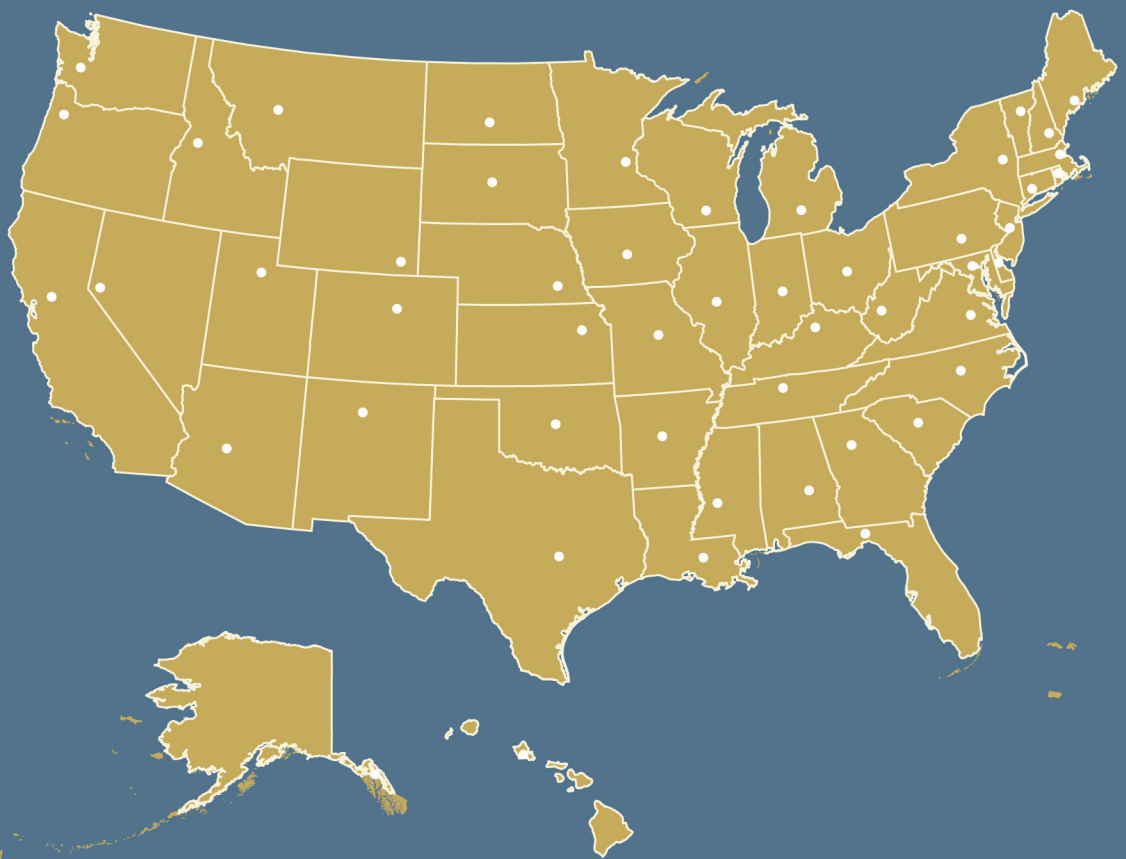


# Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups



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Behavioral Health is Essential to Health • Prevention Works • Treatment is Effective • People Recover

# **Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups**

U.S. Department of Health and Human Services  
Substance Abuse and Mental Health Services Administration  
Center for Substance Abuse Prevention

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# Executive Summary for Policymakers

Prevention research over the past three decades has underscored the importance of strategically using data to inform efforts to reduce problems related to substance abuse and mental, emotional, and behavioral (MEB) disorders. The Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Prevention (SAMHSA/CSAP) has funded State Epidemiological Outcomes Workgroups (SEOWs) to assist states, jurisdictions, tribal entities (collectively referred to as states), and communities to adopt and implement the Strategic Prevention Framework (SPF). The SPF provides a structure for the selection, funding, implementation, and evaluation of substance abuse prevention programming and, under a 2010 funding initiative, mental, emotional, and behavioral health programming.

SEOWs are a network of people and organizations that bring analytical and other data competencies to prevention. Their mission is to integrate data about the nature and distribution of substance use and MEB disorders and related consequences into ongoing assessment, planning, and monitoring decisions at state and community levels. The overall goal for SEOWs is to use data to inform and enhance state and community decisions regarding substance abuse and MEB disorder prevention programs, practices, and policies, as well as promote positive behavioral and mental health over the lifespan. Guided by the steps of SAMHSA's SPF, SEOWs examine, interpret, and use data to inform prevention planning and decision-making.

This publication presents the key principles, core expectations, and anticipated trajectory of the SEOWs. Three key principles have guided the development and process of SEOWs:

1. Emphasis on outcomes-based prevention, in which states begin with an assessment of the negative outcomes or consequences of substance use and MEB disorders and a solid understanding of the factors that cause or contribute to those problem outcomes;
2. Adoption of a public health approach to preventing and reducing substance use and related problems, as well as MEB disorders, which focuses on population-wide prevention of health problems and promotion of healthy living; and
3. Use of epidemiological data as a primary foundation for all planning and decision-making, which allows states to begin answering basic questions that serve as a foundation for data-driven prevention planning.

In general, SEOWs are expected to demonstrate an appropriate combination of needed capabilities, knowledge, and skills, including: ability to access relevant data on substance use and MEB health indicators; ability to analyze and interpret these data; knowledge of the specific context of the state it serves; access to appropriate state decision makers; and knowledge of health communications, including skills in information dissemination and knowledge transfer, particularly for developing templates and useful products for states.

Outcomes-based prevention relies on epidemiological data for its success. Data-driven decision-making for substance abuse and MEB disorder prevention should begin with a general, data-based understanding of disorder patterns and related consequences. Epidemiology, the study of factors affecting the health and wellness of populations, serves as the foundation and logic of interventions made in the interest of public health and preventative medicine. It is data-driven and relies on a systematic and unbiased approach to data collection, analysis, and interpretation.

Why invest in SEOWs? One notable benefit is increased communication between substance abuse prevention professionals and others who share concern and expertise around substance abuse and MEB disorders, constituting an important bridge across professional domains that can only benefit prevention practice in the future. SEOWs have also facilitated communication between individuals and agencies working at the state level and those at

more local levels, as well as enabling an exchange of ideas with counterparts in other states. These types of collaborations have resulted in the understanding and use of a common language and a common approach to address substance-related problems.

Additionally, the value-added features of SEOWs fall within four broad categories:

- New/improved collaboration for data-related activities;
- New/improved access to data;
- Enhanced capacity to use data in substance abuse prevention planning, including increased use of data for decision-making; and
- Increased appreciation or support from state leadership.

The progress, accomplishments, and other benefits that have emerged from SEOWs since 2004 demonstrate the importance of establishing ongoing state monitoring systems for substance abuse prevention. But this requires more than just access to quality data and epidemiological capacity. It also requires the involvement of individuals and organizations that are skilled in the areas of planning and communication. It requires the sharpening of information systems that can efficiently convey data and communication in a variety of directions. Lastly, it requires individual and organizational commitment of substance abuse and MEB disorders prevention policymakers, other key decision makers, and their partners. As more states begin to recognize the value of adopting an outcomes-based approach to substance abuse and MEB disorders prevention, it is anticipated that support for securing these additional elements will continue to grow.

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# Introduction

All states, jurisdictions, and several tribal entities (hereafter collectively referred to as states), have received federal funding from the Substance Abuse and Mental Health Services Administration’s Center for Substance Abuse Prevention (SAMHSA/CSAP) to establish epidemiological workgroups. Their mission is to integrate data about the nature and distribution of substance use and related consequences into ongoing assessment, planning, and monitoring decisions at state and community levels.

In some cases, the epidemiological workgroup is part of a broader Strategic Prevention Framework State Incentive Grant (SPF SIG) funded by CSAP. These SPF SIG workgroups are called State Epidemiology Workgroups, or SEWs. CSAP has also made contract funds available to support epidemiological workgroups in other states not currently receiving SPF SIG funds; these workgroups are called State Epidemiology Outcomes Workgroups, or SEOWs. Although the contractual mechanisms may differ, this document refers to both structures as SEOWs.

SEOWs are networks of people and organizations that bring analytical and other data competencies to substance abuse prevention and tailor their work to meet the specific needs of states. Until recently, these groups have focused solely on substance abuse prevention, looking at both consumption and consequences data. But, consistent with SAMHSA’s current focus on behavioral health, SEOWs are expanding their activities to include data related to the prevention of mental illness and the promotion of positive mental health as it relates to substance abuse. Therefore, to support data-driven decision-making for prevention activities and policies to support behavioral health, states need to develop an even broader monitoring system for behavioral health. Such a monitoring system can help inform assessment (“What do behavioral health related consequences look like in the state?”), planning (“What are the current prevention priorities that emerge after needs assessment?”), and monitoring and evaluation activities (“How are we doing in our efforts to address these issues?”) to enhance behavioral health.

Within this effort, CSAP has defined a series of data-driven activities to assist states to further develop their substance abuse and mental, emotional, and behavioral (MEB) disorder monitoring systems by:

- Developing key indicators to describe the magnitude and distribution of substance-related consequences and consumption patterns across states;
- Developing similar key indicators for prevention of mental illness and promotion of positive behavioral health across states;
- Collecting, analyzing, interpreting, and communicating these data through the development of an epidemiological profile;
- Establishing prevention priorities for state resources based on data analyzed and interpreted through the profiling process;
- Allocating resources to populations in need for established priorities; and
- Developing a systematic, ongoing monitoring process for state substance-related consumption and consequences patterns as well as indicators of MEB health in order to track progress on addressing prevention priorities, detect trends, and use such information to redirect resources if needed.

The overall goal for SEOWs is to use data to inform and enhance state and community decisions regarding substance abuse and mental illness prevention programs, practices, and policies, as well as promote positive behavioral and mental health. Guided by the Strategic Prevention Framework (SPF), SEOWs examine, interpret, and apply data to inform prevention planning and decision-making.

## Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups

SEOWs have been funded to build infrastructure; develop state and community-level epidemiological profiles that focus on assessment, with implications for future prevention planning; develop products and strategies for effective data dissemination (i.e., a data dissemination plan); begin to address data gaps and other data system challenges related to describing, interpreting, and applying epidemiological data findings to enhance decisions about enhancing prevention infrastructure and practice; and integrate their efforts with state prevention systems thereby promoting SEOW sustainability within the overall prevention infrastructure. SAMHSA/CSAP has provided assistance to SEOWs in selecting behavioral health indicators through provision of Web-based databases.

As noted above, SEOWs are supported through two funding mechanisms. Since 2004, they have been a component of SPF SIGs—five year cooperative agreements between CSAP and selected states that are intended to promote adoption of the SPF for substance abuse prevention planning. CSAP has also made contract funds available to support epidemiological workgroups in other states not currently receiving SPF SIG funds. SEOWs are supported over the course of the project’s lifespan at a minimum support level of \$150,000 per year for states and \$100,000 or \$75,000 for jurisdictions and tribal entities, depending on availability of funds.

SEOWs collaborate with agencies, organizations and individuals to use data, skills, and/or decision-making authority to guide and promote positive behavioral health. Behavioral health encompasses a wide variety of domains (e.g., education, traffic safety, crime, and public health), so numerous types of state and local agencies and organizations are likely to hold relevant data. SEOW membership varies, but typically includes substance abuse and mental health agency staff, tribal leaders, staff from public health agencies (including tobacco control), drug enforcement authorities, criminal justice and law enforcement agents, educators, behavioral health researchers and statisticians, and others representing relevant history and cultural diversity issues. Overall, SEOWs consist of members who provide the necessary access to data, competencies, and skills for analyzing and communicating data implications. SEOWs collaborate with those agencies and state and community groups that have decision-making authority for behavioral health policies.

To assist SAMHSA/CSAP in its goal of preventing substance abuse and MEB disorders, as well as promoting positive mental health across the lifespan, the next logical step for SEOWs is expansion of substance abuse monitoring and surveillance to incorporate associated behavioral health outcomes and assess common risk and protective factors. For example, substance abuse, mental health, suicide, trauma, and other SAMHSA-wide priorities have common risk factors. As SAMHSA moves forward in developing positive behavioral health across the lifespan, it is important to assess these and other relevant behavioral health issues.

This publication, *Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups*, describes the evolution, structure, and accomplishments of SEOWs as a key component of SAMHSA’s support of states as they address problems related to substance abuse and MEB disorders. It highlights SEOW successes and offers guidance for providing data to support prevention decision-making in the future at the state and community levels. Throughout this report, highlighted quotes from SEOW members illustrate the value of SEOWs to prevention programming in states and communities throughout the United States.



# Using SAMHSA's Strategic Prevention Framework to Support Data-Based Decision-Making

SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities. With its many partners, SAMHSA has demonstrated that prevention works, treatment is effective, and people recover from mental and substance use disorders. The agency has a unique responsibility to focus the nation's health care and social agendas on these preventable and treatable problems stemming from disease, trauma, inadequate access to appropriate care, and insufficient community and family supports. Behavioral health services improve health status and reduce health care and other costs to society.<sup>1</sup> Continued improvement in the delivery and financing of prevention, treatment, and recovery support services provides a cost-effective opportunity to advance and protect the nation's health.

According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), excessive alcohol consumption is the third leading cause of preventable death in the United States and is a risk factor for many health and societal problems.<sup>2</sup> Among adults, it can take the form of heavy drinking, binge drinking, or both. Underage drinking can also be considered a form of excessive drinking because it is illegal and it often involves consumption in quantities and settings that can lead to serious, immediate, and long-term adverse consequences. More than half of the adult U.S. population drank alcohol in the past 30 days.<sup>3</sup> Nearly 7 percent of the total population drinks heavily, and 23 percent of the population engages in binge drinking.<sup>4</sup> Youths aged 12 to 20 (who are under the legal drinking age) account for 11 percent of all alcohol consumed in the United States.<sup>5</sup> More than 90 percent of this alcohol is consumed in the form of binge drinking.<sup>6</sup> According to the Alcohol-Related Disease Impact (ARDI) tool, from 2001–2005, approximately 79,000 deaths annually were attributable to excessive alcohol use.<sup>7</sup>

According to the U.S. Surgeon General, tobacco use remains the leading preventable cause of disease and death in the United States, responsible each year for approximately 440,000 deaths and the loss of more than 5.6 million years of potential life.<sup>8</sup> It is recognized as a cause of multiple cancers, heart disease, stroke, complications of pregnancy, and chronic obstructive pulmonary disease. Smoking and smokeless tobacco use are almost always initiated and established during adolescence. Most people who begin smoking during adolescence are addicted by age 20.<sup>9</sup>

According to SAMHSA's National Survey on Drug Use and Health, in 2010, an estimated 22.6 million Americans aged 12 or older were current (past month) illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 8.9 percent of the population aged 12 or older. An estimated 3.0 million persons aged 12 or older used an illicit drug for the first time within the past 12 months. This averages about 8,100 initiates per day. In 2010, 12.7 percent of young adults aged 18 to 25 reported driving under the influence of illicit drugs in the past year.<sup>10</sup>

Drug abuse and addiction are a major burden on society. According to the National Institute on Drug Abuse (NIDA), estimates of the overall costs of substance abuse in the United States—including health- and crime-related costs as well as losses in productivity—exceed half a trillion dollars annually. This includes approximately \$181 billion for illicit drugs, \$193 billion for tobacco, and \$235 billion for alcohol.<sup>11</sup> However, these figures do not fully capture the breadth of deleterious public health—and safety—implications, which include family disintegration, loss of employment, failure in school, domestic violence, child abuse, and other crimes.

The World Health Organization ranks mental illnesses first among illnesses that cause disability in the United States.<sup>12</sup> According to the Institute of Medicine, most mental, emotional, and behavioral (MEB) disorders have roots in childhood and youth. Among adults reporting a MEB disorder during their lifetime, more than half say the onset was during childhood or adolescence. In any given year, the percentage of young people with MEB disorders is estimated between 14 and 20 percent. MEB issues among young people—including both diagnosable disorders and other problem behaviors, such as early drug or alcohol use, antisocial or aggressive behavior, and violence—have enormous personal, family, and societal costs. The annual quantifiable cost of such disorders among young people in 2007 was estimated at \$247 billion.<sup>13</sup>

More than three decades of prevention research have provided clear evidence that—within the context of a broader public health approach to addressing problems related to alcohol, tobacco, and other drug use and abuse and MEB disorders—we now have the capability to develop and implement effective policies and strategies to reduce problems.<sup>14</sup> Consistent with this research, SAMHSA has developed its Strategic Prevention Framework (SPF).

With the passage of the Affordable Care Act in 2010, there is an increasing commitment to prevention across government and in states and communities.<sup>15</sup> This commitment means fostering physical and behavioral health and well-being in addition to ensuring access to affordable and effective health care. The SPF is built on a community-based risk and protective factors approach to prevention and a series of guiding principles that can be used at the federal, state/tribal and community levels.

## Strategic Prevention Framework



The SPF requires states and communities to systematically:

1. Assess their prevention needs based on epidemiological data;
2. Build their prevention capacity;
3. Develop a strategic plan;
4. Implement effective community prevention practices and policies; and
5. Evaluate their efforts for outcomes.

SEOWs support data-driven decision-making within state substance abuse prevention systems by bringing systematic, data-driven thinking to the process of guiding effective and efficient use of prevention resources at the state and community levels. Through each of the SPF steps, SEOWs provide support that is essential to the success of prevention policies and projects:

1. **Assessment:** SEOWs collect, analyze, and interpret a set of epidemiological data elements and describe substance-related consequences and consumption patterns and MEB-related problems in an epidemiological profile.
2. **Capacity Building:** SEOWs provide data and information to key stakeholders to mobilize and enhance state and community resources to address prevention priorities and assist states in collecting, analyzing, and interpreting prevention system capacity data.
3. **Planning:** SEOWs determine key substance- and MEB-related problems (i.e., specific consequences of substance use and MEB disorders, target populations, geographic areas) and provide these findings to guide state decisions about prevention priorities and allocation of prevention funds.
4. **Implementation:** SEOWs work with the state and communities to provide information to assist decision makers in determining strategies that effectively address identified priorities.
5. **Evaluation:** SEOWs conduct ongoing data collection and analysis to examine changes over time in substance-related problems, patterns of consumption, and MEB-related problems and provide this information for ongoing state decision-making about prevention priorities and resource allocation.

“Because of the SEOW award, and the support of your office, California and the Department of Alcohol and Drug Programs are in a much better position to address its AOD prevention-focused needs as they relate to data and data systems, as well as the development of its AOD-focused infrastructure and analytical capacity.”

SEOWs are a key player in implementing SAMHSA’s Eight Strategic Initiatives and especially Strategic Initiative #7, Data, Outcomes, and Quality—Demonstrating Results. The goal of this initiative is to realize an “integrated data strategy and a national framework for quality improvement in behavioral health care that will inform policy, measure program impact, and lead to improved quality of services and outcomes for individuals, families, and communities.”<sup>16</sup>

SEOWs also play a critical role in helping states shift their focus to advancing health and preventing disorders, rather than waiting until a disorder is established and has done considerable harm. Research has shown that a broad array of evidence-based programs, practices, and policies can effectively prevent substance abuse, promote mental health, and prevent related health and social problems by reducing risk factors and increasing protective factors.<sup>17</sup>

Studies evaluating preventive interventions have shown that we have the potential to shape communities where fewer people develop problems with alcohol, tobacco, and other drugs; crime is less prevalent; unwanted pregnancies and sexually transmitted diseases are rare; and incidence of depression and anxiety are decreased.<sup>18</sup>

# State Epidemiological Outcomes Workgroup Key Principles

Three key principles have guided the development and process of SEOWs:

- Emphasis on outcomes-based prevention;
- Adoption of a public health approach to preventing and reducing substance use and related problems, as well as MEB disorders; and
- Use of epidemiological data as a primary foundation for all planning and decision-making at state and community levels.

“Support for the formation and facilitation of New Mexico’s Epi Workgroup has allowed the state to create a long-term process to examine data for the purpose of determining what is truly useful for assessment, what data can be useful for planning, what data are useful for monitoring program progress, and what data ultimately represent outcome data. Even more importantly, this has allowed us to adopt and utilize a theory-driven model and identify data that match the theory.”

**Outcomes-Based Prevention:** Before states determine what strategies to fund, it is critical to begin with a solid understanding of the outcomes to be addressed. Outcomes-based prevention starts with a focus on substance use and related consequences and MEB disorders among populations. Understanding the nature and extent of substance-related and MEB problems is critical to identifying the underlying risk and protective/causal factors contributing to such problems and ultimately choosing prevention strategies with the expectation of changing targeted consequences and consumption patterns. Data reflecting consequences and associated usage patterns serve as a foundation for ongoing monitoring and evaluation activities to track and improve prevention efforts. The outcomes-based prevention model allows state prevention stakeholders to lead with results, not with strategies.

Outcomes-based prevention proposes that states begin with an assessment of the negative outcomes or consequences that result from substance use and MEB disorders and a solid understanding of the factors that cause or contribute to those problem outcomes. Determining the presence and magnitude of negative consequences associated with substance use and MEB disorders is critical to determining prevention priorities and aligning effective strategies to address them.

**The Public Health Approach to Prevention:** The public health approach to reducing substance use and MEB disorders and related consequences focuses on preventing health problems and promoting healthy living for whole populations of people (i.e., people who share a common characteristic such as residence in a common geographic region [e.g., county], age [e.g., children, young adults] or experience [e.g., pregnant women]). Traditionally, substance abuse and MEB disorders prevention has been more individual- or person-centered, reflecting its close association with substance abuse and mental illness treatment. Prevention research, however, has demonstrated that prevention approaches that broadly target population-level change are effective in producing measurable improvements in harmful consumption patterns and negative consequences and MEB disorders in groups as a whole.<sup>19</sup>

“In California, the SEOW increased the use of the public health perspective regarding surveillance and substance use epidemiology and increased the knowledge base, analytical capacity, and expertise for prevention policy, planning, and program development.”

**Epidemiological Data:** Epidemiology is the study of the distribution and determinants of health-related events in populations. Epidemiological data describing the extent and distribution of substance use and MEB disorders and their adverse consequences within and across populations is vital to a successful prevention initiative that embodies outcomes-based prevention and a public health approach. Such data allow states to begin answering basic questions that serve as a foundation for data-driven prevention planning, such as: What are the consequences of substance use? What substances are being used? By whom? How? Where?

“The North Carolina SEW provided a new forum for discussion among state agency representatives, university researchers, practitioners (i.e., service providers), and other community-level stakeholders to address the consequences of substance abuse in a systematic and data-driven approach, which was very different from the manner in which we had addressed problem identification in the past. It created a data-driven process for the SPF, which added credibility to the process.”

# State Epidemiological Outcomes Workgroup Expectations

SAMHSA/CSAP supports states in establishing and/or maintaining a SEOW to examine behavioral health archival data, to determine the scope and extent of problems related to behavioral health, and to develop key data/products geared to meeting local prevention planning needs in states and communities. SEOWs may be established around a previous or current epidemiological workgroup. CSAP expects that these continued data collection efforts will support ongoing monitoring and surveillance throughout the life of the program. SEOWs are expected to consider indicators and domains from existing Web-based databases and to add other data as deemed important and available in the states. SAMHSA/CSAP gives SEOWs access to Web-based databases that provide a set of key substance abuse outcomes indicators from national data sources, including the Behavioral Risk Factor Surveillance System (BRFSS), the National Survey on Drug Use and Health (NSDUH), and others.

SEOWs and their epidemiologists/data analysts conduct periodic, statewide/community assessments, which include but are not limited to:

- Assessment of the prevalence of substance abuse and MEB-related problems within specific populations and across the life span;
- Determination of the nature, magnitude, and problems associated with substance abuse and MEB disorders;
- Establishment and management of all relevant data systems, including systems used to conduct archival, evaluative, ethnographic, and prospective studies as well as those designed to serve as an early warning network;
- Development of state profiles detailing patterns of consumption for substance abuse and consequences of substance abuse and MEB disorders and promotion of positive mental health;
- Employment of systematic, analytical thinking to better understand the causes and consequences of the use of alcohol, tobacco, and other drugs, as well as MEB disorders;
- Coordination with appropriate decision-making entities within the state to provide data in formats that will be useful in guiding effective and efficient use of prevention resources, including the development of templates, reports, and other products for dissemination; and
- Promotion of ongoing, in-depth exchange of data and learning among the SEOW and state and community leaders who have a thorough understanding of local substance abuse problems and MEB disorders.

Using SEOW funding, states should acquire the services of a SEOW epidemiologist/data analyst through contractual agreements, employment, interagency agreements, or other means. The SEOW epidemiologist/data analyst must have an in-depth understanding of substance abuse and MEB issues. He or she participates in the work of the SEOW and works collaboratively with the Single State Agency (SSA) and National Prevention Network (NPN) representative in addition to public health and other related agencies in the operation of the SEOW. In so doing, the SEOW and the epidemiologist/data analyst will help facilitate data-driven decision-making across state and community organizations, helping to assure the effective and efficient use of resources.

In addition to the SEOW epidemiologist/data analyst, CSAP recommends that SEOW membership include appropriate representatives from state public health, mental health, drug enforcement, law enforcement, criminal justice, and education agencies; behavioral health organizations; universities; social science research/statistics organizations; community groups; youth groups; and other involved service providers.

## Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups

In general, the organization of SEOWs should demonstrate an appropriate combination of needed capabilities, knowledge, and skills, including:

- Ability to access relevant data on substance use and MEB health indicators;
- Ability to analyze and interpret these data;
- Knowledge of specific context of the state it serves;
- Access to appropriate state decision makers; and
- Knowledge of health communications, including skills in information dissemination and knowledge transfer, particularly for developing templates and useful products for states.

CSAP recommends that SEOWs be organized according to a basic set of operating principles and be “housed” within a state government agency. These operating principles include:

- Establishing and documenting a clear purpose and set of goals and objectives through a formal charter;
- Establishing and keeping regular working meetings and work plans;
- Identifying specific workgroup products, schedules, and milestones;
- Establishing and maintaining regular contacts with an appropriate state advisory group and/or key decision makers; and
- Ensuring an ongoing and meaningful exchange of data and information between the SEOW, state leaders and staff, and CSAP.

# Epidemiology and Effective Prevention: What's the Link?

Data-driven decision-making for substance abuse and MEB disorder prevention in states should begin with a general, data-based understanding of the patterns of substance use and MEB disorders and related consequences. That is why it is important for states to develop and maintain epidemiological profiles. Epidemiology is the study of factors affecting the health and wellness of populations and serves as the foundation and logic of interventions made in the interest of public health and preventative medicine. It is data-driven and relies on a systematic and unbiased approach to the collection, analysis, and interpretation of data.

In the area of alcohol use and abuse, regular and detailed monitoring of alcohol consumption has several benefits. First, each measurement provides a portrait of current drinking practices. Repeated measurements allow for early detection of trends in drinking patterns for the entire nation, states, and population subgroups. Certain subgroups, such as ethnic minorities, who may have distinct health problems and limited access to care, may warrant particular attention in such analyses, because these populations may be more vulnerable to alcohol-related and other health problems.

Second, close monitoring of the consumption patterns of a population subgroup of people residing in a given geographic area may be vital for understanding other alcohol-related social harms, such as spousal violence, urban blight, or poor academic performance in a school setting.

Third, routine monitoring with rapid reporting allows states to detect changes in measures such as the prevalence of heavy-drinking episodes at an early stage, providing a basis for the planning and targeting of prevention programs, practices, and policies.

Finally, repeated measurements of alcohol consumption are necessary to estimate the effectiveness of policy changes related to alcohol consumption, such as alcohol excise taxes and availability controls, increased accessibility or entitlements to treatment, enactment or enforcement of drunk-driving laws, welfare reform, advertising, and health education. Particularly in light of ongoing economic and cultural changes that affect drinking, repeated monitoring of alcohol consumption is helpful for understanding trends in the effects of specific interventions and policy measures.

In short, alcohol epidemiology gives states and communities the data they need to assess problems resulting from alcohol abuse. Such information is useful in estimating the societal costs of various health problems, often providing the basis for justifying program development and implementation. Surveillance, an ongoing form of descriptive epidemiology characterized primarily by uniformity of methods for repeated observations over time, is conducted to monitor change and provides one means of evaluating the effectiveness of treatment and prevention programs, practices, and policies.

Drug use epidemiology provides a foundation for continuity in the monitoring and surveillance of current and emerging drug problems and related health and social consequences. It demonstrates on whom, through what agents, and where drugs exert their effects by enabling assessment of drug abuse patterns and trends using community, county, and state-specific data from a variety of health and other drug abuse indicator sources. Such sources include public health agencies; medical and treatment facilities; ethnographic research; key informant discussions; criminal justice, correctional, and other law enforcement agencies; surveys; and other sources unique to local areas.



The epidemiology of drug use and its disorders has historically served as a foundation for understanding the nature and extent of drug use, abuse, and dependence in the population; for informing basic, clinical, treatment, and services research; and for developing prevention strategies.<sup>20</sup>

Over the past several decades, this epidemiology has developed in two major veins: descriptive and analytic. Descriptive studies characterize and describe the distribution of drug use and drug use disorders according to time, place, person, and groups of people. Analytic studies test specific hypotheses linking drug use and drug use disorders to putative causes, such as exposure to drugs, opportunities for drug use, social-environmental risk factors, and individual characteristics, including genetic and biological factors. Epidemiological data have proven to be very valuable for describing drug use patterns across person, place, and time; for identifying factors associated with increased (or decreased) risk for drug use and drug use disorders; and for informing prevention policies and strategies.<sup>21</sup>

Epidemiological surveillance of selected tobacco use behaviors contributes to understanding the effects of activities that promote tobacco use, evaluating tobacco control interventions, and identifying populations at high risk for tobacco use. Prevention strategies designed to accelerate the reduction of declining use will lessen the eventual burden of lung and other cancers, heart disease, and other tobacco-attributable diseases.<sup>22</sup> An epidemiologic model is a comprehensive approach for understanding and controlling the tobacco epidemic. It can guide the decisions of program planners and regulators as they strive to implement optimal public health strategies for reducing tobacco use. It recognizes the need to understand and measure both pro- and anti-tobacco forces when considering use patterns and trends. Reducing smoking requires health-promoting decisions at the individual, family, community, state, and national levels.<sup>23</sup>

Research has identified multiple factors that contribute to the development of MEB disorders, and interventions have been developed to successfully intervene with these factors.<sup>24</sup> Through the application of programs, practices, and policies aimed at eliminating risks and increasing strengths, there is great potential to reduce the number of new cases of MEB disorders and significantly improve the lives of young people. This requires accurately establishing when MEB disorders first occur and what their consequences are in terms of chronicity and impaired functioning, as well as impact on an individual's ability to reach developmental milestones, such as graduating from school, finding work, and forming adult relationships.

In the prevention of MEB disorders, epidemiology can provide information about which individuals are suffering from or at risk for mental, emotional, or behavioral problems, and at what ages or developmental stages. MEB epidemiology can be used to assess whether interventions have reduced the incidence of a disorder; epidemiology is also essential for monitoring the prevalence of disorders and key risk and protective factors, as well as the use of relevant services across a range of delivery systems.

A variety of factors—including individual competencies, family resources, school quality, and community-level characteristics—can increase or decrease the risk that a person will develop an MEB disorder or related problem behaviors, such as early substance use, risky sexual behavior, or violence.<sup>25</sup> Systematic data related to the prevalence and incidence of MEB disorders are sparse, even though the United States collects rich data related to drug use and abuse. Consistent with SAMHSA's expansion of the mission of SEOWs, an expansion in current data collection is needed to include measures of service use across multiple agencies working with vulnerable populations of young people.

## Evidence-Based Prevention

Problems related to substance abuse and MEB disorders are among the most difficult social problems to prevent or reduce. Prevention research over the past three decades has demonstrated that reductions in these problems require comprehensive solutions—a variety of intervention approaches directed to multiple opportunities.<sup>26</sup> Given

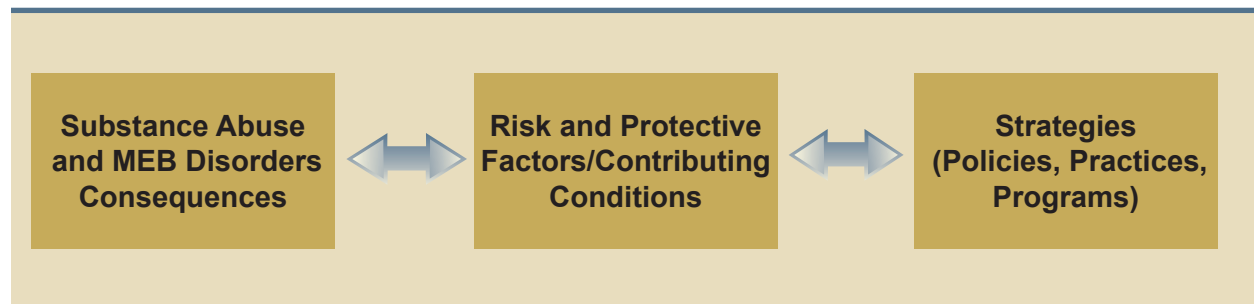
that comprehensive solutions combine a variety of strategies, it is important to understand the nature and extent of problems and the relationships between these problems and the factors or conditions that contribute to them. Few problems related to substance abuse or MEB disorders can be changed through direct influence or attack. Rather, they are influenced indirectly through underlying factors that contribute to the problem and its initiation, escalation, and adverse consequences.

SAMHSA advocates for prevention as a comprehensive, proactive, research-based, data-driven process using strategies and programs that are proven to reduce or prevent substance abuse and MEB disorders in individuals, families, and communities. Its approach to prevention and the conceptual framework that supports it has evolved. Both are based on emerging national research findings and the states' experiences in program development, implementation, and evaluation, which have shown that prevention can reduce problems related to substance abuse and other MEB disorders within the context of a public health approach.

The work of SEOWs is framed by an outcomes-based prevention model that grounds prevention in a solid understanding of alcohol, tobacco, and drug use and related consequences, and now MEB disorders as well. SEOWs develop State Epidemiological Profiles (hereafter Epi Profiles) that summarize the nature, magnitude, and distribution of substance use and related consequences in the state in order to inform policymakers and decision makers so that they can develop programs, practices, and policies that are evidence-based and more likely to be effective in reducing specific problems. Understanding the nature and extent of substance use and related consequences in the state is critical for decision makers to determine prevention priorities.

Prevention that focuses on risk and protective factors is grounded in the public health approach, which relies on data-based predictors of problem behaviors and positive outcomes.<sup>27</sup> These underlying factors include the following:

- Risk and protective factors that present themselves across the course of human development and make individuals and groups either more or less prone to substance abuse or MEB disorders in certain social contexts.
- Contributing conditions and environmental factors implicated in the development of the problems and consequences associated with substance abuse or MEB disorders. Examples may include specific local policies and practices, community realities, or population shifts.



Understanding the nature and extent of problems related to substance abuse and MEB disorders is critical to identifying the underlying factors contributing to such problems (risk and protective factors/contributing conditions) and ultimately choosing prevention strategies that can be expected to change targeted consequences and consumption patterns. Data reflecting consequences and associated-use patterns serve as a foundation for ongoing monitoring and evaluation activities to track and improve prevention efforts. The outcomes-based prevention model allows state prevention stakeholders to lead with results, not strategies.

Outcomes-based prevention proposes that states begin with an assessment of the negative outcomes or consequences that result from substance use and MEB disorders, as well as a solid understanding of the factors that cause or contribute to those problematic outcomes. Determining the presence and magnitude of negative consequences is critical to determining prevention priorities and aligning effective strategies to address them.

For state and community decision makers, the challenge of selecting the optimal mix of strategies is complicated by the limited availability of public resources on evidence-based interventions. Practitioners seeking to reduce substance abuse problems will need to put together their own interventions. An optimal mix of interventions will fit the particular needs of the community—its population, cultural context, and unique local circumstances, including community readiness. Some interventions in the comprehensive plan may be deemed “evidence-based” through inclusion in federal registries or reported findings in the peer-reviewed literature, while others may document effectiveness based on other sources of information and empirical data. An optimal mix of strategies will combine complementary and synergistic interventions.

# Why Invest in SEOWs?

SEOWs help states focus on the “big picture” of substance abuse and MEB disorder prevalence and support communities in using data to work with evaluators for monitoring and tracking progress of target priorities and emerging trends. By engaging in data-based prevention, states can demonstrate to the public that resources allocated to prevention are justified.

“In Guam, the SEW needs assessment has been used as a basis for setting policy and program priorities. Profile data are used by government and community groups in their grant applications and needs assessment. The Epi Profile is considered as a key reference that guides program development and resource allocation.”

One notable benefit of SEOWs is the level of increased communication between substance abuse prevention professionals and others who share concern and expertise in areas associated with substance abuse and MEB disorders. Regular communication between prevention policymakers, administrators, epidemiologists, and other public health professionals within the SEOW constitutes an important bridge across professional domains that can only benefit prevention practice in the future. In particular, the focus by the SEOWs on a public health approach has infused epidemiologists and public health personnel into the prevention efforts for substance abuse and MEB disorders.

SEOWs have also facilitated greater communication between individuals and agencies at the state-level and those at more local levels (e.g., region, county, city, or community). Individuals engaged with SEOWs have also reached out to counterparts in other states. These types of collaborations have resulted in the understanding and use of a common language and a common approach to address substance-related problems. Collaboration has also led to an increase in awareness and understanding of epidemiology and its value in planning and priority setting.

Participation in SEOWs has afforded substance abuse staff and administrators increased exposure to and experience with using data in decision-making. This experience, in turn, has allowed them to guide prevention programming with a focus on substance abuse-related consequences and the factors that contribute to them. This process has improved the alignment between resources to prioritize problems and the use of evidence-based strategies to address them. Ultimately, this increased exposure to data-driven processes provides a foundation for improvements in the scope, quality, and relevance of prevention activities. With the inclusion of MEB health data in the work of SEOWs, that foundation will be expanded to improve prevention of MEB disorders, especially as they intersect with substance abuse.

To help SEOWs further develop their collaborations with public health professionals and epidemiologists, CSAP partnered with the Council of State and Territorial Epidemiologists (CSTE) to cosponsor an all-day workshop on substance abuse epidemiology with the aim of supporting and enhancing substance abuse epidemiology infrastructure in states. CSTE is a professional association of more than 1,050 public health epidemiologists working in states and local health agencies. It works to establish more effective relationships among state and other health agencies. In 2007, CSTE declared substance abuse epidemiology a new crosscutting theme for the Council. Together, CSAP and CSTE share a common goal—to improve the capacity for state, jurisdictional, and local systems to use epidemiologic data effectively to guide practice. Connecting SEOWs to the CSTE network of epidemiologists, resources, and associational activities provides a mechanism to ensure the continuity of efforts to increase epidemiological capacity in substance abuse prevention over time.

SEOW members and stakeholders have had numerous opportunities to reflect on their experiences related to the core tasks during several SAMHSA/CSAP workshops and conferences convened since the inception of

the program. They have provided considerable feedback on the benefits resulting from the establishment and implementation of their SEOWs. Most of the value-added features they described fall within four broad categories:

- New/improved collaboration for data-related activities;
- New/improved access to data;
- Enhanced capacity to use data in substance abuse prevention planning, including increased use of data for decision-making; and
- Increased appreciation or support from state leadership.

### Improved Collaboration for Data-Related Activities

SEOW members themselves have noted a variety of benefits as a result of new partnerships forged as part of SEOW efforts. For example, one member reported that the SEOW allowed data experts (evaluators, survey researchers, epidemiologists) from around the state to meet and discuss their work. Many of these people did not know each other prior to being on the SEOW.

“SEOW meetings allow collaboration among state agencies, resulting in improved knowledge of ways to understand/collect/disseminate state/sub-state level data.”

Members have also voiced overwhelming acclaim for SEOWs’ impact on stimulating collaboration between and among other state-level organizations, often for the first time. For example, one member reported that the SEOW significantly increased the number of agencies involved and greatly improved collaboration between agencies. Those involved are represented by program staff or data staff, which has resulted in an improved understanding of the importance of their involvement in the SEOW.

This new or increased collaboration has brought a diversity of perspectives to the data-driven planning process, increased data sharing through formal and informal agreements, and increased collaboration among state agencies on non-SEOW tasks—even the production of specific data-related products. Interaction on SEOWs has helped overcome the disinclination that often exists among those working in public health to talk with people in other state departments or agencies such as transportation, crime control, and business and economic research. SEOWs have served as a pioneering effort to integrate substance abuse data collection efforts into one cohesive mechanism. For example, within the SEOW structure, data gatekeepers in key agencies, in both the private and public sectors, collaborate to collate, review, analyze, and disseminate information on substance abuse patterns and consequences. By providing a venue for periodic engagement, relationships among these data professionals are strengthened.

### New/Improved Access to Data

“In Montana, the epidemiological workgroup gives credibility to asking other divisions and departments for data. That helps people to not feel they are alone in asking for data.”

The establishment of SEOWs has resulted in access to new data sources and enhanced access to previously used data from earlier epidemiological efforts. This has led to the use of new types of data for prevention planning as well as more complete utilization of data, assisted in part by Web-based sources provided through SAMHSA/CSAP. In addition, SEOWs have contributed to the identification of improved mechanisms for data sharing, including formal data-sharing agreements.

Increased access to data also has allowed SEOWs to identify gaps and limitations in existing data sources and to strategize about bridging those gaps by expanding data sources. For example, SEOWs have highlighted data access issues that were previously understood by a very small number of individuals. SAMHSA’s Strategic Prevention Framework promotes cooperation among various stakeholders, so gaining an understanding about data that stakeholders could provide and why they were not easily accessible helped close gaps in data availability.

SEOWs demonstrate that for effective prevention planning, state agencies cannot rely on data from a single organization to assess the status of problems related to substance abuse or MEB disorders. In reality, data across multiple systems (health, criminal justice, education) yield a fuller understanding of the consequences and effects of limited prevention efforts. For example, in one state, the directors of five state agencies (Human Services, Health, Education, Transportation, and Public Safety) that are involved in prevention and early intervention funding of services for youth and children approved the formation of a joint Data Sharing and Utilization Group. SEOW funding and leadership made it possible to develop that group, as well as a Web-based decision support system tool that has been used to centralize and query cross-agency data.

## Enhanced Capacity to Use Data in Substance Abuse Prevention Planning

In addition to increased access to more and better data, SEOWs have resulted in increased capacity to use those data for substance abuse prevention planning. The work of SEOWs as documented in Epi Profiles has been a basis for setting policy and program priorities. For example, one state reported that data in its Epi Profile are now used by various government and community groups in their grant applications and needs assessment activities. In fact, the Epi Profile was recognized as setting a new standard for the state, and is now considered as a key reference that guides program development and resource allocation for the various stakeholders active in the substance abuse prevention and early intervention field.

Another state reported that its SEOW supported the active monitoring of prevention data across the state. Monitoring the data increases data entry accuracy, so that the state now expects to be able to make stronger, more impactful data-based decisions for its substance abuse prevention practices and policies. SEOW efforts have resulted in a much wiser usage of prevention data in all decision-making. Instead of accepting whatever data may be available and not necessarily knowing what to do with those data, states can now collect data in a strategic way to help focus prevention efforts, learn when to alter those efforts, understand how much effort is being applied to a problem, determine whether the context for the problem behavior is being sufficiently altered, and collect other data that are more useful to effective prevention.

This enhanced data capacity at the state level has also been particularly useful in building capacity at the local level. SEOWs are working to provide local areas with community-level Epidemiological Profiles so they can successfully implement the five steps of the SPF. Local Epi Profiles help communities identify additional data that needs to be collected in their area to provide a better understanding of consequences related to substance abuse. In addition, they help communities understand the importance of using data for advancing decision-making.

## Increased Appreciation or Support From State Leadership

For a number of states, the formation and implementation of SEOWs resulted in increased recognition, appreciation, participation, and/or support from state leaders for data-driven decision-making. Some have also credited their SEOWs as a catalyst for leadership development.

“In Virginia, the Epi Profile was shared with [the] Governor and his Cabinet, leading to the launch of [a] statewide underage drinking prevention initiative.”

Examples include the formation of an interagency council for substance abuse prevention and treatment that is chaired by the lieutenant governor and the use of Epi Profiles by state leaders as a policymaking tool for substance abuse prevention. One state created a Legislative Task Force on Prevention to examine substance abuse prevention needs. It relies on the SEOW so that it can make data-driven decisions.

SEOWs have contributed to stronger organizational leadership as new directions and clear objectives are articulated internally and externally by the data. Preliminary efforts to expand the SEOW approach across disorders (i.e., mental health, developmental disorders, and substance abuse treatment) are an example of organization leadership that recognizes the longer-term benefits of such an effort. The SEOW process contributes to the development of

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strategies to strengthen leadership support for building connections with other human service, education, and law enforcement agencies to improve collaboration and data-driven prevention planning.

According to one SEOW member, the single most important result of the SEOW has been the ability to champion a research-based, theory-driven model of change and to systematically design a data “framework” that supports the model of change. It led to identification of a comprehensive data set to fit the model of change and collection of the right types of data. This specification was based on a greater understanding of the differences between data for planning, data for monitoring, and data for evaluation.

# Field Experiences of SEOWs

One particular benefit of the Virgin Islands (VI) SEOW was a data repository developed for substance abuse prevention planning. The VI SIG Prevention Advisory Council (PAC) used data to establish project priorities and target populations. In addition, the PAC and the SEOW presented prevention-related data to community members through several mechanisms, including a local television show and a community forum.

In South Carolina, the SEOW has impacted data-driven prevention planning at state and local levels primarily through the creation of state and county epidemiological profiles, which have helped identify substance abuse prevention priorities. The SEOW Data Dissemination Plan is based heavily upon dissemination of specialized data products for four alcohol, tobacco, and other drug priorities established in 2008. At the state level, the Department of Alcohol and Other Drug Abuse Services (DAODAS) urged 301 system agencies to consider county profile data as they drafted yearly updates of the tri-annual county plan, a required DAODAS deliverable. A notable county-level example is York County's use of county profile data to initiate a print media campaign to increase adherence by local retailers and residents to drinking-age laws.

The Red Lake Nation Epidemiological Outcomes Workgroup works in partnership with other programs on the reservation to get data that will help the nation better itself now and for future generations. In the second year of the SEOW grant, it made great strides in gathering data. Tribal programs that currently collect data have expressed a great interest in what the SEOW is doing and would like to contribute their data to the Red Lake Epi Profile. Furthermore, the Red Lake Tribal Grant Writing department has used the Epi Profile to apply for grants for the Red Lake Reservation.

Through a collaborative process, the Oklahoma SEOW has identified needs for improved substance abuse monitoring at state and local levels. For example, the group recently discussed the need for substance abuse data to be more widely available and in a user-friendly format. This is partially achieved through state and community profiles. In addition, the Oklahoma SEOW has identified data gaps that require monitoring in areas such as prescription drug abuse. The Oklahoma SEOW provides a valuable venue for collaboration to ensure that data gaps and data dissemination are improved for the state.

In North Dakota, the relationships built among data analysts from SEOW members representing different state agencies—such as the Attorney General's Office, Tax Department, and Departments of Transportation, Health, and Public Instruction—facilitate ongoing data sharing. In addition, SEOW members have gained a deeper understanding of each other's programs and their involvement with substance abuse prevention issues. As a result, data analysts and researchers no longer operate in a vacuum and benefit from sharing not only data with colleagues, but also processes and methodologies.

The Commonwealth of the Northern Mariana Islands (CNMI) SEOW has taken on the function of substance abuse data collection and dissemination through its Epi Profile. Furthermore, the CNMI SEOW has forged an aggressive public dissemination effort. As a result, the SEOW's data collection, management, and dissemination role is more visible to the community.

The Maryland SEOW created products that have made data relevant for prevention planning. These user-friendly documents are accessible to anyone interested in substance use prevention, and are targeted at varied audiences, including substance abuse prevention professionals, legislators, and laypeople. SEOW members paid special attention to increasing data capacity at the local level by educating and empowering county prevention coordinators in the use of Maryland SEOW data. This was achieved through training sessions on Maryland SEOW data and the production of documents. These activities have facilitated the use of data in prevention coordinators' grant writing



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and presentations, and have made it easier for the SEOW to distribute data to local policymakers and residents. Moreover, SEOW members have formed strong relationships with county prevention coordinators, who frequently contact the SEOW with special requests for additional data.

In Idaho, due to groundwork by the SEOW workgroup, state agencies have committed to the development of a comprehensive state prevention plan that allows Idaho to meet the needs of all residents. Among the most important collaboration formed is the one between the SEOW and Idaho Department of Health and Welfare (IDHW) executives. The collaboration has led to the executives having a more reliable and trusted source of data to support their decisions. The SEOW has developed a solid relationship with the Office of Drug Policy (ODP) and supplies that group with research and data to support its mission.

In Virginia, the SEOW Community Profile Database, with its epidemiology reports, provides detailed data that communities and state agencies need to assess needs, allocate resources, and plan and implement strategies to produce desired changes. It serves as a model of collaboration by state agencies to address a shared need through the use of highly cost-effective technology. Especially in times of fiscal stress, it is a tool to guide decisions using objective data. It provides easy access to data on the health and well-being of the Commonwealth and engages the citizens of Virginia in strengthening their communities and holding their government accountable. The Community Profile Database is an investment in infrastructure to meet the Commonwealth's critical data needs to strategically plan a robust future.

The interactive Web site developed by the Minnesota SEOW has greatly increased data access, making more than 70 substance abuse indicators available in one place. Users can create customized data tables, graphs, and charts and refine their search by topic, location, age, grade, gender, and race/ethnicity. Links take users directly to primary sources of data whenever possible. Multiple trainings offered by the Minnesota SEOW have increased epidemiological capacity throughout the state. In addition, resources and tip sheets are available in the Toolbox section of the Web site—examples include a glossary of epidemiological terms, explanations on how to calculate rates, ratios, and percentages, and a discussion of the differences between cause and correlation. Users can send questions about data sources, use, analysis, presentation, and more by clicking on the Contact Us link on the homepage of Substance Abuse in MN.

In the Federated States of Micronesia (FSM), the process of collating and analyzing the data provided opportunities for building data and epidemiologic capacity through two SEOW data workshops. These workshops enabled SEOW members to collectively identify substance abuse indicators, create a data inventory, establish an online communications group, select key data messages, and delineate a strategic plan for using the data to drive policy and programs for each of the FSM states. As a result of the strategic dissemination of data to policymakers in the state of Kosrae, a law was passed making the sales of single sticks of cigarettes illegal—an environmental strategy to reduce tobacco use that is a direct outcome of the SEOW's work. Already, the Epi Profile, the SEOW's major product, is being lauded by other programs in FSM and used to help guide grant writing, program development, and program planning for substance abuse prevention and youth services. In addition, the Epi Profile is playing a pivotal role in helping FSM meet its international reporting requirements as a Party to the International Framework Convention on Tobacco Control (FCTC).

# The Future of SEOWs

The progress, accomplishments, and other benefits that have emerged from SEOWs since 2004 demonstrate the importance of establishing ongoing state monitoring systems for substance abuse prevention. But this requires more than just access to quality data and epidemiological capacity. It also requires the involvement of individuals and organizations skilled in planning and communication. It requires the sharpening of information systems that can efficiently convey data and communication in a variety of directions. Lastly, it requires substance abuse and MEB disorders prevention policymakers, other key decision makers, and their partners to make individual and organizational commitments. As more states recognize the value of adopting an outcomes-based approach to substance abuse and MEB disorders prevention, support for securing these additional elements is anticipated to grow.

Once the epidemiological profiles have been produced, states must further develop ongoing monitoring and strategic planning systems for substance abuse prevention so they can continue to use data to set priorities and allocate resources. Ongoing training and technical assistance will be necessary to bring this work to fruition. To support SEOWs, SAMHSA provides annual updates of SEDS, multi-state workshops, one-on-one technical assistance, and additional opportunities for cross-site learning. SAMHSA supports technical assistance (TA) to the SEOWs as long as funds are available. Such activities are important not only for building the knowledge and skills of SEOWs, but also for ensuring their sustainability.

For SEOWs, sustainability means managing change and maintaining optimal group performance so that activities supporting outcomes-based prevention planning can continue (e.g., gathering and analyzing epidemiological data, setting substance abuse prevention priorities based on data, addressing gaps in data). Sustainability will likely involve:

- Realigning, restructuring, or expanding the role of SEOWs to strengthen their position within the state substance abuse and MEB disorders prevention infrastructure;
- Clarifying, promoting, and integrating the added value of data products and processes into the work of the individuals and organizations that use them; and
- Ensuring that financial sustainability, often the first notion associated with the general concept of sustainability, is not sought in a vacuum.

Managing change and maintaining optimal SEOW performance remain a top priority as new policy leadership arrives, as attrition and transition alters membership, and as the role of the SEOWs is institutionalized—all in an environment of profound resource constraints.

Key elements of successful SEOWs include:

**SEOW Structure:** Considerable variability exists among SEOWs. Some are based within the State Incentive Grant (SIG) agency and include among their membership the Single State Agency (SSA) administrator and others from within state administrative departments and agencies. Others are contracted out to universities and other organizations with expertise in epidemiology or comprise individuals from both within and outside government. Regardless of where the SEOW is housed, having clearly defined goals and roles for the SEOW and its members has been advantageous. Clear articulation of the role of the SEOW within the larger state substance abuse prevention system has been a particularly important facilitating factor.

SEOWs vary widely in size and organization, with memberships ranging from 8 to more than 40. While a few states have advocated a “less-is-more” approach to staffing, others have been flexible on SEOW size and structure.

Workgroups with large membership rosters typically organize into subcommittees, recognizing that some members cannot be as active as others. Therefore, it is imperative to recognize one size does not fit all when considering the SEOW structure. It is important also to recognize that “diversity matters.” The participation of particular types of members has been noted as especially beneficial for SEOWs—namely, data managers or data “gatekeepers” from key prevention agencies, members with expertise in and access to Geographic Information Systems (GIS) technology, and members with epidemiological expertise who are willing and able to “translate” epidemiological information for non-epidemiologically oriented members and decision makers, and representatives from high-risk counties or ethnicities. Today’s SEOWs comprise members from more than 40 different types of organizations including universities, the U.S. Department of Health and Human Services and the U.S. Department of Education, and numerous public safety, corrections, social services, and juvenile justice agencies and organizations at the community, state, and federal levels.

**Epidemiological expertise:** It is essential that states engage personnel who have both epidemiological expertise and time to attend to tasks in SEOW efforts. Several states have reported success in recruiting members as a result of high-quality collaborations with other agencies. To be effective, SEOWs need to have individuals with epidemiological data skills among their members.

**Structures and procedures for effective working relationships:** Good working relationships and communication between SEOWs and key decision makers and stakeholders are at the core of data-driven prevention planning. Because easy and efficient communication between and among these parties (e.g., Listservs, Web sites, e-mail) is critical, most SEOWs have instituted electronic communications mechanisms and outreach processes. SEOWs now specify timelines for their deliverables and for the achievement of milestones. They also typically meet less frequently but for longer periods of time, with quarterly SEOW meetings of two to three hours in duration (with food provided) being the current norm.

**Description of state data needs:** SEOWs are advised to address this task by considering all possible data sets and indicators that might inform decisions on substance abuse prevention planning, including Web-based databases made available to SEOWs by SAMHSA/CSAP. These databases include indicators that have been identified based on explicit criteria (e.g., data availability, reliability, how often data are collected, and relevance to substance use). In addition, SEOWs should consider the depth and breadth of available state-level data and create decision rules for data inclusion before beginning the collection process. Upon selecting appropriate indicators, SEOWs found that their ability to recommend comprehensive, detailed data collection/analysis plans was enhanced. Subsequent data-related efforts, such as establishing and maintaining simple matrices of available indicators and scheduling routine data updates, also improved.

**Collection and analysis of data on substance use and related consequences:** The experiences of SEOWs provide some practical suggestions for facilitating the development of useful data products, including Epi Profiles. These include: recruiting SEOW members who have access to data to help obtain it more quickly; aggregating multiple years of data when necessary to enable more precise rates and to minimize suppression of rate reporting; and creating a flow chart of decisions about data collection. Facilitators related to data analysis include: assigning data analysis to smaller subgroups of SEOW members who have analysis skills; displaying data in a variety of formats (e.g., charts, narratives); dividing consequence indicators by domain (e.g., mortality, morbidity, criminal justice, and education); and using Geographic Information Systems (GIS) technology to map data at the county level and reveal regional patterns of consumption and consequences that may help target prevention activities.

**Assistance in determining substance abuse prevention priorities based on epidemiologic data:** Prioritizing substance abuse prevention activities is perhaps the most delicate task SEOWs face, as it has implications for financial and other types of resource allocation. The inherent objectivity and transparency of a data-driven prioritization process has had an equalizing effect—attracting the interest of numerous individuals concerned with substance use and related consequences. Specifically, a priori specification of prioritization criteria has been cited

as a facilitating factor in securing state acceptance of SEOW prioritization recommendations, regardless of whether individual preferences were reflected in those decisions. SEOWs cited the following approaches as facilitating their involvement in the prioritization process:

- Address only what can be addressed well: Several early SEOWs reported that presenting fewer rather than more data-indicated priority problems to their state decision-making bodies often set the stage for effective planning. Subsequently, by focusing the attention of decision makers on the most pressing problems affecting the state, SEOWs have realized greater success in enabling decision makers to approach their task efficiently and ultimately select only one or two state priorities.
- Explain how SEOW data can be most influential in targeting and focusing available funds from all sources: Several early SEOWs reported greater success in influencing state prioritization processes when they presented the epidemiological data they examined, specifically data on priority state problems, to highlight those areas of the state most affected. This information not only assisted state decision makers in determining resource allocation, but also supported their efforts to justify and press for more support from funding entities.

**Assistance in identifying, collecting, and analyzing community-level data and in guiding their use in community prevention planning and resource allocation:** SEOWs have an important role to play in data-driven planning and decision-making at the community level. Specifically, they provide guidance on community-specific data analysis and its implications for community-level planning. A number of strategies have been identified to facilitate data-driven planning and decision-making. These include: having in place clearly defined substance abuse prevention priorities to assist communities in focusing their efforts; creating data-informed tools for communities (e.g., county fact sheets containing data tables, Geographic Information System (GIS) maps, and summary data); providing orientation and training to community-based data users, as appropriate and needed, which may necessitate providing expertise to help states develop technical assistance systems that support community-level change; and shifting the principle of data-driven substance abuse prevention from the state level to the community level by encouraging communities to embrace the use of data to refine their understanding of state priorities, strengthen local planning efforts, and/or identify their own priorities.

Additionally, a number of SEOWs have assisted with community-level data assessments to define state priorities at the local level and identify locally-based causal factors and intervening variables associated with those priorities (e.g., easy access to alcohol in commercial outlets as a contributor to high rates of underage drinking).

**Development of a system for ongoing monitoring of substance abuse-related data to track state progress in addressing prevention priorities and detecting substance abuse trends:** Regardless of the type of SEOW in a state, its role in data-guided decision-making applies broadly across all realms of substance abuse prevention—that is, the work of the SEOW is relevant to substance abuse planning beyond addressing state priorities in any year. Since the SEOW effort began, it has become increasingly clear that the data assessment and planning tasks associated with preparing Epi Profiles and SPF SIG state plans represent important but insufficient components of a comprehensive data-guided system for improving substance abuse prevention. A comprehensive system for using data to improve prevention practice must focus attention on the development and maintenance of a comprehensive monitoring system for tracking, communicating, and using data over time and across a broad spectrum of decision makers.

Critical steps toward achieving this objective include developing a state monitoring plan and devising a schedule for ongoing data products. In the future, SEOWs will likely undergo a period of regrouping as they embark on the next phases of implementation to include data on MEB disorders. That means formulating additional monitoring-related goals and products, recruiting members with additional and/or complementary skill sets, and institutionalizing data-driven substance abuse prevention activities at the state and community levels. A few states have already begun to engage in SEOW-recommended activities aimed at sustaining a data-driven approach to

substance abuse planning and decision-making. Some of these SEOWs have started developing online databases that enable users to run queries and reports, and others are planning updates to their state and local Epi Profiles. Several have also begun to forge new partnerships to address limitations and gaps in the data, gather feedback on their data products to improve their utility, and conduct trainings to strengthen the competencies of SEOW members/staff and others to use data effectively.

Implicit in the development of a state monitoring system is the goal of institutionalizing the practice of data-driven decision-making for substance abuse prevention. Building on what has been accomplished in states so far will require other important elements of sustainability such as: adapting and integrating relevant agencies' missions into that of the broader state infrastructure, such that these stakeholders can see the value and justify the importance of epidemiological data in prevention planning and decision-making; developing innovative data products that can be used by a variety of decision makers; and conducting data forecasting and special analyses to support policy development. These and other approaches may be critical in efforts to convince decision makers that investment in the monitoring of substance abuse data is a financially wise and necessary action.

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# Appendix A

## Resources for Moving Forward

### Examples of SEOW State Epidemiological Profiles

North Dakota Epidemiological Profile

<http://www.nd.gov/dhs/info/pubs/docs/mhsa/2009-epi-profile.pdf>

Iowa Substance Use Epidemiological Profile

[http://www.idph.state.ia.us/bh/common/pdf/substance\\_abuse/state\\_profile.pdf](http://www.idph.state.ia.us/bh/common/pdf/substance_abuse/state_profile.pdf)

### National Research Council and Institute of Medicine of the National Academies

*Preventing Mental, Emotional, and Behavioral Disorders Among Young People* (2009)

[http://www.nap.edu/catalog.php?record\\_id=12480](http://www.nap.edu/catalog.php?record_id=12480)

Mental health and substance use disorders among children, youth, and young adults are major threats to the health and well-being of younger populations that often carry over into adulthood. The costs of treatment for mental health and addictive disorders, which create an enormous burden on affected individuals, their families, and society, have stimulated increasing interest in prevention practices that can impede the onset or reduce the severity of the disorders. Prevention practices have emerged in a variety of settings, including programs, practices, and policies for selected at-risk populations (such as children and youth in the child welfare system), school-based interventions, interventions in primary care settings, and community services designed to address a broad array of mental health needs and populations. *Preventing Mental, Emotional, and Behavioral Disorders Among Young People* updates a 1994 Institute of Medicine book, *Reducing Risks for Mental Disorders*, focusing special attention on the research base and program experience with younger populations that have emerged since that time. This publication is valuable for researchers, such as those involved in prevention science, mental health, education, substance abuse, juvenile justice, health, and child and youth development, as well as policymakers in state and local mental health, substance abuse, welfare, education, and justice, who can use this updated information on the status of research and suggested directions for the field of mental health and prevention of disorders.

### National Institute on Drug Abuse's Community Epidemiology Workgroup

Established by the National Institute on Drug Abuse (NIDA) (<http://www.drugabuse.gov/nidahome.html>) in 1976, the Community Epidemiology Workgroup (CEWG) (<http://www.drugabuse.gov/about/organization/cewg/CEWGHome.html>) is a network of researchers from major metropolitan areas of the United States and selected foreign countries who meet semiannually to discuss the current epidemiology of drug abuse. The CEWG's primary mission is to provide ongoing community-level surveillance of drug abuse through analysis of quantitative and qualitative research data. Through this program, the CEWG provides current descriptive and analytical information regarding the nature and patterns of drug abuse, emerging trends, characteristics of vulnerable populations, and social and health consequences. The Web site includes recent CEWG meeting reports and a guide for *Assessing Drug Abuse Within and Across Communities: Community Epidemiology Surveillance Networks on Drug Abuse* (<http://www.drugabuse.gov/pubs/assessing/>).



# Appendix B

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