD and the number of potentially traumatic events an individual encounters as a child, collectively referred to as adverse childhood experiences (ACEs).^{22–24} As an example, enduring four or more ACEs before the age of 18 in multiplies an individual's risk for smoking by three, alcohol misuse by four, and any substance misuse by seven.²⁵ Traumatic incidents drive multi-level changes through chronic

^{*}Substances are any legal or illegal, scheduled, or unscheduled psychoactive compound with the potential to cause health and social problems, including addiction. "Substance misuse" is use at high doses and/or frequency, or in a manner that elevates risk to self or others, and includes nonmedical use of prescription medication, and in adolescence, includes any nonmedical use of substances. Some prefer "unhealthy use" to substance misuse (Saitz, et al., 2021 and Alinsky, et. al., 2022), both terms encompass "hazardous" or "at-risk use," which increases the risk for health consequences to the individual, and "harmful use," which has resulted in health consequences to the individual. "Substance use disorder (SUD)" should not be conflated with "substance dependence" and SUD can range from mild to severe and transient to persistent; it is a separate, independent, diagnosable illness that significantly impairs health and function and may require special treatment (McClellan, 2017).

activation of the stress response system;²⁶ however, more longitudinal research is necessary for understanding the causal effects of traumatic stress on an individual's risk behaviors and biology, including genetics, and applying this to prevention interventions.^{23,27–29}

Often underappreciated structural conditions, such as the long-term effects of racism and poverty, unstable housing, and food insecurity, contribute to and exacerbate ACEs,²⁶ and have profound implications for individuals' health outcomes.^{30,31} Indeed, the persistence of structural inequities renders minoritized youth more likely to experience severe consequences from using substances and less likely to receive evidence-based treatment than their White counterparts.^{32–36} Some prevention models recognize experiences of racism as risk factors for SUD.² Therefore, a critical component of prevention prioritizes equity and the needs of Black, Indigenous, and Other People of Color (BIPOC), and additionally, those of Lesbian, Gay, Bisexual, Transgender, and Queer, Plus (LGBTQ+), youth.

Research has identified risk and protective factors³⁷ that change over the life course and are consistent across diverse populations.³⁸ These factors shape the presence of safe, stable, and nurturing relationships and environments, which are powerful potential safeguards against the initiation and progression of substance use, misuse, and SUD.³⁹ Risk factors predict compromised youth health and wellbeing,⁵ increase the likelihood of morbidity and mortality,⁴⁰ and are associated with other behavioral problems, such as minor crime, early pregnancy, school misbehavior, and abandonment of education.³⁷ Protective factors are not simply indicated by an absence of risk factors, rather, the presence of protective factors may lessen or stunt risk factors' negative impacts.⁴¹ Risk and protective factors are categorized as biological or environmental in nature;¹⁶ environmental risk factors are amenable to available prevention interventions.³⁹

General prevention measures

Experts have reviewed the impact and characteristics of prevention interventions and found that they are effective at all ages to reduce substance use.^{38,42} Effective prevention interventions may be universal (i.e., meant to reach whole communities), selective (i.e., aimed at high-risk individuals or a subgroup), or indicated (i.e., targeted to individuals who already use substances, but do not have SUD).² Prevention interventions that are tailored to be culturally appropriate³⁹ to address racial and ethnic inequities in access to substance use-related interventions,^{32,33,39,43} can help reduce the social consequences of early onset of SUD.^{44,45}

Prevention measures that bolster protective factors and mitigate risk factors, such as home visitation before and during infancy⁴⁶⁻⁵¹ and family skills training programs to reinforce parenting skills^{52,53} impact individuals' lives more broadly.^{37,39,54} However, interventions interact with individuals that live in complex systems with broad social, environmental, and legal contexts and may have unintended, adverse consequences.⁵⁴ For example, home visiting may be implemented with legal surveillance by child welfare agencies, and result in child removal under circumstances that are inconsistent with a public health approach.^{55–57}

In addition, exclusionary school laws or policies that respond to substance-related infractions by suspending students or referring them to the legal system are still commonplace,⁵⁸ but lack evidence,⁵⁹⁻⁶² and may lead to more criminal offenses.⁶³ Random drug testing of students in schools, although seemingly straightforward, can have adverse consequences such as false positives, discouraging students from participating in extracurricular activities, and implementing exclusionary and strict punishments based on test results.^{62,64-66} Lastly, policies that focus on the

carceral rehabilitation or confinement of youth who use substances increase social inequities,^{67,68} while prevention measures can forestall youth health problems from occurring at all.⁵

Though prevention interventions can improve behavioral and health outcomes across generations,⁶⁹ inadequate government financing and limited public knowledge are significant barriers to widespread implementation.⁴⁰ The federal drug control budget allocates relatively limited funding for prevention, including for scientific research and intervention implementation.^{70–74} Less than 3 percent of the National Institute of Health's (NIH) annual research awards were for prevention science in recent years, namely to the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA).⁷⁵ When adjusted for inflation, the funding level has decreased for the federal block grant to states that requires 20 percent be spent on primary prevention programs,^{76,77} and the pace of the federal grant process may restrict states from quickly responding to changing trends in substance use.⁷⁶ Other longstanding federal efforts fund coordination of substance use and violence prevention efforts at schools and in their surrounding communities.⁷⁸ However, historically, less than half of middle school programs used evidence-based prevention curricula.^{79,80} Fostering collaborative approaches among education and other community systems may help schools lacking capacity to better identify and serve students at risk or already affected by substance use.⁸¹

Neglected opportunities within the healthcare system

In addition to a historical emphasis on prevention initiatives at schools, visits in primary care settings represent a wide-reaching opportunity for implementation of universal screening, brief intervention, and referral to treatment (SBIRT).^{82–84} Among adults, SBIRT reduces heavy alcohol use,^{85–88} and is a recommended practice by the U.S. Preventive Services Task Force (USPSTF).⁸⁶ However, limitations have been demonstrated in SBIRT's efficacy among adults to reduce unhealthy drug use⁸⁹ and the USPSTF recommendation is that screening for unhealthy drug use should be implemented when "services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred." The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for unhealthy alcohol or drug use in adolescents.⁹⁰ The American Academy of Pediatrics reaches a different conclusion and recommends increased implementation of SBIRT for adolescents.⁸³ Furthermore, constraints to the study of SBIRT among adolescents have likely stymied uptake.⁹¹ An evolving evidence base, low cost, and minimal evidence of harms may support SBIRT's potential population-level benefit and further deliberate incorporation into primary care settings.^{92,93}

Even now, in spite of the prevalence of substance misuse in primary care settings, there is limited access to screening, assessment, and follow-up, especially in rural areas.^{94,95} Integrating family-focused prevention and early intervention and reducing barriers to reimbursement upstream can save healthcare payers costs in hospital charges from adolescent substance use,^{82,96,97} and sustain such services in primary care settings.⁹⁸ Furthermore, sufficient education and training can increase the professional competencies that are necessary to facilitate discussion of substance use and may strengthen critical patient-practitioner relationships in primary care settings.^{82,99}

Substance-specific measures

Tobacco use, and the harmful use of alcohol, respectively, are the nation's number one and four leading causes of preventable death.^{100,101} The most cost-effective activities for tobacco control and cessation and reducing alcohol use are increased tobacco and alcohol taxes and restrictions

on alcohol availability, such as reduced hours of sale.¹⁰² Effective health policy advocacy predictably generates resistance by the tobacco and alcohol industries, the majority of whose sales are to individuals with heavy use associated with harm.¹⁰³ Of concern is that alcohol has become more affordable since its federal excise tax was last set in 1991.¹⁰⁴ Furthermore, some options for increasing federal tobacco and alcohol excise taxes could create an estimated \$150 billion in federal revenue over nine years.^{105,106}

System-level prevention and response strategies are also needed to reduce the burden associated with the ongoing opioid addiction and overdose crisis in America,^{107,108} in which the marketing of pharmaceutical opioids for pain to prescribers and patients and the inappropriate prescribing thereof have played a significant role.^{109–112} While people who misuse pharmaceutical opioids frequently obtain them from friends and family, the original source of shared pharmaceutical opioids is often traceable to excess prescribing for pain.¹¹³ Furthermore, six percent of patients undergoing both minor and major surgery develop the new onset of longterm opioid use, suggesting that over two million people may transition to persistent opioid use following elective surgery each year in the U.S.,¹¹⁴ potentially placing them and those around them at risk for associated adverse events. However, such risks can be addressed: after an educational intervention for surgical faculty, residents, and staff in one hospital following gallbladder surgery, the median dosage of opioid prescriptions was decreased by 70 percent, with no change in patient-reported pain management effectiveness score or refill requests.¹¹⁵

Given evidence of an increased and dose-dependent risk between opioid prescribing and the development of opioid use disorder (OUD) as well as other, serious harms in the treatment of patients with chronic, non-cancer pain,^{109,116} reducing exposure to the supply of inappropriately prescribed opioids among such patients (and by extension, reducing such exposure by their friends and family), warrants sustained attention.[†] This may be especially true for opioid-naïve patients, who can benefit from parallel prevention measures such as multimodal pain care plans.¹¹⁷ Further, developing effective, evidence-based interventions to address modifiable aspects of underlying risk factors for the transition from opioid use and misuse to OUD also warrants sustained attention.¹¹⁸

Widespread use of illicitly manufactured fentanyl (IMF), increasingly pressed into counterfeit pills resembling oxycodone, alprazolam, and other prescription medications, appear to be contributing to the steep, recent rise in opioid overdose deaths.^{119,120} Counterfeit pills are available outside licensed pharmacies, and one problematic point of access is online social media sites and marketplaces.¹²¹⁻¹²⁴

Youth cannabis use is associated with harms above those reported by adults. Early initiation and frequency of use and use of high-potency THC products are associated with risk for individuals to use other substances,^{125,126} developing substance misuse and SUD,¹²⁷ and encountering additional adverse consequences to their mental health and functional wellbeing.^{128–131} Therefore, as state commercialization and legalization of recreational cannabis use becomes more commonplace, limiting such products' availability to youth has significant public health importance, and implementation of evidence-based policies is warranted – not limited to restricting advertising, including for social media; enacting minimum distances between retailers and residential zones;

[†] While tapering of opioids among patients established on a long-term opioid therapy for chronic non-cancer pain may reduce opioid use and pharmaceutical opioid exposure, it has also been associated with "numerous potential harms," (Stringfellow, et. al., 2021) and the need for and approach to tapering should be determined on a case-by-case basis, with patients involved in shared decision-making whenever possible.

and preventing high retailer density in disadvantaged neighborhoods, densely populated areas, and for the product-naïve.^{132–136}

The future of prevention

The lessons the nation is learning from the past decades underscore the need to fund and deploy validated and vigorous prevention measures in medical and nonmedical settings. While the nation's current approach to substance use prevention has value, it also has fundamental weaknesses, including its constraint by commercial influence and the need to demonstrate visible policy impacts in the short-term.^{5,137,138} The imminent challenge to governments is to substantially support research for better insight into longstanding uncertainties, including implementation fidelity and adaptation, and long-term sustainability of prevention interventions,^{39,40,139-142} and furthermore, to swiftly adopt and implement evidence-based prevention policies and programs at scale.

In addition, the nation requires new, innovative solutions that aim to address structural inequities, stigma, and discrimination, which adversely affect access, utilization, experiences, and outcomes in healthcare services.^{143–148} New state financing structures are emerging to reorient the health care system from a traditional focus on short-term and acute illness and incentivize a variety of public and private entities to address the long-term health-related social needs of children and their families.¹⁴⁹ Finally, states and localities expect billions of dollars in settlement and judgment proceeds from opioid manufacturers, distributors, and pharmacies over the coming decades; historical lessons from the spending of tobacco litigation settlement funds illustrate the importance of ensuring that such proceeds are spent to abate substance use, misuse, and SUD, and maximize public health benefit.^{150,151}

Recommendations

General prevention policy measures

- 1. The federal government should increase funding for prevention science research that assesses and proliferates evidence-based prevention interventions, as well as addresses the influence of social adversity on behavioral risk for substance misuse and SUD,¹⁵² including the longitudinal, potentially causal effects of traumatic stress. NIDA should dedicate a significant, baseline portion of its funding to actionable research addressing the causal and consequential role of health inequities and adverse childhood experiences (ACEs) in the development and severity of substance misuse and SUD, and to developing interventions for the mechanistic drivers of elevated risk for substance misuse and SUD.^{21,153}
- 2. At a minimum, the federal government should adjust prevention funding for inflation and ensure related programming can adapt quickly to changing local substance use trends.⁷⁶
- 3. States should ensure that communities implement prevention interventions that are evidence-based, equity enhancing, and cost beneficial, by establishing and implementing criteria for such interventions. Furthermore, states should use outcome data from controlled studies and information from cost-benefit analyses to inform policy decisions.⁵

- 4. States should provide communities with assessment and capacity-building tools to prioritize risk and protective factors systematically, and target such factors with selected implementation of evidence-based prevention programs.^{154,155}
- 5. States should adequately fund public health agencies to provide comprehensive, evidence-based prevention programs to families throughout the life course, including home visitation before and during infancy and family skills training programs, which support and reinforce parenting abilities. Home visitation interventions should be implemented with the intention to prevent potential adverse and unintended consequences, for example, by reserving child removal from families for cases in which other risk factors or harms have been assessed or identified, and there is objective evidence of abuse, neglect, or other danger to the child.⁵⁵
- 6. States should require proven prevention programming for all students in publicly funded school districts and postsecondary institutions that meets quality, impact, specificity, and dissemination readiness criteria.^{4,156} Moreover, states should refrain from implementing and/or repeal exclusionary school laws or policies that suspend students or refer them to the legal system for substance use-related infractions, or that mandate random drug testing in schools.⁶¹
- 7. States should implement trauma-informed crisis intervention models, which are based on interagency collaboration among schools, law enforcement agencies, and mental health providers.

Maximizing opportunities within the healthcare system

- 8. The federal government should increase funding for programs that ensure a diverse and inclusive healthcare professional workforce with adequate capacity to provide highquality prevention and early intervention services, including the Addiction Medicine Fellowship, the Teaching Health Center Graduate Medical Education (THCGME), the Minority Fellowship Program (MFP), and the Substance Use Disorder Treatment and Recovery Loan Repayment Program (STAR-LRP).
- 9. The federal government should provide funding to encourage medical and other healthcare professional schools to expand substance use-related content in clinical and basic science curricula, including in residency and fellowship training for physicians, and similar programs for advanced practitioners, pharmacists, and other clinicians. Graduate medical education and healthcare professional associations that are responsible for training the workforce should foster skills and experiences that increase professional competence in screening, early intervention, and consultation with addiction specialist physicians, as well as the development of competencies in screening and prevention programs."^{82,157}
- 10. States should implement public health approaches for youth and families affected by substance use,⁵⁵ and encourage pediatric healthcare professionals working in primary care settings to increase their core competencies in providing preventive care for such individuals and families.^{158,159}

- 11. States should advance policies that support primary care and allied healthcare professionals in increasing their capacity to offer state-of-the-art, evidence-based interventions to detect, assess, and intervene for substance use, misuse, and SUD, and participate in training on models of prevention and early intervention, including family focused SBIRT, which screens whole households during well-child visits.
- 12. States should support strategies for well-defined and operationalized plans for SBIRT implementation where an appropriate diagnosis, effective treatment, and appropriate care can be offered or referred in primary care practices, federally qualified health centers, school-based health centers (SBHCs), safety-net emergency departments, and other medical settings.¹⁶⁰ Concurrently, states should support funding for the continued study of SBIRT's efficacy, especially among adolescents.^{91,93}
- 13. Public and private healthcare payers should promote and provide prevention and early intervention services by ensuring such services are offered, covered, and reimbursed without burdensome utilization management oversight, as well as a standard payment mechanism for confidential follow-up for patients to receive continuity of care.
- 14. State Medicaid/Children's Health Insurance Programs (CHIP) programs should advance policies that would increase receipt of substance use screening and early intervention for Medicaid-enrolled youth,^{161,162} including 1) enacting billing codes to ensure coverage of services; 2) satisfying the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit;¹¹⁶³ 3) providing incentives to ensure that pediatricians, SBHCs, and primary care and allied healthcare professionals effectively screen children and youth; 4) improving guidance, training, and oversight of primary care and school-based healthcare professionals to screen for, provide early interventions and appropriate follow-up for, and bill for such services; 5) increasing reimbursement rates for such services to boost system capacity; 6) establishing performance, quality, and outcome measures that can be tied to reimbursement and incentive payments for high-quality care; and 7) updating state plans to reimburse for covered services provided in schools to Medicaid-enrolled students, even if there is no charge for the service.¹⁶⁴

Strengthening substance-specific measures

- 15. In the absence of a legal ability to ban direct-to-consumer pharmaceutical advertising, the federal government should advance policies that limit pharmaceutical companies' marketing of scheduled medications to healthcare professionals and patients, including ending related tax deductions.¹¹²
- 16. States should promote system-level measures and policies to optimize opioid prescribing, expand patients' access to multimodal (including non-opioid) pain management, and support clinicians in responsible opioid prescribing (when opioids are medically indicated) to reduce inappropriate prescribing and exposure to pharmaceutical opioids, especially among opioid-naïve patients.
- 17. States should require prescribers and dispensers to participate in and query prescription drug monitoring programs (PDMPs) to prevent related harms.^{108,165} States should include

[‡] The EPSDT requires that Medicaid and many CHIP enrollees under age 21 be periodically screened for SUD as a regular component of comprehensive medical assessments.

such personnel working at opioid treatment programs (OTPs) in mandated PDMP reporting, to support safer controlled medication prescribing and dispensing practices.

- 18. States should enact policies that facilitate the safe disposal of scheduled medications, such as through mandating prescription drug take-back drop boxes at community pharmacies.¹⁶⁶
- 19. The federal government should increase federal tobacco and alcohol excise taxes as an efficient means to reduce tobacco and harmful alcohol use, increase federal revenues, and save lives. State and localities governments should increase or maintain significant alcohol and tobacco taxes, reduce alcohol retail outlet density and days of hours of sale, and enforce 1) commercial host liability policies;¹⁶⁷ 2) the Minimum Legal Drinking Age, through compliance check surveys, and 3) laws to suspend drivers' licenses for underage alcohol violations, as well as take other cost-effective measures to reduce harmful alcohol use and tobacco use.¹⁰²
- 20. States should enact policies that reduce youth access and exposure to cannabis products, including restrictions on manufacturing, marketing, and retail operations, age limits, and opposing commercialization.¹²⁷ States should implement science-based campaigns that provide public education on potential and demonstrated risks (particularly for youth) of using cannabis products, and correct misinformation that minimizes youth perception of risk, or conflates the important differences between decriminalization, legalizing possession, state-controlled or other public health-based regulation of legalized sales, and full commercialization.¹⁶⁸ In states where cannabis products are legally available, states should identify minimum distances from schools and residential zones for retailers and enforce measures that prevent diversion to minors.

Capitalizing on future prevention opportunities

- 21. The federal government should provide planning grants to state governments that support efforts to launch public-private partnerships established to address the long-term health-related social needs of children and their families. States should establish such funds as mechanisms for blending and braiding federal, state, and/or private funding streams to improve the implementation of interventions that support children's development, growth, and ability to thrive.¹⁴⁹
- 22. The federal government should assist states and localities with optimizing spending from opioid litigation settlements.¹⁶⁹ States should codify measures to ensure that opioid litigation settlement funds are spent on evidence-based substance use, misuse, and SUD prevention and treatment programs.¹⁷⁰

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