

Substance Use, Misuse, and Addiction Prevention





Introduction

In recent years, there has been a major uptake in opiate use, misuse, and addiction in the United States, creating a public health crisis that has hit hard on individuals, families, and communities, often in the most unlikely places. Addiction to prescription pain medications and heroin has become commonplace and the heartbreak of death by overdose has become an everyday reality in the lives of so many Americans. More than one-quarter (26%) of individuals admitted to treatment in the publicly funded system cited heroin or prescription opioids as their primary substance of use. Admissions for prescription opioid pain relievers alone increased by 500% from 2000-2012. According to the National Association of State Alcohol and Drug Abuse Directors (NASADAD) data, from 2012-2014, 37 states reported an increase in treatment admissions for heroin. In addition to the troubling increase in treatment admissions, opioid overdose deaths have also been on the rise— the Centers for Disease Prevention and Control (CDC) report 33,000 opioid overdose deaths in 2015.

Once thought to be primarily an inner-city problem, the impact of opiate addiction is now regularly felt in suburbs, farmlands, and many rural communities and falls hard on a host of demographic groups. Because this crisis has spread so vigorously and touched so many lives, it has garnered considerable media attention, as well as from policymakers, as a public health epidemic. It has also set the stage for a new national public discourse that offers Americans the opportunity to understand substance use, misuse, and addiction in the context of public health. The reframing of the issue has the potential to move thinking away from negative attitudes that promote blame and shame and towards the science-proven evidence that addiction is a chronic brain disease, can happen to anyone, and is preventable and treatable.

Public concern about rising addiction rates and increasing overdose deaths – voiced by a diverse range of stakeholders, have led to a range of policy, programming, and funding initiatives designed to address the crisis. Following the November 2016 release of the U.S. Surgeon General’s Report,¹ entitled “Facing Addiction in America: Alcohol, Drugs, and Health,” these stakeholders now have a credible document from the nation’s highest ranking medical office that creates a science-based and realistic framework from which to address addiction. This Report is based on the most current scientific data that “shows that addiction to alcohol or drugs is a chronic brain disease that has potential for recurrence and recovery” (op. cit. p. 2-2). In addition to the chapter on the neurobiology, there are chapters highlighting the science of prevention, treatment, and recovery, as well as a chapter on integrating health systems. In the Report, the Surgeon General calls for a “cultural shift” away from attitudes that regard addiction as a moral failing to that of a public health issue and includes recommendations for action to targeted stakeholder groups.

While the opioid crisis is real and severe, the problems of substance use, misuse, and related disorders – including addiction – are not new ones, especially to the professional field that has been addressing these issues for decades. While opioid-specific interventions, such as medication-assisted treatment and overdose prevention, are requiring renewed attention and strategies, National Council member organizations have been on the forefront of service delivery long before this crisis, demonstrating clinical experience in detoxification and rehabilitation services offered in a variety of community settings that serve diverse cultures and demographics. Many of these members have been pioneers in



prevention, by collaborating with community prevention groups and implementing prevention programs directly in their agencies.

The Surgeon General’s Report firmly establishes addiction as a preventable chronic medical condition, in the same vein of other chronic health conditions, such as cancer, diabetes, and HIV/AIDS. However, funding for prevention of substance use, misuse, and addiction has been disproportionate to prevention programs for these other chronic health conditions. The science for substance use prevention has clearly indicated its effectiveness and warrants a greater level of investment and commitment. Front-end strategies to curtail a public health issue are as important as crisis intervention episodes.

Misuse of alcohol, tobacco and other drugs (ATOD) is costly to our nation, exacting more than \$700 billion annually in costs related to crime, lost work productivity, and health care.ⁱ Because prevention significantly reduces behavioral health problems and saves billions of dollars every year, it is one of our nation’s most valuable and underused resources.

Leading causes of preventable deaths in the United States in the year 2000ⁱⁱ

<u>Cause</u>	<u>Deaths caused</u>	<u>% of all deaths</u>
Tobacco smoking	435,000	18.1
Poor diet and physical inactivity	400,000	16.6
Alcohol consumption	85,000	3.5
Infectious diseases	75,000	3.1
Toxicants	55,000	2.3
Traffic collisions	43,000	1.8
Firearm incidents	29,000	1.2
Sexually transmitted infections	20,000	0.8
Drug abuse	17,000	0.7

More recent data from the Centers for Prevention and Disease Control (CDC) affirm that preventable death estimates are an important tool for public health, enabling state and federal officials to strategize prevention goals and priorities. It is important to note that deaths from Unintentional Injuries – many of which are from opioid overdoses – are vastly more preventable than the other listed categories, but have increased during a four-year period, while the others have decreased or stayed virtually the same. According to CDC Director Tom Frieden, “Fewer Americans are dying young from preventable causes of death, tragically, deaths from overdose are increasing because of the opioid epidemic, and there are still large differences between states in all preventable causes of death, indicating that many more lives can be saved through use of prevention and treatment available today.”ⁱⁱⁱ



Five Leading Preventable Causes of Death in the United States

(<https://www.cdc.gov/mmwr/volumes/65/wr/mm6545a1.htm>)
Centers for Prevention and Disease Control (CDC, 2014)

Cause	Percentage of Deaths Considered Preventable	Comparison with 2010
Heart diseases	30%	Decreased 4%
Cancer	15%	Decreased 25%
Stroke	28%	Decreased 11%
Unintentional Injuries	43%	Increased 23%
Chronic lower respiratory diseases (CLRD)	36%	Increased 1%

Background

Overall health encompasses a variety of physical and mental domains and is affected by environmental factors, genetic predisposition, disease agents, and lifestyle choices. Similarly, disease and disability are dynamic processes that are experienced throughout an individual's lifetime, often with little awareness of the overall impact on his or her life. While many chronic medical conditions, including addiction, are not curable, they are treatable and can be managed over a person's lifetime. Treatment for addiction is aided by follow-up services and recovery supports that assist in sustaining behavioral change. Similarly, prevention efforts take serious precedent in curtailing or eliminating chronic conditions by establishing a groundwork of healthy behaviors and decision-making from the time of the individual and community's initial exposure to substances. Addressed in a context of public health, preventative health care has become a critical cost-effective, life-enhancing, and life-saving priority, as evidenced in health care policy and programming at the federal, state, county, and local levels of government.



*Plumas County Alcohol, Tobacco, and Other Drug Program
Continuum of Services Strategic Plan (2012)*

The graphic demonstrates the interplay of prevention, treatment, and recovery in a continuous cycle, rather than a linear continuum, emphasizing that prevention is not a one-time activity, but has many components that are implemented and evolve over time.

Prevention relies on anticipatory actions that can be categorized as Primary (Universal), Secondary (Selective), Tertiary (Indicated) prevention, and Health Promotion (Indirect Universal Services).

Primary prevention consists of Universal interventions that target the general population and are not directed at a specific group. Universal prevention measures address an overall population (national, local, community, school, or neighborhood) with messages and programs aimed at preventing or delaying the use of alcohol, tobacco, and other drugs (ATOD). The mission of Universal Prevention is to deter the onset of substance use disorders (SUDs) by providing all individuals with the information and skills necessary to consider options and make informed choices.

Secondary prevention is made up of Selective interventions that focus on specific demographic groups that pose higher risk for substance use and misuse. Individuals are identified by the magnitude and nature of risk factors for substances to which they are exposed. Selective prevention measures are directed to sub-populations that are considered at risk. Selective Prevention targets the entire subgroup, regardless of the degree of risk of any individual within the group.

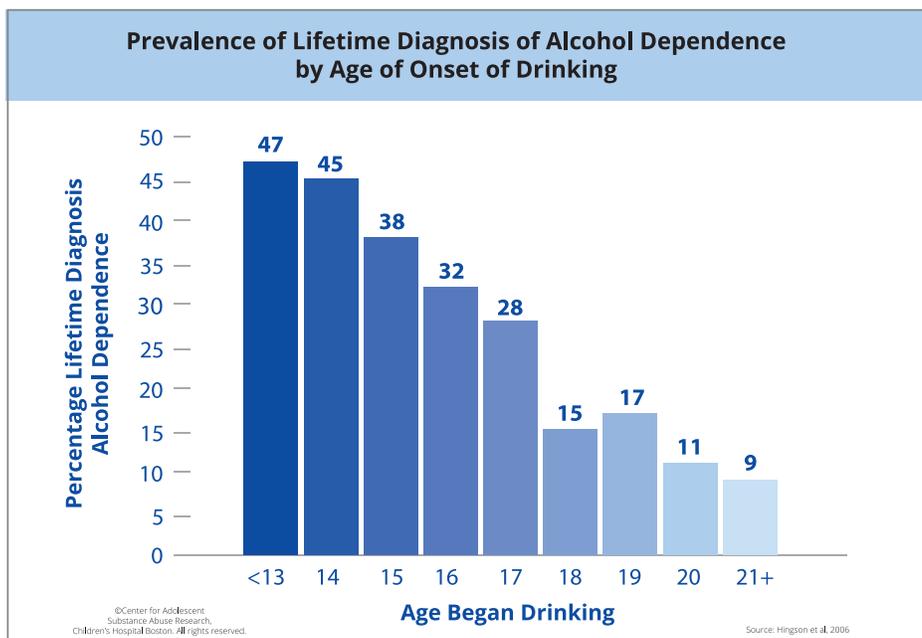


Tertiary prevention relates to Indicated interventions to prevent heavy or chronic use for individuals who are already using or engaged in other high-risk behaviors. Indicated prevention measures are designed to prevent the onset of SUDs in individuals who do not meet the medical criteria for addiction, but who are showing early danger signs. The mission of Indicated Prevention is to identify individuals who are exhibiting problem behaviors and to involve them in special programs. In addition to substance use, some high-risk behaviors warranting interventions include risky driving, aggressive behavior and conduct problems in childhood, adolescent violence, self-inflicted injury, risky sexual behavior, anxiety, depression, and school dropout.

Health Promotion Activities can alternatively be thought of as Indirect Universal Services. Health promotion aims to prevent disease, disability, and premature death through education-driven voluntary behavior change activities. Health promotion is the development and implementation of individual, group, institutional, community, and systemic strategies to improve health knowledge, attitudes, skills, and behavior. The purpose of Health Promotion is to positively influence the healthy behavior of individuals and communities and to improve the living and working conditions that influence the health of the selected communities.

Link Between Early Substance Use and Prevention of Substance Use Disorders

Normal neurobiological development makes youth particularly vulnerable to the development of SUDs and mental health disorders. Drinking and other substance use in teens and pre-teens doesn't always lead to disorders, but youth who drink or use other substances before age 21 are much more likely to develop SUD in adulthood, as the attached chart from the Center for Adolescent Substance Abuse Research demonstrates. Adverse childhood experiences and continued exposure to other risk factors – especially in combination – also predispose youth to development of substance and mental health disorders. Developmentally appropriate prevention and early intervention services minimize or prevent these disorders.





Planning the System of Prevention of Substance Use Disorders at the Federal Level

The national model of prevention has been developed by the Institute of Medicine (IOM), National Institute on Drug Abuse (NIDA), and the Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA's Center for Substance Abuse Prevention (CSAP)^{iv} works with federal, state, public, and private organizations to develop comprehensive prevention systems by:

- Promoting effective substance use and misuse prevention practices that enable states, communities, and organizations to apply prevention knowledge effectively;
- Providing national leadership in the development of policies, programs, and services to prevent the onset of illegal drug use, prescription drug misuse, alcohol misuse, and underage alcohol and tobacco use;
- Funding states to develop and implement the 20% “prevention set-aside” of the SAMHSA-administered Substance Abuse Prevention and Treatment Block Grant (SABG), the backbone of the publicly-funded prevention system in the U.S. Currently, the majority of prevention services are funded through the required minimum 20% set-aside in the SABG for each state, directly funding approximately \$371.6 million in FY '16^v for prevention services for thousands of people across the nation. On average, Block Grant funds make up 68% of primary prevention funding in States and Territories. In 21 states, the prevention set-aside represents 75% or more of the State agency's substance abuse prevention budget. In six of those States, the prevention set-aside represents 100% of the State's primary prevention funding.^{vi}
- Managing a SAMHSA/CSAP discretionary grant portfolio to advance prevention priorities of the nation – including prescription drug misuse, overdose prevention, and suicide prevention.

To ensure a comprehensive and cost-effective national approach to planning and implementing prevention services, SAMHSA's **Strategic Prevention Framework (SPF)**^{vii} is a planning process for logically designing and targeting prevention services. The effectiveness of the SPF begins with a clear understanding of community needs and involves community members in all stages of the planning process.

The SPF has five distinct features: 1) Data driven; 2) Dynamic – adjusting to changing community needs; 3) Focuses on population level change using strategies that address the risk and protective factors in a given community; 4) Guides prevention efforts across the lifespan – not just for children and youth; and 5) Relies on a team approach, including community partners.



Additionally, the framework incorporates a process that includes five steps:

- Step One, **Assess Needs**: gathering, assessing, and synthesizing data from multiple sources to ensure that prevention activities are community-specific, culturally appropriate, contextually relevant.
- Step Two, **Build Capacity**: identifying, building, and mobilizing community leadership and resources and developing relationships, partnerships, and overall readiness to respond to ongoing initiatives and challenges.
- Step Three, **Plan**: designing effective goals and strategies, based on risk and protective factors, interventions, stakeholder input, and logic models.
- Step Four, **Implement**: developing an action plan that outlines proposed accomplishments, action steps charted on a timeline, and assigned tasks.
- Step Five, **Evaluate**: creating and measuring processes and proposed outcomes to gauge program success and sustainability.

Designing and Implementing Substance Use/Misuse Prevention Services

Prevention should focus on a selected audience, community, age group, or other distinct population, that is at risk of substance use/misuse, based on concrete public health data for that local, regional or statewide community. Once identified, the prevention activities must be implemented in a manner that takes cultural norms and community attitudes towards substance use/misuse into consideration, the



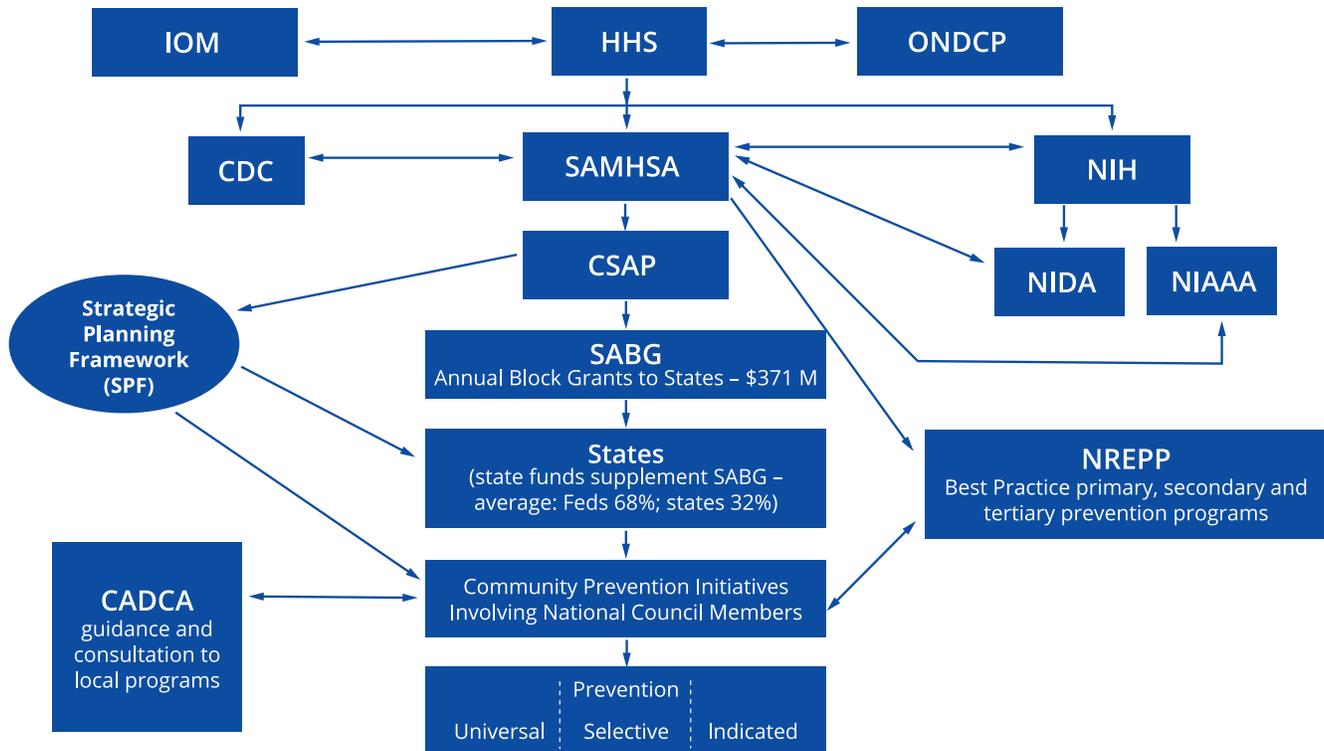
same as any commercial marketing, advertising or public relations campaign. Statewide and local assessments must be based on reliable demographic data of the vulnerable populations, and the message of prevention must be customized to connect with the selected population using available resources in a variety of media.

Useful sources of national databases include:

- National Survey on Drug Use and Health (NSDUH) (<http://www.samhsa.gov/data/population-data-nsduh>), conducted by SAMHSA. This annual epidemiological survey is the primary source of statistical information on the use of illegal drugs, alcohol, and tobacco by the civilian, non-institutionalized population of the United States (12 years and older). Data can be organized by state, county, and local levels;
- The Behavioral Risk Factor Surveillance System (<http://www.cdc.gov/brfss/>), compiled by the Centers for Prevention and Disease Control (CDC). BRFSS is a collaborative project between all states, participating US territories and the CDC. BRFSS is an ongoing surveillance system designed to measure behavioral risk factors for the non-institutionalized adult population (aged 18 years of age and older) residing in the United States. Factors assessed by the BRFSS in 2014 include tobacco use, HIV/AIDS knowledge and prevention, health care access, chronic health conditions, alcohol consumption, and drinking and driving;
- The Alcohol Epidemiologic Data System (AEDS);
- Drug Abuse Warning Network (DAWN);
- The Monitoring the Future Survey (MTF); and
- Other archival data may be available from third party government sources, such as poverty data and arrest rates.

Other prevention data sets may be available at the state, regional, county and local levels. For example, nearly every state now has a Prescription Drug Monitoring Program (PDMP). Data from PDMPs may be available to prescription drug prevention services and services and can be shared in regions across states.

The chart on the next page provides a visual model of the relationship among the federal agencies that conduct research, gather data, formulate policy and fund states, which, in turn fund local prevention programs operated by National Council members.



Successful prevention programs value youth, parents, and community members as resources and incorporate their involvement in program planning, implementation, and evaluation.^{viii} These programs generally operate on any combination of local, state, and federal funding and are frequently led by prevention specialists, representatives from local municipalities, addiction treatment providers, and other community stakeholders.

The Drug-Free Communities Support Program is a collaborative effort between the Office of National Drug Control Policy (ONDCP) and its two partners - the Substance Abuse and Mental Health Services Administration (SAMHSA) and Community Anti-Drug Coalitions of America (CADCA). These are grants to help “establish and strengthen collaboration among communities; public and private non-profit agencies; and federal, state, local, and tribal governments to support the efforts of community coalitions working to prevent and reduce substance use and misuse among youth. These projects are initiated with federal funding and sustained over time with local resources. They have proliferated across the country, working with community sector representatives to promote collaboration among services, programs, and policies that strengthen protective factors and reduce risk factors. Successful coalitions have tools to conduct performance monitoring and evaluation to assess the progress of an intervention, build community capacity for prevention and treatment activities, assure quality through measurable results, support sustainability, and provide data for decision-making on local, state, and national levels.



CADCA's National Coalition Institute

Defining the Seven Strategies for Community Change^{ix}

1. **Providing Information** – Educational presentations, workshops or seminars or other presentations of data.
2. **Enhancing Skills** – Workshops, seminars or other activities designed to increase the skills of participants, members and staff needed to achieve population level outcomes.
3. **Providing Support** – Creating opportunities to support people to participate in activities that reduce risk or enhance protection.
4. **Enhancing Access/Reducing Barriers** – Improving systems and processes to increase the ease, ability and opportunity to utilize those systems and services.
5. **Changing Consequences (Incentives/Disincentives)** – Increasing or decreasing the probability of a specific behavior that reduces risk or enhances protection by altering the consequences for performing that behavior.
6. **Physical Design** – Changing the physical design or structure of the environment to reduce risk or enhance protection.
7. **Modifying/Changing Policies** – Formal change in written procedures, by-laws, proclamations, rules or laws with written documentation and/or voting procedures.

All prevention activities are designed to reduce risk factors and enhance protective ones. David Hawkins and Richard Catalano created the risk and protective factor model for substance use disorder prevention.^x

Table 1: Risk and Protective Factors for Substance Use Disorders

Level	Risk Factors	Protective Factors
Individuals	Genetic predisposition (positive family history), psychiatric disorders, low perception of risk of substance use, impulsiveness, hostility, rebelliousness, deficits in social skills, aggression, alienation	Strong social skills, caring and cooperative nature, positive sense of self, problem-solving skills, sense of humor, autonomy, sense of purpose, religiosity or spirituality, skills to resist negative influences by peers
Family	Families with abuse or excessive conflict, families with interpersonal distance or low support, poor cooperative problem-solving, positive attitudes toward substance use	Positive bonding, lack of severe criticism, trust, mutual and reasonably high expectations, clear rules, mutual involvement in activities, involvement in religious or spiritual groups
Peer Group	Involvement with other individuals who use alcohol and drugs or engage in other risky behaviors	Involvement in activities not involving substance use, good communication and support among peers
Work/School	A negative climate, low or overly high expectations of employees/students	A caring and supportive climate, appropriately high and attainable expectations, clear standards and rules, participation in important tasks and decisions
Communities	Norms, customs and policies that permit or promote substance use, extreme economic deprivation, disorganization, alienation of individuals from their cultures, pro-use messages in the media and advertising	Caring and supportive climate, high expectations for citizenship, opportunities for participation
Society	Availability of substances, poor economic conditions, unemployment, discrimination and marginalization	Counter-advertising messages, enforcement of relevant laws, restricted availability of and access to substances



Examples of Best Practice Prevention Programs and Strategies

SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) is a repository of recognized programs and practices that have an established evidence base or are considered to be promising in their movement towards collecting evidence. In addition, some exemplary prevention programs are listed below.

Primary Prevention Programs

- 1. Life Skills Training (LST)**^{xi, xii, xiii, xiv} is a 3-year middle school classroom curriculum that teaches students personal self-management, social, and drug-resistance skills. LST has been found to produce sustained effects in preventing adolescent tobacco use, alcohol use, binge drinking, and marijuana use by targeting the major social and psychological factors that promote the initiation of substance use and other risky behaviors.
- 2. Eliminate Alcohol Sales to Youth (EASY)**^{xv} is a Utah-based program that uses a leveraged approach to direct universal (primary) prevention involving law enforcement and grocery/convenience retailers and the sale of beer. EASY minimizes one source of supply of alcohol to underage buyers. In 10 years, implementation of EASY has reduced underage alcohol related arrests by a factor of 4, from 42 per 10,000 population to 10 per 10,000. (<http://digitallibrary.utah.gov/awweb/awarchive?type=file&item=19214>) and a summary of outcome statistics)
- 3. Project Success**^{xvi} (Schools Using Coordinated Community Efforts to Strengthen Students) is designed to prevent and reduce substance use among students 12 to 18 years of age. Components of the program include an eight-session educational series, individual and group counseling, parent education and support programs, and referrals to further services, such as treatment and intensive counseling.
- 4. Lead and Seed**^{xvii} is a youth empowered, environmental approach to preventing and reducing teen alcohol consumption, tobacco use, drug use, and prescription drug misuse in a community. The program includes an intervention for middle and high school youth designed to increase their knowledge and problem solving skills for preventing and reducing ATOD use, guide them in developing strategic prevention plans for use in their schools and communities, and help them implement these plans.

Secondary Prevention Programs

- 1. Teen Intervene**^{xviii} is a brief, early intervention program for 12- to 19-year-olds who display the early stages of alcohol or drug involvement. Integrating the Stages of Change theory, Motivational Enhancement, and Cognitive-Behavioral Therapy, the intervention aims to help teens reduce and ultimately eliminate their substance use.



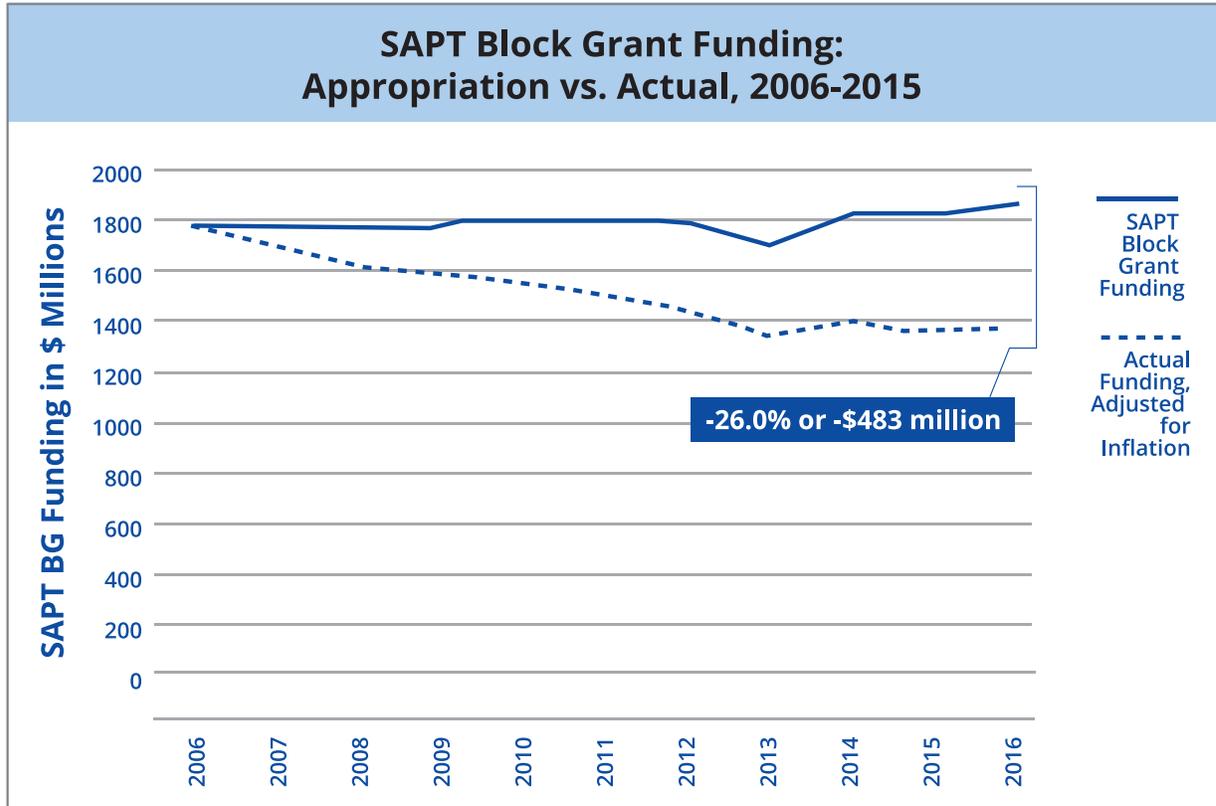
2. **Screening, Brief Intervention and Referral to Treatment (SBIRT)^{xxix}** is an important evidence-based program to help primary care physicians, school nurses, emergency room staff, and care coordinators identify patients who are already experiencing problems with their substance use and determine if preventive services, brief intervention, and/or referral to treatment are most appropriate.

Tertiary Prevention Programs

1. **Prescription Drug Monitoring Programs (PDMP)^{xx}** are state-run programs that collect and distribute data about the prescription and dispensation of federally controlled substances. PDMPs help to prevent adverse drug-related events through [opioid overdoses](#), [drug diversion](#), and [substance misuse](#) by decreasing the amount and/or frequency of opioid prescribing.^{xxi} [1]
2. **Naloxone (NARCAN) antidote for opioid overdose^{xxii}** is an important medication that reverses an opioid overdose and prevents death by enabling an individual to resume breathing. Policies are being put into place across the country to equip first responders, family members, and community stakeholders with this life-saving drug and making it accessible in a multitude of settings, including over-the-counter availability in an increasing number of states.
3. **Referral to Treatment for Substance Use Disorders** – Once an individual has been identified with a substance use disorder, a referral can be made to a treatment program. However, a key component of the referral is the acceptance of a problem by the individual. Engaging the individual to accept that they have a substance use problem and recognize the need for treatment is critical to a successful referral.

Examples of Best Practice Prevention Programs and Strategies

Over the last 10 years, SABG funding has been eclipsed by health care inflation, resulting in a staggering 26% decrease in the real value of funding by FY 2015 (to \$1.375 million). As inflation increases, the actual purchasing power of the same funding decreases. To restore the SAPT Block Grant's 2006 purchasing power, Congress would need to allocate an additional \$483 million for FY 2017. As States work to maintain their systems with fewer resources, the demand for services continues to rise. According to the National Survey on Drug Use and Health (NSDUH), past month use of illicit drugs has been on the rise, increasing from 8.3% of individuals aged 12 or older in 2006 to 10.2% in 2014.^{xxiii} Given the astronomical rise in opioid abuse and overdose among young people and adults between the ages of 25 and 54, it is essential that critical funding be restored and increased, and that research-based services be put in place to ensure that effective prevention efforts are in every community across the country.



<http://nasadad.org/wp-content/uploads/2015/02/SAPT-Block-Grant-Fact-Sheet-2016-1.pdf>

The final chapter of the Surgeon General’s Report, entitled “Vision for the Future,” outlines five general messages; one is specific to prevention: “Highly effective community-based programs and policies should be widely implemented.” (op. cit. pp. 7-4) The message emphasizes the following points, which are consistent with the tenets of this paper:

- Policies and programs should address both risk and protective factors that have an impact on the health of young people. They should be research-tested and evidence-based and delivered throughout the entire at-risk period by trained and supervised individuals
- Community coalitions can be enhanced and increased through federal and state funding incentives to promote effective practices and rigorous standards
- Research “suggests that coordinated efforts could significantly improve the impact of existing prevention funding, programs, and policies, enhancing the quality of life for American families and communities.”

In addition, it is important to underscore that: Prevention is cost effective.^{xxiv} SAMHSA estimates that prevention services delivered to public school settings would save \$18 for every \$1 spent.^{xxv} This creates cost savings in medical and other resources (including property damage, police and criminal justice interventions, and insurance administration); lost wages and household work; and reduced



quality and loss of life. The existing substance use prevention infrastructure must be strengthened and built up on to ensure that substance use prevention strategies and services are fully included and explicitly required in broader chronic disease prevention initiatives.

As final words, consider this from the Institute of Medicine: “Unleashing the power of prevention is a call to action that our nation can’t afford to miss. Behavioral health problems now surpass communicable diseases as the country’s most pressing concern (xix). Given its ability to significantly reduce behavioral health problems and save billions year upon year, prevention is one of our nation’s most valuable and underused resource. Prevention is the best investment we can make, and the time to make it is now.”



Endnotes

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