

EPIDEMIOLOGICAL WORKGROUP

Technical Assistance Toolkit

Final Draft

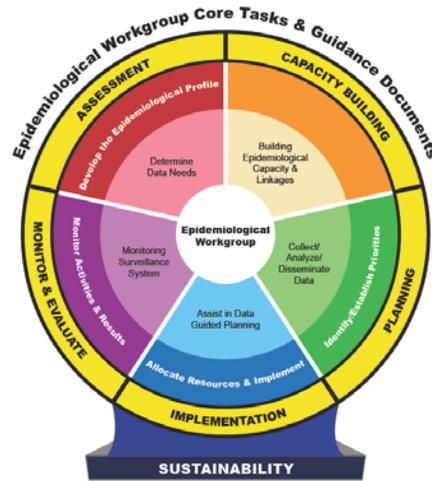
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Note: A new cohort (cohort IV) of Epidemiological Workgroups was initiated on July 1, 2009. Information on this new cohort is not reflected in these documents

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EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

CONTENTS

- **INTRODUCTION**

1. Foreword
2. Orientation to the Toolkit
3. State Epidemiological Workgroups: A Brief Overview

- **DEVELOP THE EPIDEMIOLOGICAL PROFILE**

1. Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups
2. Epidemiological Profile: Group Assessment
3. Epidemiological Profile: Individual Member Self-Assessment

- **IDENTIFY / ESTABLISH PRIORITIES**

1. Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups
2. Priority Setting: Group Assessment
3. Priority Setting: Individual Member Self-Assessment

- **ALLOCATE RESOURCES & IMPLEMENT**

1. Allocating Resources to Address State-Level Substance Abuse Prevention Priorities: Guidance for States
2. Resource Allocation: Group Assessment
3. Resource Allocation: Individual Member Self-Assessment

- **MONITOR ACTIVITIES & RESULTS**

1. Developing a Substance Abuse Monitoring System: Guidance for States
2. Monitoring System: Group Assessment

- **SUSTAINABILITY**

1. **Sustainability Planning Discussion Guide: 2008 Conference Highlights**
2. **Sustainability: Group Assessment**

- **LESSONS LEARNED**

1. **State Epidemiological Workgroups: Preliminary Lessons Learned**

- **ADDITIONAL RESOURCES**

1. **Glossary of Terms Used**
2. **List of Acronyms Used**
3. **Epidemiological Workgroup Technical Assistance Session Planning Template**
4. **Sample Epidemiological Workgroup Technical Assistance Session Feedback and Evaluation Form**
5. **Adding Tools to the Toolkit**
6. **Slide Sets:**
 - a. **Epidemiological Workgroups in Brief**
 - b. **Epidemiological Profile Development**
 - c. **Setting Prevention Priorities**
 - d. **Allocating Resources**
 - e. **Monitoring Systems**
 - f. **Sustainability**
 - g. **Epidemiological Workgroups: Challenges, Guidance, and Benefits**

- **APPENDIX A: Online Resources**

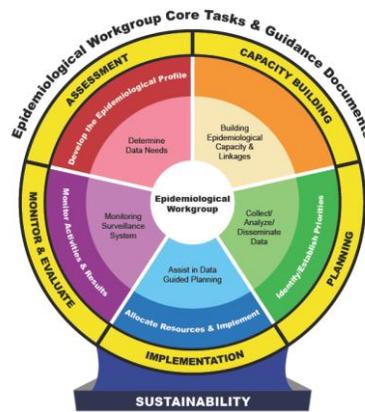
- **APPENDIX B: Contributions**



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

INTRODUCTION

1. Foreword
2. Orientation to the Toolkit
3. State Epidemiological Workgroups: A Brief Overview



EPIDEMIOLOGICAL WORKGROUP

Technical Assistance Toolkit

Foreword

Program Mission

The mission of the State Epidemiological Workgroup initiative is to move States¹ toward the integration of data about the nature and distribution of substance use and related consequences into ongoing assessment, planning, and monitoring decisions at the State and community levels. A State Epidemiological Workgroup (hereafter referred to as Epi Workgroup) is a network of people and organizations that bring analytical and other data competencies to substance abuse prevention. Epi Workgroups aim to bring systematic, analytical thinking about the causes and consequences of substance use to substance abuse prevention planning so that prevention resources are used effectively and efficiently.

The Strategic Prevention Framework State Incentive Grant Context

The Strategic Prevention Framework State Incentive Grants (SPF SIGs) are one of SAMHSA/CSAP’s infrastructure grant programs. SPF SIGs provide funding to implement the SPF in order to:

- Prevent the onset and reduce the progression of substance abuse, including childhood and underage drinking;
- Reduce substance abuse-related problems in communities, and;
- Build prevention capacity and infrastructure at the State and community levels.

¹ CSAP provides funding to support Epi Workgroups in the States, the District of Columbia, and Federally recognized Tribal and U.S. territories (hereafter collectively referred to as “States”).



The SPF itself is a five-step planning process to guide States and communities in their prevention activities. SPF SIG grantees are required to:

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

In most cases, Epi Workgroups are part of a SPF SIG initiative. These SPF SIG Epi Workgroups are called *State Epidemiology Workgroups* or *SEWs*. In areas that lack SPF SIG funding, CSAP provides contract funding to support Epi Workgroups. These contract Epi Workgroups are called *State Epidemiology Outcome Workgroups* or *SEOWs*. Some Epi Workgroups predated the SPF SIG initiative and adopted names of their own. Many of these early groups were supported by the National Institute on Drug Abuse and were called *Community Epidemiological Workgroups* or *CEWGs*. In the interest of editorial simplicity, this Guide refers to all as *Epi Workgroups*; however, this nomenclature should not obscure the differences that exist or existed among the various groups because at least some of these differences may be of importance to the technical assistance provider.

In addition to funding support, CSAP also provides technical assistance to support Epi Workgroup development and data work in the form of data resources, one-on-one interactions, and multi-State/other cross-State learning opportunities. As of 2009, a total of 65 CSAP-sponsored Epi Workgroups promote data-driven decision making in the substance abuse prevention systems developed within States, the District of Columbia, and Federally recognized Tribal and U.S. territories (hereafter referred to collectively as “States”).

Epi Workgroup Initiative Program Goals and Objectives

Overall, Epi Workgroups focus on using data to inform and enhance substance abuse prevention practice. More specifically, Epi Workgroups examine and interpret data and assess the implications of those data for prevention decisions. Epi Workgroups are most often engaged in work that supports SPF steps 1, 3, and 4 (Assessment, Planning, and Implementation) but also, to a lesser extent, support States on Steps 2 and 5 (Building Capacity and Evaluation).

Non-SPF SIG Epi Workgroups focus on building data capacity and infrastructure that will serve to strengthen data systems and competencies. These workgroups have been funded to focus on building infrastructure (e.g., via charters); developing State and community-level epidemiological profiles (via a focus on assessment, with implications for future prevention planning); addressing data gaps and other data system challenges related to describing, interpreting, and applying epidemiological data findings

(including National Outcome Measures or NOMs); and developing dissemination and sustainability plans—all to improve decisions about enhancing prevention infrastructure and practice.

Guided by the SPF steps and Epi Workgroup objectives/tasks, Technical Assistance (TA) provision to the Epi Workgroups has been focused on:

- Developing an Epi Workgroup structure and procedures for examining and using data for substance abuse prevention decision making; determining data needs to describe the magnitude and distribution of substance use and related consequences in a State; and gathering, analyzing, and summarizing implications from epidemiological and other data that describe need;
- Understanding how to identify, analyze, and interpret data, and communicate data implications to key stakeholders or transform data into useful information;
- Developing criteria and processes for defining and interpreting data-guided priority problems; using data to define planning models that guide funding allocations to target priorities;
- Identifying the intervening variables most closely associated with priority problems and supporting the selection of relevant, appropriate, and effective strategies for targeting these intervening variables and priority problems; and
- Developing data capacities and systems to use data in ongoing decision making.

Targeted Audiences

In their effort to use data to inform and enhance prevention practice, Epi Workgroups collaborate with and target multiple organizations, agencies, and individuals within the State whose activities affect substance abuse prevention decision making.

Stakeholders

Through their work, the Epi Workgroups enable agencies/organizations and individuals with the decision-making authority to use data to guide and improve substance use-related prevention. Such entities are key stakeholders. Substance use problems pervade a wide variety of domains (e.g., education, traffic safety, public safety, public health), so numerous types of State and local agencies and organizations are likely to hold relevant data and have an interest in mining data to inform planning.

Epi Workgroup membership varies, but typically includes representatives from substance abuse and public health agencies (including tobacco control), the criminal justice system, the education sector, tribal leaders, behavioral health professionals, researchers/statisticians, and others who are knowledgeable about the history and cultural diversity issues relevant to the context of substance use and abuse. Overall, Epi Workgroups consist of members who provide the necessary access to data and who have the competencies and skills needed to analyze and communicate the data implications and forge collaborations with agencies and State/community groups that have decision-making authority for substance abuse prevention.

Past and Future Training/Technical Assistance

Technical Assistance in the past was grounded in core tasks and milestones and included: (1) multi-State technical assistance workshops; (2) individual technical assistance in the form of telephone calls, email, and site visits/on-site training; (3) updates of data available on CSAP's State Epidemiological Data System (SEDS) Web site (<http://www.epidcc.samhsa.gov/>); (4) conference calls involving States

with similar questions and concerns; (5) audio calls focusing on specific data-related topics; (6) sample materials and outlines, technical issue “tip sheets,” and Guidance Documents; and (7) reviews of document deliverables (e.g., the State Data Gap Plan).

Ongoing training and TA will continue to build on efforts to develop and strengthen the Epi Workgroup structure, describe substance use and related consequences, identify and address data and other gaps in systems and human capacities, build monitoring systems, and apply data findings and implications to substance abuse prevention decisions. Overall, TA to the Epi Workgroups has been designed around a “learning community” concept, whereby States interact with and learn from each other. Future TA efforts will provide opportunities to broaden and strengthen the work of the Epi Workgroups; for instance, taking into account emerging trends, characteristics of vulnerable populations, and social and health consequences in order to improve outcomes.

Short-Term/Long-Term Goals

In the short term, Epi Workgroups and the TA supporting their work aim to enhance current understanding of substance use and related problems, guide identification of priority problems, and assist State decision makers in assessing the data-guided implications of targeting substance use prevention efforts and their potential for reducing substance use and related outcomes. In the long term, they aim to guide development and use of State data and data-monitoring systems that enable States to be effective and efficient in (a) measuring and monitoring substance use and related problems using National Outcome Measures (NOMs) or other measures; and (b) allocating resources to address priority problems.

Program Outlook and Challenges

Epi Workgroups and the TA provided to them will continue to focus on capacity building in the areas of data collection, analysis, and application for ongoing planning, implementation, and monitoring. They also will continue to focus on developing and updating the Epi Profiles for assessment of baseline and trends, understanding and applying data for planning decisions, developing and using data-monitoring systems, and integrating workgroup data efforts into comprehensive State and community planning to support strategic implementation activities.

States are now using data to identify needs and further identify the factors that contribute to substance abuse related problems that then can be targeted by prevention programming. States are also generating ideas for improving the scope, quality, and relevance of prevention efforts. State-level efforts continue to show improvement in addressing access and quality issues, variations in data and analytical capacities within and across States, and the infusion of a data-guided approach into their decision-making structures. The building of such a monitoring system, and the epidemiological capacity for using it, requires the upfront and ongoing involvement of State-level decision makers in substance abuse prevention.

Strategic Direction and Vision

Epi Workgroups are working with State prevention partners to build data systems and analytical capacities that position the States to reduce substance use and related problems. Building a monitoring system that can strengthen substance abuse prevention practice requires attention to people, information systems, and organizational commitment. The desired system must support data infrastructure as well as technical assistance; it must also provide support for data syntheses, interpretation, and application. Current and ongoing Epi Workgroup efforts focus on a multi-pronged approach that addresses improving the availability, quality, and access of existing data systems; enhancing human and

organizational resources and capacities for using them; and fostering collaborative relationships among State and community-based stakeholders to enhance prevention decision making.

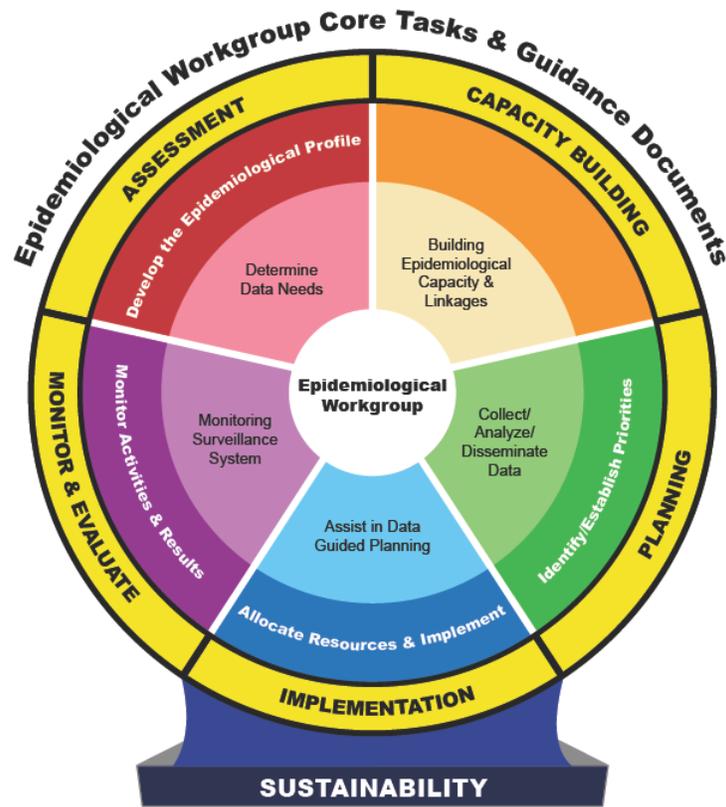
Using this Toolkit

The guidance documents contained in the Toolkit provide both the “how-to” knowledge and the story behind the work of the States during the past few years. Much of the TA provision during this time focused on activities related to the SPF steps concerning assessment, planning, and implementation and the Toolkit contents reflect this. Since Epi Workgroup activities did not focus on building capacity outside of the Workgroup itself or evaluating the effectiveness of prevention interventions, this toolkit does not provide guidance in those areas.²

This Toolkit should serve as a resource for these continued efforts, both for TA providers and for those working at the State and community levels. It should also serve as a guide to opportunities for enhancing the creativity and capacity of State efforts and for broadening horizons as the States continue their important work and move toward sustaining their work through ongoing monitoring of epidemiological data.

This Toolkit can be accessed online at <http://captus.samhsa.gov/home.cfm>. Several additional documents related to the Epi Workgroup tasks and deliverables discussed in this toolkit can also be accessed on this site. These additional documents include the *Epi Workgroup State-by-State Report* and samples of a State Epi Profile, a Community Epi Profile, a State Epi Data Gap Plan, and a State Epi Data Dissemination Plan.

² Within the SPF, capacity building includes community capacity building to implement the SPG SIG grant. Community capacity building falls outside of the Epi Workgroup Core Tasks. Evaluations are conducted by State SPF SIG evaluators.



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Orientation to the Toolkit

Description

This document provides an orientation to the Epidemiological Workgroup Technical Assistance Toolkit. The Toolkit is designed for use by CSAP staff and technical assistance (TA) providers who work with Epi Workgroups. After defining the Toolkit's purpose, it provides a brief summary of the Toolkit's organization and contents.

Possible Use(s)

TA facilitators should use this guide to become familiar with the overall scope of the Epi Workgroup project and the likely TA needs of States in the future.

Orientation to the Toolkit

This Toolkit is designed to serve as a repository of technical assistance (TA) tools and materials. TA teams can use these tools and materials to guide State Epidemiological Workgroups (hereafter, Epi Workgroups) as they work to: (1) develop State- and community-level Epidemiological Profiles (hereafter, Epi Profiles); (2) establish prevention priorities based on epidemiological data; (3) adequately allocate resources to address prevention priorities; (4) begin work toward the establishment of a data-monitoring system for substance abuse prevention; and (5) begin considering how best to sustaining the work of Epi Workgroups after SAMHSA/CSAP funding has ended.

The figure below displays the Epi Workgroup Core Tasks, key guidance documents that were developed based on the Core Tasks, and the Strategic Prevention Framework (SPF) steps as they relate to both. Note that the Core Tasks are interrelated and users of this toolkit may find some overlap of important information among the guidance documents. For instance, the *Developing a State Epidemiological Profile for Substance Abuse Prevention* Guidance Document contains information on indicators/dimensions that is also essential information for determining Statewide priorities and allocating resources. Similarly, in order to engage in effective data-guided prevention planning, one must align needs assessment, analyze key indicator data, and allocate resources based on such data. In sum, users of this Toolkit should remember that even though the information is presented in sequential order, the information in the sections is interrelated.



The Toolkit consists of eight sections:

- **INTRODUCTION** includes the Toolkit Foreword, which explains the State Epi Workgroup mission, goals, and objectives as well as SAMHSA/CSAP's Strategic Prevention Framework State Incentive Grant (SPF SIG) initiative and the SPF itself. This section also includes, in addition to this basic orientation information, the Guidance Document that summarizes the Epi Workgroup experience—*State Epidemiological Workgroups: A Brief Overview*.
- **DEVELOP THE EPIDEMIOLOGICAL PROFILE** consists of three tools that provide guidance related to the State Epi Profile. The first, *Developing a State Epidemiological Profile for Substance Abuse Prevention*, is the Guidance Document that presents information, focusing on four issues: identifying appropriate constructs and indicators; developing the Epi Profile; addressing technical challenges with data; and summarizing and presenting epidemiological data for ease of use in decision making. This section also includes two smaller documents: *Epi Profile: Group Assessment*, a tool designed to support the work of developing and updating Epi Profiles and that identifies 10 task dimensions Epi Workgroups should address; and *Epi Profile: Individual Member Self-Assessment*, which is designed to prepare individual Epi Workgroup members to communicate to others about the Epi Profile development process.
- **IDENTIFY AND ESTABLISH PRIORITIES** consists of three tools that support identifying prevention priorities based on Epi Profile data. The first, *Setting Priorities for Substance Abuse Prevention*, is the Guidance Document that provides guidance on interpreting and comparing different forms of epidemiological data in order to establish substance abuse problem priorities for SPF SIG States. It also details a method for developing a data-driven process for problem prioritization and provides examples of methods States have used. This section also includes two smaller documents. *Priority Setting: Group Assessment* is a tool that focuses on nine critical aspects of the priority-setting process. Designed for use in a group setting, this tool can serve as a relatively low-risk entry point for Epi Workgroups that need to identify and explore performance problems, estimate future needs, and resolve challenges. The third tool, *Priority Setting Individual Member Self-Assessment*, identifies the elements of knowledge or applied skill vis-à-vis the priority-setting process that should be evidenced by all Epi Workgroup members so that they may accurately communicate about the process to various decision makers and stakeholders.
- **ALLOCATE RESOURCES AND IMPLEMENT** includes three tools related to resource-allocation planning. The first, *Allocating Resources to Address State-Level Substance Abuse Priorities*, is the Guidance Document that describes methods for developing a data-driven process for allocating resources to address prevention priorities with the goal of using data to allocate *sufficient* resources to improve targeted health outcomes. This document describes four data-guided, resource-allocation planning models. It also provides specific examples of data-guided approaches that States have used for allocating resources, even when State statutes require open bidding. The second tool, *Resource Allocation: Group Assessment*, uses a checklist format to evaluate how well Epi Workgroups followed the guidance offered in the Guidance Document. The third, *Resource Allocation: Individual Member Self-Assessment*, is designed to prepare individual Workgroup members to communicate accurately about their group's resource-allocation planning process and methodology, and identify areas for which assistance or other support may be needed to strengthen understanding.

- **MONITOR ACTIVITIES AND RESULTS** contains two tools pertaining to the establishment of a State-level substance abuse monitoring system. The first tool, *Developing a State Substance Abuse Monitoring System*, is the Guidance Document that provides both a definition of a monitoring system for substance abuse prevention and a rationale explaining its value to States. This tool also describes the core components of a monitoring system and includes examples of how States have worked toward establishing their systems. Given that few Epi Workgroups have actually begun addressing monitoring system tasks, the second tool in this section, *Monitoring System: Group Assessment*, provides a speculative checklist to help Epi Workgroups focus on the 5 substance abuse monitoring system domains and the 17 subdomain elements pertaining to those domains.
- **SUSTAINABILITY** consists of two tools. The first is *Sustainability Discussion Guide (Workshop 2008)*, a brief document that captures the major presentation and discussion points made in the nine areas of sustainability planning addressed by participants at the June 2008 TA workshop titled *Sustaining Epidemiological Workgroup Structure, Function, and Contributions to Strengthen Substance Abuse Prevention Systems*. The second document, *Sustainability: Group Assessment*, covers seven theoretical and practical insights about sustainability in an action-plan format.
- **LESSONS LEARNED** consists of one tool, *State Epidemiological Workgroups: Preliminary Lessons Learned*. This document describes the knowledge gained through the processes of performing each of the six core Epi Workgroup tasks. It also describes barriers and facilitators to performing each task as well as the perceived benefits States may derive from Epi Workgroups' efforts to address these tasks.
- **ADDITIONAL RESOURCES** consists of six additional resources: (1) a Glossary of Terms; (2) a List of Acronyms Used; (3) a TA Session Planning Template; (4) a TA Session Feedback and Evaluation Form; (5) a form for documenting tool adaptations and additions to the Toolkit; and (6) a series of seven presentation slide sets that can be used to provide overviews each of the topics addressed in this Toolkit.

APPENDIX A contains links to online resources.

State Epidemiological Workgroups:

A Brief Overview



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
www.samhsa.gov

Foreword

All States, Jurisdictions, and several Tribal Entities (hereafter referred to as States) have received Federal funding from the Substance Abuse and Mental Health Services Administration, (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish an epidemiological workgroup. These epidemiological workgroups are a network of people and organizations that bring analytical and other data competencies to substance abuse prevention. 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. Their deliberate focus is on using data to inform and enhance prevention practice.

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 a epidemiological workgroups in all other States and Jurisdictions not receiving SPF SIG funds. These contract workgroups are called *State Epidemiology Outcome Workgroups* or *SEOWs*. In the interest of editorial simplicity, this document refers to both work group structures as *Epi Workgroups*. In both cases, the Epi Workgroup promotes data driven decision-making in the State substance abuse prevention system by bringing systematic data-driven thinking to guide effective and efficient use of prevention resources.

Such data driven decision-making necessitates the development of a State monitoring system for substance abuse. Such a system can help inform assessment (“*What do substance use and related consequences look like in the State?*”), planning (“*What are the current prevention priorities that emerge after needs assessment?*”), and monitoring/evaluation activities (“*How are we doing in our efforts to address these issues?*”) to enhance substance abuse prevention.

Within the Epi Workgroup effort, CSAP has defined a series of data driven activities to assist States further develop their State monitoring systems by:

- Developing a key set of indicators to describe the magnitude and distribution of substance related consequences and consumption patterns across the State (i.e., an epidemiological profile of the State).
- 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
- Developing a systematic, ongoing monitoring system of state substance-related consumption patterns consequences and to track progress on addressing prevention priorities, detect trends, and use such information to redirect resources if needed. Thus, the State epidemiological profile can become a “living document” rooted in the State’s substance monitoring system.

To assist States with these tasks, CSAP has developed several resources. The State Epidemiological Data System (SEDS) presents a preliminary set of constructs and indicators identified as relevant, important, and available for substance use prevention planning. SEDS can be found at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/). Five guidance documents also serve to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Developing a State Substance Abuse Monitoring System: Guidance for States

State Epidemiological Workgroups: Lessons Learned

TABLE OF CONTENTS

Foreword	i
Table of Contents	1
Introduction	2
State Epidemiological Workgroup Funding, Structure, and Function	2
State Epidemiological Workgroup Key Principles	6
State Epidemiological Workgroup Expectations	8
State Epidemiological Workgroup Products and Accomplishments	9
Early Benefits	11
Challenges	12
State Epidemiological Workgroups and the Future	13
Appendix: State Epidemiological Workgroup Tasks and Deliverables by SPF SIG Cohort or Epi Workgroup Contract Year	15

Introduction

The abuse of alcohol, tobacco, and other drugs contributes to a myriad of health and social problems. Through careful analysis of substance use patterns and its substantial morbidity, mortality and other social consequences, State and community agencies can more effectively and efficiently allocate resources to address these problems. Currently, however, few agencies systematically monitor the magnitude and patterns of substance use and related consequences. Most agencies have only limited data infrastructure and epidemiological capacities to build and conduct surveillance to adequately inform and strengthen substance abuse prevention efforts.

In response, the Substance Abuse and Mental Health Services Administration (SAMHSA) began funding an ambitious initiative in 2004 to help States, jurisdictions and tribal entities (hereafter referred to as States) collect and compile data related to drug and alcohol consumption patterns and related population-level consequences. Funded States were charged with forming Epidemiological Workgroups (Epi Workgroups) to carry out substance abuse-related data collection and analysis for use in substance abuse prevention planning. Epi Workgroups are a network of people and organizations that bring analytical and other data competencies to substance abuse prevention, and this initiative has led to advances in States' capacity to use substance-related data to conduct needs and resource assessments, produce State substance abuse consumption and consequence profiles, and engage in data-driven prevention planning.

This document was created to provide senior policymakers, administrators, States, and communities with a general overview of the Epi Workgroups, and it is based on a presentation prepared for senior SAMHSA/CSAP administrators. Although intended to serve as a synopsis of the work of the Epi Workgroups, it is also the first in a series of documents, the rest of which provide more detailed information about specific aspects of Epi Workgroup work and lessons learned. This document begins with a description of the funding, structure, and function of Epi Workgroups. It is followed by discussion of the key principles underlying their work and describes CSAP's expectations for the Epi Workgroups. Early benefits emerging from the Epi Workgroups and some of the challenges encountered are then presented. The document concludes with a discussion on institutionalizing the Epi Workgroups and an outcomes-based approach to substance abuse prevention.

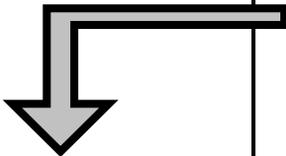
State Epidemiological Workgroup Funding, Structure, and Function

The Epi Workgroups are networks of agencies, organizations, and individuals with expertise about alcohol, tobacco, and other drug (ATOD) data and prevention issues. They conduct careful, systematic reviews and analyses of the data on the causes and consequences of substance use for the purpose of guiding prevention decision-making. Over time, they support the development of systems to monitor substance abuse and related consequences and use such data to drive effective and efficient use of prevention resources. **The primary purpose of the Epi Workgroups is to use epidemiological data to guide and enhance prevention practice.**

Epi Workgroups are supported through two funding mechanisms. Since 2004, the Epi Workgroups have been a component of Strategic Prevention Framework State Incentive Grants (SPF SIGs). These grants are five-year cooperative agreements between CSAP and selected States that are intended to promote adoption of the Strategic Prevention Framework for substance abuse prevention planning. The agreements require that the Epi Workgroups be

supported over the course of the project’s lifespan at a minimum support level of \$150,000 per year for States and \$100,000 for Jurisdictions and Tribal entities.¹ SPF SIG Epi Workgroups are called *State Epidemiological Workgroups* or *SEWs*.

Beginning in 2006, States that had not received SPF SIG funding received their own Epi Workgroup funding. These agreements are three-year contracts, providing \$200,000 per year for Epi Workgroup activity. (See Table 1.) Contract-based Epi Workgroups are called *State Epidemiological Outcome Workgroups* or *SEOWs*.

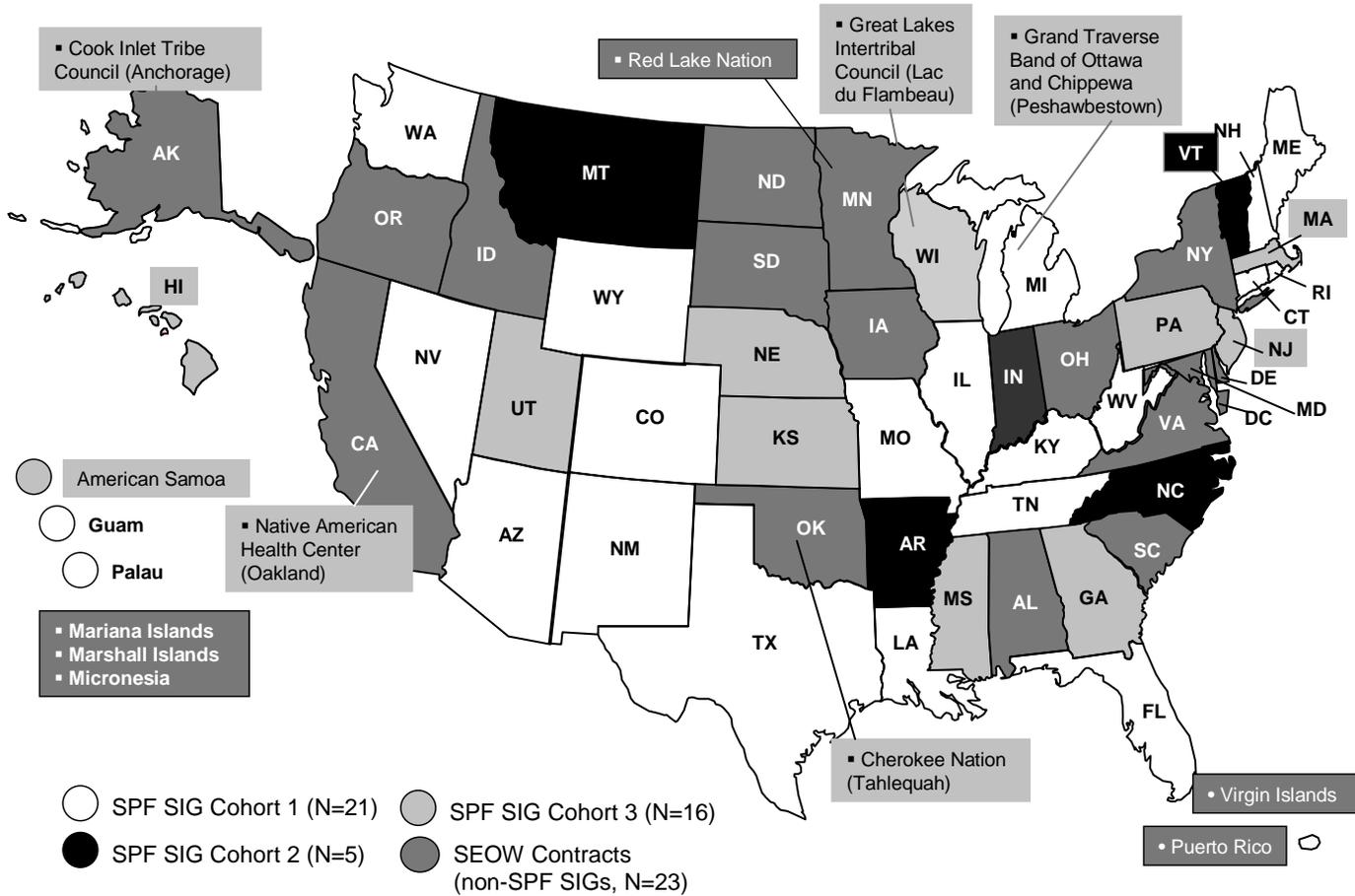
Table 1: State Epidemiological Workgroup Structures		
Date	SPF SIG Epi Workgroups (SEWs)	Epi Workgroup Contracts (SEOWs)
2004	21 (19 States, 2 Jurisdictions)	
2005	5 (States)	
2006 (Mar)		31 (27 States, 4 Jurisdictions)
2006 (Oct)	<div style="text-align: center;">  </div> 11 (10 States, 1 Jurisdictions) 5 new Tribes	Of these 31, 11 (10 States, 1 Jurisdiction) were converted to SPF SIG agreements in October 2006
2007		3 (2 Jurisdictions, 1 Tribe)
Totals (July 2008)	42	23

As of July 2008, 23 Epi Workgroups are funded through Epi Workgroup contracts and 42 are funded through SPF SIG grants. (See Figure 1)

¹ For more information on SPF SIG program, see <http://prevention.samhsa.gov/grants/sig.aspx>.

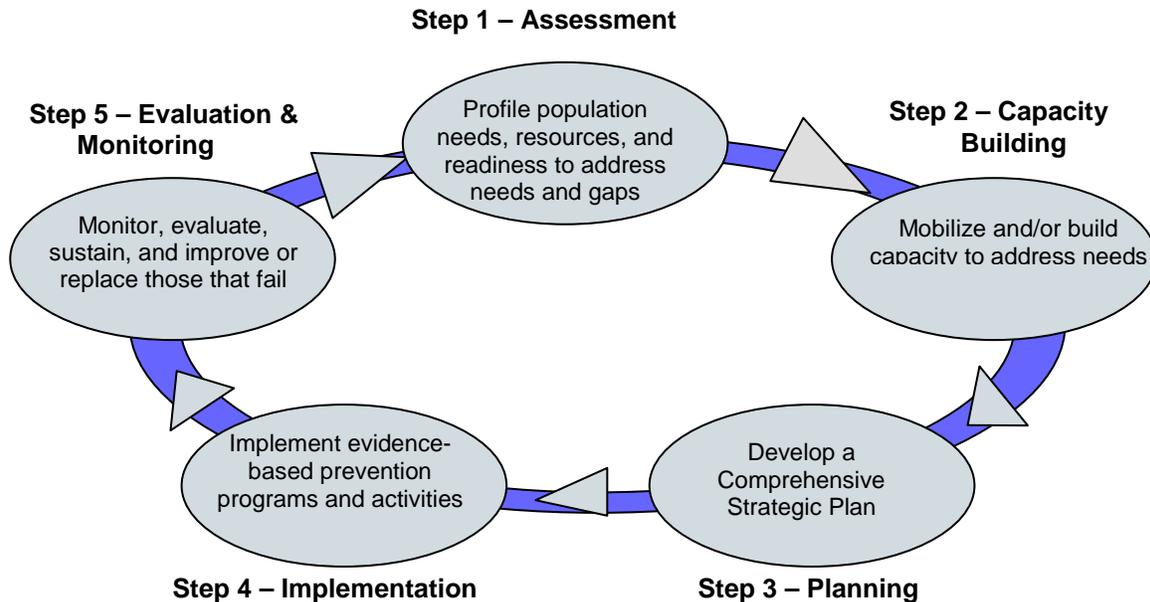
Figure 1

Epidemiological Workgroups, 2008 (N=65)



Guided by steps of the Strategic Prevention Framework, Epi Workgroups examine, interpret, and apply data to prevention decisions. (See Figure 2)

Figure 2: SAMHSA's Strategic Prevention Framework Implementation Steps



Through each of the SPF steps, Epi Workgroups provide support that is essential to the success of the projects:

1. In *Assessment*, Epi Workgroups collect, analyze, interpret a set of epidemiological data elements and describe substance-related consequences and consumption patterns in a epidemiological profile.
2. In *Capacity Building*, Epi Workgroups provide data and information to key stakeholders to mobilize and enhance State and community resources to address prevention priorities and may assist the State collect, analyze, and interpret prevention system capacity data.
3. In *Planning*, Epi Workgroups determine key substance-related problems (i.e., specific consequences or substance use patterns, target populations, geographic areas), and provide these findings to guide State decisions about prevention priorities and State allocation of prevention funds.
4. In *Implementation*, Epi Workgroups may work with the State and communities to determine strategies that are aligned with and effectively address identified priorities.
5. In *Evaluation*, Epi Workgroups conduct ongoing data collection and analysis to examine changes over time in substance-related problems and patterns of consumption and feed this information into ongoing State decisions about prevention priorities and resource allocation.

State Epidemiological Workgroup Key Principles

Three key principles have guided the development and functioning of Epi Workgroups:

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

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* among populations. Understanding the nature and extent of substance related problems is critical to identifying the underlying factors contributing to such problems (risk and protective/causal factors) 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 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 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 related consequences focuses on preventing health problems and promoting healthy living for whole populations of people (e.g., people who share a common characteristic such as residence in a common geographic region (e.g. county), age (e.g., children) or experience (e.g., pregnant women). Traditionally, substance abuse prevention has been more individual- or person-centered, reflecting its close association with substance abuse 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 in groups as a whole.

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 the consequences of substance use 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: What are the consequences of substance use? What substances are being used? By whom? How? Where?

State Epidemiological Data System (SEDS)

CSAP is making epidemiological data available to States for purposes of substance use prevention needs assessment, planning, and monitoring through the State Epidemiological Data System (SEDS) website. Many measures of substance use and related consequences exist at the National, State, and sub-State level. However, with limited time and resources for data analysis and interpretation, it is important to focus on those data for which there is strong evidence regarding their quality and usefulness for prevention decision making. SEDS presents a preliminary set of data elements identified as relevant and important to substance use prevention planning. SEDS makes data available to States that need it and guides data choices for States that have data. The data provided by SAMHSA are organized around an outcomes-based approach to prevention. Data available in the SEDS addresses key constructs and indicators by substance type (alcohol, tobacco, illicit), consequences (e.g., drug deaths, violent crime), and substance use (e.g., daily cigarette use, drinking and driving). The system includes data available from National sources only (e.g., YRBSS, FARS, UCR, NVSS, NSDUH), and provides downloadable zip files of State data for Epi Workgroups to use in their work. SEDS can be found at <http://www.epidcc.samhsa.gov/>.

EPI DCC - Windows Internet Explorer
http://www.epidcc.samhsa.gov/default.asp

United States Department of Health & Human Services
Substance Abuse & Mental Health Services Administration

Epi Home Background Indicator List Codebooks Data Feedback

State Epidemiological Data System (SEDS)

Welcome

This Web site makes epidemiological data available to States for purposes of substance use prevention needs assessment, planning, and monitoring. This site was created primarily as a resource for State Epidemiology Workgroups (SEWs) funded by CSAP in support of its Strategic Prevention Framework (SPF). The SPF provides a model to guide prevention decision making. The five critical steps of the SPF that support effective planning and decision making are:

- Creating a profile of needs and setting priorities
- Building capacity
- Planning prevention activities and funding allocations
- Selecting and implementing strategies
- Evaluating and monitoring SPF SIG activities

Many measures of substance use and related consequences exist at the national, State, and sub-State level. However, with limited time and resources for data analysis and interpretation, it is important to focus on those data for which there is strong evidence regarding their quality and usefulness for prevention decision making. The current data system presents a preliminary set of data elements identified as relevant and important to substance use prevention planning.

Users are strongly encouraged to review the information on this web site before downloading and using the data files provided. Use the links on the menu bar at the top of this page to access important information regarding the development and contents of the data system.

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State Epidemiological Workgroup Expectations

CSAP identified six core tasks (Tasks A through F below) that would result in the establishment and effective functioning of the Epi Workgroups:

- A) Develop a State-level structure that focuses on using data for decision making related to substance abuse prevention**
This task involves: 1) establishing a Statewide Epi Workgroup, 2) securing staff members with epidemiological expertise and time to perform Epi Workgroup tasks, and 3) creating structures and procedures that connect and foster working relationships between the Epi Workgroup and the larger State prevention system.
- B) Identify the types and scope of data needed to describe the magnitude and distribution of State-level substance use and related consequences across the lifespan.**
The task requires establishing a core set of substance-use and related consequence data indicators.
- C) Collect and analyze data on substance use and related consequences.**
This task requires creating a State epidemiological profile (Epi Profile) and/or other data products.
- D) Assist in setting substance abuse prevention priorities based on epidemiological data and outline how they inform State planning and resource allocations.²**
This task involves making recommendations for: 1) prioritization criteria, 2) the process for setting priorities according to the criteria, and 3) how to apply the results of the prioritization process. Epi Workgroups in SPF SIG States also are asked to make recommendations for State Prevention Plans.
- E) Assist in identifying, collecting, and analyzing community-level data and in determining the use of those data in community planning**
This task involves providing input and guidance for community-specific data analyses and considering the implications of those analyses for community planning.
- F) Develop a system for ongoing monitoring of substance abuse-related data to track the progress of efforts to address prevention priorities and for detecting trends.**
This task involves creating a State Substance Abuse Monitoring Plan and developing a schedule for ongoing data reports.

With these core tasks as a common backdrop, non-SPF SIG States were charged with a brief, yet demanding list of expectations for the first three years of operation, beginning with developing a charter for the Epi Workgroup and the completion of a State-level substance-related Epi Profile in the first year appendix. In Year 2, these States were expected to conduct a thorough analysis of data gaps, complete a community-level substance-related Epi Profile, and update the initial State profile. In their last contract year, Epi Workgroups are expected to update their State- and Community-level profiles and develop dissemination and sustainability plans.

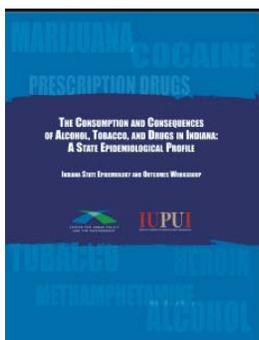
² States with Epi Workgroup contracts are not required to address Task D.

For States in which the Epi Workgroup operates in service to the SPF SIG initiative, expectations for the first two years of operation were geared toward setting a foundation for a successful implementation of the first three steps of the SPF model. Like non-SPF-SIG States, SPF SIG Epi Workgroups began by developing State-level Epi Profiles of substance-related consequences and consumption. Activities to follow included making data-guided recommendations (process and product) to determine State priorities for SPF SIG funds, using data to inform SPF SIG funding allocations to communities (e.g., identify high-need communities to address priorities), and using data to inform and develop SPF SIG strategic plans. The Appendix provides an overview of tasks and deliverables for both SPF SIG and non- SPF SIG Epi Workgroups.

State Epidemiological Workgroup Products & Accomplishments

Epi Workgroups have made impressive progress:

- All funded entities have developed a functional Epi Workgroup network of individuals and organizations with requisite data expertise and knowledge.
- Recognizing their value to substance abuse planning, several States have gone so far as to begin to institutionalize the Epi Workgroup into State decision-making by elevating the stature of the group by incorporating a gubernatorial attachment through a reporting requirement, recognition, or gubernatorial appointment.
- All Epi Workgroups have produced State-level Epi Profiles of substance-related consequences and consumption.
- Many Epi Workgroups have also developed one or more community-level Epi Profiles of substance related consequences and consumption.
- Other data-driven products include topic specific data reports to aid State decision-makers, such as the Arizona report on underage drinking and methamphetamine, and the identification and development of plans to address data gaps such as that developed in Arkansas. (See examples below.)



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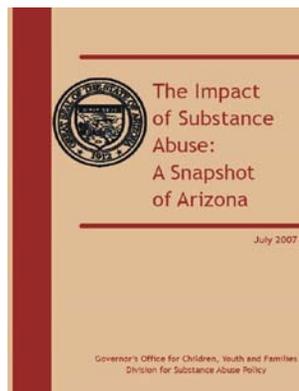


Table of Contents	
Executive Summary	1
Introduction	3
Arizona Demographics	3
Drug Trafficking	3
Alcohol	6
Underage Drinking: A National and Statewide Crisis	6
Binge Drinking among Individuals Between the ages of 18 and 25	11
Driving Under the Influence	12
Methamphetamine	15
Heroin	15
Treatment	17
Enforcement	21
Children's Cabinet	24
Emerging Issues	27
Conclusions	29
Substance Abuse Epidemiology Work Group Member Roster and Contact List	30
References	32



In light of the information contained in the Epi Profiles, SPF SIG Epi Workgroups developed data-based recommendations for SPF SIG priority problems and target populations. The Epi Workgroups' ability to articulate the processes by which they analyzed the data to arrive at priority problems was critical to the SPF advisory bodies' ability to engage in data-driven, decision-making processes. Using the epidemiological profiles and Epi Workgroup recommendations, policymakers and senior administrators in SPF SIG States selected priorities on which to focus their SPF efforts and resources. (See *Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups* for additional information regarding the mechanisms used to prioritize substance abuse issues in SPF SIG States.) Table 2 indicates SPF SIG priorities to date.

Table 2: SPF SIG Priority Areas as of June 2008* (34 Sites**)		
Alcohol	Underage use	AR, CO, KS, KY, MS, PA, RI, WA
	Underage use, young adult binge drinking	AZ, IN, ME, MO, MT, NE, NJ, PAL, TN, TX, VT
	Underage use, young/adult binge drinking	CT, FL, GLITC, GU, IL, NAHC, NH, UT, WY
	Alcohol-related motor vehicle crash fatalities	AR, AZ, FL, IL, LA, MI, MS, NC, NM, NV, PA, TX, WY
	Alcohol-related crime	LA, PA, WY
Tobacco	Tobacco use	GU, KY
Other Drugs	Inhalants	FL, KY
	Marijuana	ME, TN, VT
	Cocaine	IN, TN
	Methamphetamine	IN, KY, TN
	Non-medical prescription drugs	KY, ME
	Opioids	MA
	Youth illicit drugs (general)	AZ, NJ, UT, RI
<p>* Some Sites have more than one priority. ** Cherokee Nation & West Virginia have approved SPF SIG Plans, but are not included here as they identified "high need" locations defined by data for all substances rather than a priority substance.</p>		

Early Benefits

One notable benefit emerging from the Epi Workgroups is the level of increased communication between substance abuse prevention professionals and others who share concern and expertise in areas associated with substance abuse. Regular communication between substance abuse prevention policymakers, administrators, epidemiologists, and other public health professionals within the Epi Workgroup constitutes an important bridge across professional domains that can only benefit prevention practice in the future. In particular, the Epi Workgroups' focus on a public health approach has served to infuse epidemiologists and public health personnel into substance abuse prevention.

The establishment of the Epi Workgroups has also facilitated greater communication between individuals and agencies working at the State-level and those working at more local levels (e.g., region, county, city). Individuals engaged with State Epi Workgroups have also reached out to counterparts in other States. These types of communication 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 to planning and priority setting. Participation in the Epi Workgroups 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-related consequences and the factors that contribute to them and in the process, improved the alignment between resources to priority problems and between problems and evidence-based strategies to address them. Ultimately, this increased exposure to data-driven processes will provide a foundation for improvements in the scope, quality, and relevance of substance abuse prevention activities.

Indeed, in an effort to assist Epi Workgroups further develop their collaborations with public health and epidemiologists, CSAP partnered with the Council of State and Territorial Epidemiologists (CSTE) to co-sponsor an all-day workshop on substance abuse epidemiology to support and enhance substance abuse epidemiology infrastructure in States. CSTE is a professional association of over 1050 public health epidemiologists working in States, local health agencies, and Jurisdictions, and it works to establish more effective relationships among State and other health agencies.³ 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 the Epi Workgroups 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 over time.

³ For more information about CSTE see www.cste.org.

Challenges

Along with promising beginnings for the Epi Workgroups, Epi Workgroups have faced a host of common challenges. Some of these challenges relate to epidemiological capacities within States. There has been a range in expertise vis-à-vis epidemiology and/or in State infrastructure to support epidemiological data gathering and use. Many Epi Workgroups (and the State prevention systems) are reliant on contractors or data analysts with multiple responsibilities to provide expertise and guidance on the collection, analysis and interpretation of substance abuse data. Most States need to continue to build their epidemiological capacity in substance abuse epidemiology.

There have also been technical challenges related to data quality and data access issues. While the United States has the most developed data systems in the world to track substance use patterns and related consequences, much work is still required to generate data on all the pressing issues in substance abuse. In particular, limited data collection systems on serious consequences of substance use such as crime, child abuse, domestic violence, and employment and school problems are in their infancy. Equally difficult, data at levels lower than the State are less prevalent and generally less available than State-level data, making efforts to promote local data-driven decision-making more difficult. States are faced with these challenges in their efforts to institutionalize data-based monitoring and data-driven planning for substance abuse prevention, revealing the necessity of careful planning on next steps to develop and improve their substance abuse data systems.

Another set of challenges resides within the decision-making at the State level. Data in and of itself is not the only criteria used in making decision about prevention priorities, resource allocation and evidence-based strategies. Competing interests, such as politics and political opinion can sometimes be formidable drivers of decision-making within State systems. Related to this is pressure to respond to an unanticipated tragedy or event by redirecting resources to attend to a specific problem. A third competing interest relates to timing. For a variety of reasons decision-makers at the State level may find themselves with a directive to expend funding by a specific date or within a specified timeframe, and this may preclude deliberate consideration of data to guide how such funds will be allocated. Unfortunately, competing interests affect the extent to which States can use data to influence prevention decision-making.

A third set of challenges relate to sometimes seemingly competing prevention paradigms or models of prevention. An outcomes-based public health approach which focuses on changing whole populations can and should work hand in hand with other more individually-based prevention efforts. At times, in some States, these approaches are perceived to be in conflict with each other, limiting the effectiveness of using population level data to drive efforts to change outcomes at the group level. As the Epi Workgroup work continues, States are developing an increased understanding and appreciation for the power of a population-based approach to prevention and, consequently, developing comprehensive approaches to prevention.

State Epidemiological Workgroups and the Future

The Epi Workgroups have made considerable progress over the past few years, yet much work lies ahead. Once the epidemiological profiles have been produced, SPF SIG States must further develop ongoing monitoring and strategic planning systems for substance abuse prevention, so that 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 the Epi Workgroups, SAMHSA will provide annual updates of SEDS, multi-State workshops, one-on-one technical assistance, and additional opportunities for cross-site learning. SAMHSA will continue to support TA to the Epi Workgroups so long as funds are available. Such activities will be important not only for building knowledge and skills of the Epi Workgroups but ensuring their sustainability.

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

- Realigning, restructuring, or expanding the Epi Workgroup's role to strengthen its position within the State substance abuse 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;
- Ensuring that financial sustainability, often the first notion associated with the general concept of sustainability, is not sought in a vacuum.

Although TA provision has begun to steer Epi Workgroups toward consideration of sustainability issues, sustainability has not been a priority concern for many workgroups primarily due to the workgroup's stage of maturity (workgroups two years old or younger tend to be more focused on start-up concerns and completing deliverables). Sustainability will be a growing concern among all workgroups in the months and years to come.

Managing change and maintaining optimal group performance remain among the top challenges as new policy leadership arrives, as attrition and transition alters membership, and as the role of the Epi Workgroup itself is institutionalized—all in an environment of profound resource constraints. Additionally, TA providers and teams will themselves be challenged to help Epi Workgroups with their fundamental epidemiological work and with providing this assistance within and despite the limitations dictated by contextual circumstances.

The progress, accomplishments, and other benefits that have emerged from the Epi Workgroups – in spite of the challenges they have encountered – makes clear the importance of establishing ongoing state monitoring systems for substance abuse prevention. Such a task will require more than just access to quality data and epidemiological capacity. It will also require the involvement of individuals and organizations that are skilled in the areas of planning and communication. It will require the sharpening of information systems that can efficiently convey data and communication in a variety of directions. Lastly, it will require individual and organizational commitment of substance abuse 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 prevention, it is anticipated that support for securing these additional elements will continue to grow.

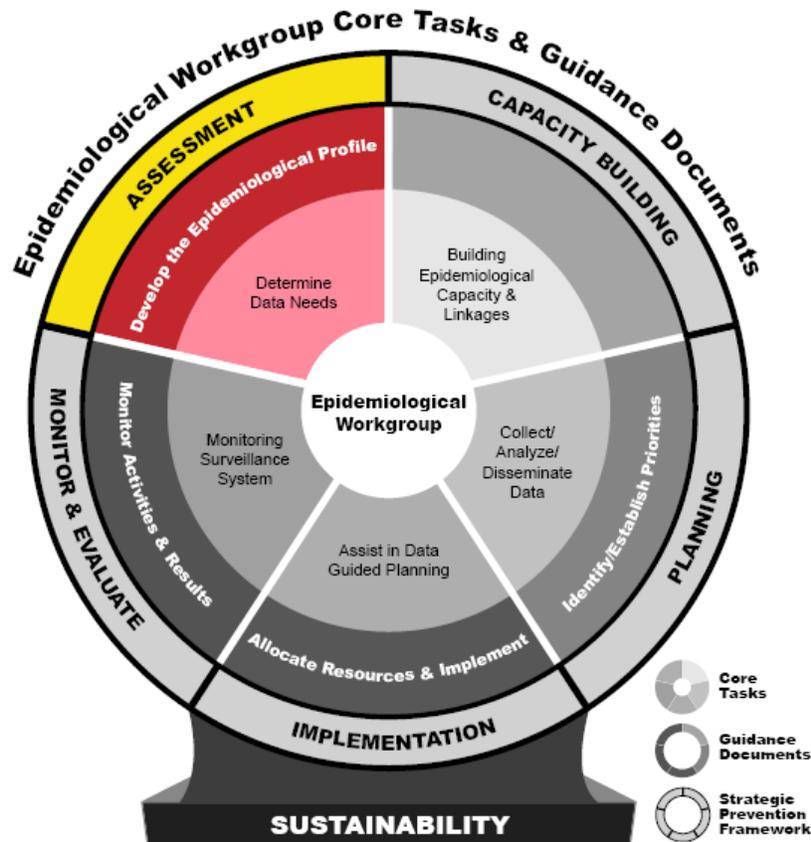
Appendix:
State Epidemiological Workgroup Tasks and Deliverables by SPF-SIG Cohort or Epi Workgroup Contract Year

TASKS					
Cooperative Agreements (SEWs)				Contracts (SEOWs)	
Tasks	SPF SIG Cohort I	SPF SIG Cohort II	SPF SIG Cohort III	Epi Contracts 2006	Epi Contracts 2007
A. Develop structure for using data in decision making.	Yes	Yes	Yes	N/A (No formal requirements; some SEOWs created such structures.)	N/A (No formal requirements; some SEOWs created such structures.)
B. Determine data needs to describe magnitude and distribution of use and related consequences.	Yes	Yes	Yes	Yes	Yes
C. Collect and analyze data.	Yes	Yes	Yes	Yes	Yes
D. Assist in determining priorities; outline implications for resource allocation.	Yes	Yes	Yes (Two Jurisdiction/Tribal plans are still in progress as of August 2009.)	N/A (No formal requirements. Some SEOWs are more involved than others in data driven prevention planning.)	N/A (No formal requirements; some SEOWs are more involved than others in data-driven prevention planning.)
E. Assist in identifying, collecting, and analyzing community-level data.	Yes (Only at SPF SIG selected community level; no community profile requirements.)	Yes (Only at SPF SIG selected community level; no community profile requirements.)	Yes (Only at SPF SIG selected community level; no community profile requirements.)	Yes	Yes
F. Develop systems for ongoing data and progress monitoring.	Yes (Both SEWs/SEOWs are in various stages for this objective)				

DELIVERABLES					
Cooperative Agreements (SEWs)				Contracts (SEOWs)	
Deliverables	SPF SIG Cohort I	SPF SIG Cohort II	SPF SIG Cohort III	Epi Contracts 2006	Epi Contracts 2007
Charter	N/A	N/A	N/A	Yes	Yes
Epi Profile	Yes (no formal requirement)	Yes (no formal requirement)	Yes (no formal requirement)	Yes	Yes
Profile Data	N/A	N/A	N/A	Yes (only for the Jurisdictions/ Tribes that did not use SEDS data or data from national sources)	Yes(only for the Jurisdictions/ Tribes that did not use SEDS data or data from national sources)
NOMs Report	N/A	N/A	N/A	Yes	Yes
Data Gap Plan	N/A	N/A	N/A	Yes	Yes
Community Epi Profiles	N/A	N/A	N/A	Yes	Yes
Charter Update	N/A	N/A	N/A	Yes	Yes
Epi Profile Update	N/A	N/A	N/A	Yes	Yes
NOMs Report Update	N/A	N/A	N/A	Yes	Yes
Dissemination Plan	N/A	N/A	N/A	Yes	Yes
Sustainability Plan	N/A	N/A	N/A	Yes	Yes
Data Gap Plan Update	N/A	N/A	N/A	Yes	Yes
Community Epi Profile Update	N/A	N/A	N/A	Yes	Yes



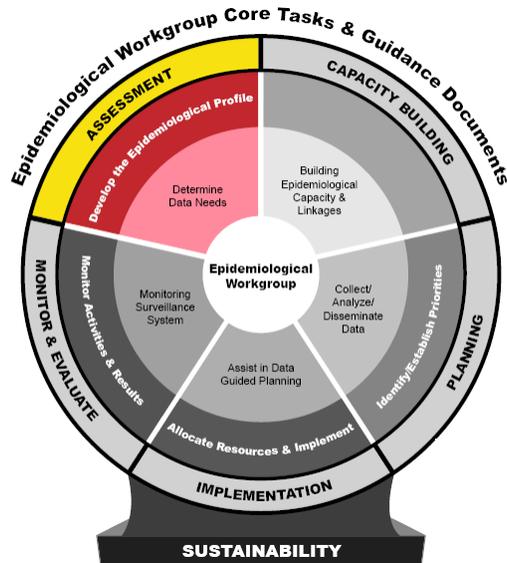
HHS Publication No. (SMA) XX-XXXX



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

DEVELOP THE EPIDEMIOLOGICAL PROFILE

1. *Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for Epidemiological Workgroups*
2. **Epidemiological Profile: Group Assessment**
3. **Epidemiological Profile: Individual Member Self-Assessment**



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Description

This document offers guidance for the development of the State Epidemiological Profile (hereafter “Epi Profile”). It presents technical information focusing on four issues: identifying appropriate constructs and indicators; developing an Epi Profile; addressing technical challenges with epidemiological data; and summarizing and presenting epidemiological data for ease of use in decision making.

This document further provides States with information on how to begin assembling data for their respective Epi Profiles and how to draw attention to the constructs and indicators available through the State Epidemiological Data System (SEDS). It also provides guidance on the various inclusion and exclusion criteria States can use when selecting State constructs and indicators.

Additionally, this document provides detailed guidance on assessing and comparing the values and patterns represented in epidemiological data by standard epidemiological dimensions (e.g., size/magnitude, trends over time, relative comparisons to national or set standards, seriousness/severity, etc.).

Possible Use(s)

This document may be useful for members of State Epidemiological Workgroups who are charged to address Core Task C: *Collect and analyze data on substance use and related consequences.*

Developing a State Epidemiological Profile for Substance Abuse Prevention:

Guidance for State Epidemiological Workgroups

FOREWORD

Data-driven decision making necessitates the development of State monitoring systems for substance abuse. Such systems can help inform assessment (“*What do substance use and related consequences look like in the State?*”), planning (“*What are the current prevention priorities that emerge after needs assessment?*”), and monitoring/evaluation activities (“*How are we doing in our efforts to address these issues?*”) to enhance substance abuse prevention.

Through its Epidemiological Workgroup (hereafter, Epi Workgroup) effort, CSAP has defined a series of data-driven activities to assist States in developing their own monitoring systems by:

- developing a key set of indicators to describe the magnitude and distribution of substance related consequences and consumption patterns across States;
- collecting, analyzing, interpreting, and communicating these data through the development of epidemiological profiles (hereafter, Epi Profiles);
- establishing prevention priorities for State resources based on data analyzed and interpreted through the profiling process;
- allocating resources to populations based on the established priorities; and
- developing a systematic, ongoing system of monitoring State substance-related consumption patterns and consequences and tracking States’ progress in addressing prevention priorities, detecting trends, and using data to redirect resources if needed.

To assist States with these tasks, CSAP has developed several resources. One of these, the State Epidemiological Data System (SEDS), provides a set of constructs and indicators identified as relevant, important, and available for preliminary substance use prevention planning. Information on the SEDS can be found at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/).

CSAP also provides five Guidance Documents to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Developing a State-level Substance Abuse Monitoring System: Guidance for States
State Epidemiological Workgroups: Preliminary Lessons Learned

TABLE OF CONTENTS

Foreword	i
Table of Contents	1
Introduction	2
Identifying Appropriate Constructs/Indicators	4
Selecting Appropriate Consequences: Using Substance-Attributable Fractions	6
Inclusion Criteria for Selecting SEDS Indicators	7
Supplementing SEDS Data with State Data Sources	8
Constructs and Indicators Not Included in SEDS	8
Developing an Epidemiological Profile	9
Organizing and Assessing Data: Applying Epidemiological Dimensions	11
Further Examination of the Data: Subgroup Analyses	15
Technical Issues	16
Summarizing and Presenting Epidemiological Data	20
Summary and Conclusion	23
Appendix: Tables	24
Table A1: List of SEDS Substance Abuse Prevention Constructs and Indicators	25
Table A2: Indicators Currently Under Consideration for Inclusion in SEDS	29
Table A3: Indicators Available From National Sources Not Included in SEDS	30
Table A4: Constructs Without National Data Sources for State-Level Indicators	32
Table A5: List of Acronyms Used for Data Sources	35

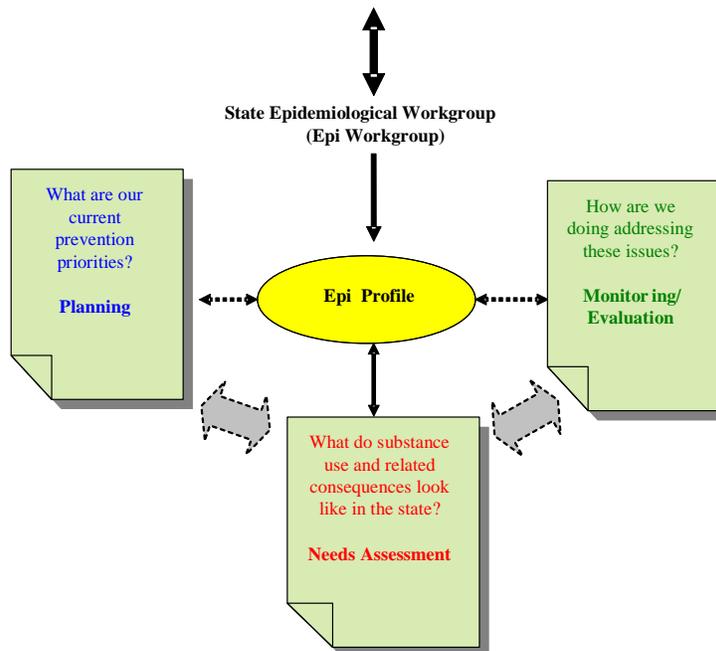
Introduction

Data-driven decision making for substance abuse prevention in States should begin with a general, data-based understanding of the patterns of substance use and related consequences, as provided in each State’s Epidemiological Profile (Epi Profile). This document provides guidance to States regarding the development of these profiles, which describe substance abuse and its consequences at the State and community levels. The principle guiding Epi Profile development is that having access to accurate and organized data on these topics will enhance prevention planning and resource allocation decisions and thereby maximize the overall effectiveness of State and local efforts to prevent and reduce substance abuse and its negative consequences. Consequently, each Epi Profile should achieve the following goals:

- summarize the nature, magnitude, and distribution of substance use and related consequences for the State; and
- organize the data in a manner that facilitates their interpretation and, ultimately, application.

The kind of epidemiological data analyses and summaries that should form the basis of a State monitoring system for substance abuse prevention efforts are described below (see **Figure 1**). Such data can help inform assessment (“*What do substance use and related consequences look like in the State?*”), planning (“*What are the current prevention priorities that emerge after needs assessment?*”), and monitoring/evaluation activities (“*How are we doing in our efforts to address these issues?*”) to enhance substance abuse prevention.

**Figure 1: Epidemiological Profile Context and Uses
(A Monitoring System)**



This guide provides suggestions to States and their Epi Workgroups in their efforts to identify and describe substance use and related consequences. It does not provide a specific template for States to follow in developing their individual Epi Profiles. States will vary in their preferred approaches to assessing, interpreting, and presenting epidemiological data and the implications of those data. As such, this guidance document aims to facilitate a thoughtful and deliberate process for the development of each State's Epi Profile and for a well-informed approach to the interpretation and application of such data for decision-making purposes.

The following discussion is organized around the following key topics related to the development of an Epi Profile:

Section II. Identifying Appropriate Constructs and Indicators

Constructs reflect the ways in which distinct aspects of consumption and consequences can be organized and identified, whereas indicators refer to the specific measures that may be used to assess those constructs empirically. This section discusses the distinction between constructs and indicators, and provides some recommendations on where to start when assembling Epi Profile data. Specifically, it provides an overview of SEDS constructs and indicators and of other inclusion/exclusion criteria that can be applied to select constructs and indicators for assessing substance use and related consequences.

Section III. Developing an Epidemiological Profile

To use data effectively, specific strategies must be employed to assess and compare the values and patterns represented in those data. This section provides an overview of commonly used descriptive/comparative epidemiological considerations (or "dimensions") used to display and interpret epidemiological data and understand the patterns of substance use and related problems in States. It also provides examples of the application of one or more epidemiological dimensions to compare different substance-related problems.

Section IV. Technical Issues

Epidemiological data often have features that require caution in their interpretation or warrant some type of adjustment in order to make patterns more interpretable. This section discusses a number of technical issues and limitations encountered when using epidemiological data and considers how Epi Workgroups may address them.

Section V. Summarizing and Presenting Epidemiological Data

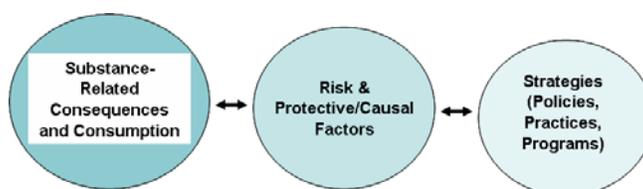
This section presents a summary of recommendations for effective presentation of Epi Profile data and suggests mechanism to promote use of such data in prevention decision making.

Identifying Appropriate Constructs/Indicators

Substance abuse prevention planning begins with a clear understanding of substance use and its chief consequences (see **Figure 2**).

In such an outcome-based approach, understanding the nature and extent of substance use and related problems (consumption and consequences) is critical for determining prevention priorities and for aligning relevant and effective strategies to address them. CSAP recommends that State Epi Profiles focus predominantly on substance use and related consequences as the first step in developing an outcomes-based approach to prevention.¹

Figure 2: Outcomes-Based Prevention



CONSUMPTION:

Consumption is defined as the use and high-risk use of alcohol, tobacco, and drugs.

Consumption includes patterns of use of these substances, including initiation of use, regular or typical use, and high-risk use.

CONSEQUENCES:

Substance-related consequences are defined as adverse social, health, and safety consequences associated with alcohol, tobacco, or drug use. Consequences include mortality, morbidity, and other undesired events for which these substances clearly and consistently are involved. Although a specific substance may not be the single cause of the consequence, scientific evidence must support a link to alcohol, tobacco, and/or drugs as a contributing factor to the consequence.

Each of the two major groupings (consumption and consequences), can be broken down into discrete categories or prevention-related constructs for each of the three major substance types—alcohol, tobacco, and drugs. The constructs provide a way to conceptualize and organize key types of consumption patterns and consequences. For example, with respect to alcohol,

¹ Focusing on consumption and consequences does not by any means undermine the importance of measuring and understanding causal factors that lead to substance abuse and substance abuse-related consequences. Understanding the factors that contribute to substance use and related problems (also referred to as “intervening variables or “risk and protective factors”) is the logical next step after a State has developed a full understanding of the substance use patterns and consequences it seeks to address. This clarification is significant, especially for SPF SIG States that, upon identifying priority problems, will continue in their State and community strategic planning efforts to identify such factors along with appropriate and effective strategies to target them and reduce their consequences.

constructs related to consequences include mortality and crime, while constructs related to consumption patterns include current binge drinking and age of initial use. For each construct, one or more specific data measures (or indicators) are used to assess and quantify the prevention-related constructs. Indicator data are collected and maintained by various community and government organizations.

Numerous constructs and indicators for substance use and related consequences exist at the national, State, and sub-State level. Assembling and interpreting *all* of the available prevention-relevant data, however, would be an overwhelming challenge. Starting with a set of key constructs can assist States in organizing and narrowing their search for data relevant to the particular decisions they must make. Experience suggests that States should be guided in this process by what they want to know rather than starting with an inventory of all the data they have—that is, States should not let the *existence* of data drive decisions about which problems they should focus on. *Instead, they should first specify the constructs of real interest, then identify the indicators that are available to measure those constructs.*

Given limited time and resources for data analysis and interpretation, it is important that Epi Workgroups focus on those constructs and indicators that will prove most useful for prevention decision making. It is therefore important that the indicators selected for inclusion in each Epi Profile be valid and reliable measures of the constructs they are intended to reflect. With respect to consequences, this means focusing as well on constructs for which strong research evidence exists regarding the causal influence of substance use.

An Important Resource: The State Epidemiological Data System (SEDS) Website

SAMHSA/CSAP developed the SEDS to support the work of epidemiological workgroups and State substance abuse prevention agencies. SEDS information can be found online at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/). The SEDS website presents a preliminary set of constructs and indicators identified as relevant, important, and available for substance use prevention planning. It also provides detailed information about background and criteria for evaluating constructs/indicators to assess their utility in needs assessment and State prevention planning. This site provides States with online access to the indicators identified at the State and, when available, county level. Constructs currently available on the SEDS website are listed in **Table 1** below. Most consequence data is available at the national, State, and county level.

Table 1: SEDS Constructs		
Substance Type	Consequences	Consumption
Alcohol	Alcohol-related mortality Motor vehicle crashes Alcohol-related crime Dependence or abuse	Current use Current binge drinking Heavy drinking Age of initial use Drinking and driving Alcohol consumption during pregnancy Per-capita sales
Tobacco	Tobacco-related mortality	Current use Daily use Age of initial use Smoking during pregnancy Per-capita sales
Drugs	Drug-related mortality Drug-related crime Dependence or abuse	Current use Lifetime use Age of first use

Selecting Appropriate Consequences: Using Substance-Attributable Fractions (SAFs)

All of the consequence-related constructs included in SEDS are associated with substance use. However, the extent to which substance use is implicated causally in the different consequences varies and can be quantified using SAFs, which are research-based estimates of the impact of substance use, especially of the negative consequences of such use, on public health.

As with many other complex behaviors, substance-related outcomes are multi-causal. Attributable fractions provide an estimate of the proportion of a consequence that is attributable to substance use. The documentation available on the SEDS website includes estimates, when available, of SAFs for each consequence described in the SEDS data. Some of the resources for measuring SAFs by substance type are discussed below.

Alcohol: The National Center for Chronic Disease Prevention and Health Promotion at the U.S. Centers for Disease Control and Prevention (CDC) hosts a website focusing on alcohol-related disease impact (ARDI; <http://apps.nccd.cdc.gov/ARDI/HomePage.aspx>). This site provides data on alcohol-attributable deaths, years of potential life lost, and alcohol-attributable fractions for the Nation as a whole as well as individual States.

Tobacco: The CDC also hosts a website that focuses on smoking-attributable mortality, morbidity, and economic costs (SAMMEC). The SAMMEC site provides SAFs data; data on smoking-attributable expenditures, deaths, and productivity losses; and years of

potential life lost nationwide, for individual States, and for user-defined populations ([://apps.nccd.cdc.gov/sammecc/](http://apps.nccd.cdc.gov/sammecc/)).

Drugs: Select attributable fraction estimates for drugs can be found in the National Institute on Drug Abuse (NIDA) report titled, “The Economic Costs of Alcohol and Drug Abuse in the United States-1992” (see, specifically, Tables 5.5, 5.6, and 6.8). ([://www.drugabuse.gov/economiccosts/index.html](http://www.drugabuse.gov/economiccosts/index.html)) .

Inclusion Criteria Used to Select SEDS Indicators

For each construct included in SEDS, one or more specific measures or indicators have been identified to quantify consumption and substance-related consequences. Unlike underlying constructs, indicators have specific data sources and precise definitions. Thus, whereas alcohol-related mortality is a relevant construct for monitoring trends associated with an important consequence of use, it does not provide precise guidance on how to measure this construct. However, several indicators are available that provide specific measures of this construct (e.g., annual incidence rate of deaths attributable to alcohol-related chronic liver disease, suicide, homicide, or crash fatalities). A complete listing of the SEDS constructs and indicators is provided in **Appendix Table A1**.

In order to decide which indicators to assess and how to monitor substance use and its related consequences at the Statewide level, States first must establish a set of criteria. The following are the key inclusion criteria used to chose SEDS indicators:

- **Availability** – The data should be readily available and accessible. The measure must be available in disaggregated form at the State level (or lower geographic level).
- **Validity** – The measure must meet basic criteria for validity. That is, research-based evidence must exist to show that the indicator accurately measures the specific construct and yields a true snapshot of the phenomenon at the time of assessment.
- **Consistency** – The measure must be consistent. That is, the method or means of collecting and organizing data should be relatively unchanged over time such that the method of measurement is the same from time i to time $i+1$. Alternatively, if the method of measurement has changed, sound studies or data should exist that determine and allow adjustment for differences resulting from data collection changes.
- **Periodic collection over at least three to five past years** – The measure should be available for the past three to five past years, preferably on an annual or least biennial basis. This enables the State to determine not only the level of an indicator but also its trends.
- **Sensitivity** – For monitoring, the measure must be sufficiently sensitive to detect change over time that might be associated with changes in substance use.

Supplementing SEDS Data with Additional Data from State Sources

SEDS includes only data available from national sources that cover most or all States and that provide data disaggregated down to the State level at least. States will no doubt vary in their approaches toward selecting constructs and indicators depending upon their data availability and substance abuse prevention needs. Due to some limitations in the availability of measures from national data sources, States may choose to identify additional constructs and indicators relevant to substance abuse prevention and for which appropriate data from within the State are available.

States are encouraged to begin with the constructs and indicators available in SEDS and then to use other State-level data if necessary to supplement SEDS. Decisions to use these additional constructs and indicators should be guided by a careful consideration of how well the data meet reasonable standards for validity, periodicity, consistency, sensitivity, and/or other criteria established by the State.

Some indicators' estimates might be available from more than one source. For example, alcohol use among high school students may be estimated from a State specific survey, the Youth Risk Behavior Surveillance System (YRBSS), and the National Survey on Drug Use and Health (NSDUH; formerly called the National Household Survey on Drug Abuse or NHSDA). However, due to sampling error and/or various methodological differences, the survey estimates drawn from the same underlying population may not be identical. Epi Workgroups will need to choose which estimates best meet their criteria for validity and consistency to identify the best source for data used in their Epi Profiles.

Constructs and Indicators Not Included in SEDS

It is especially important to note that concerns regarding validity eliminated some indicators from SEDS that have sometimes been used in substance abuse prevention needs assessment efforts. For example, indicators that are based on provision of services (e.g., drug treatment admission rates) or enforcement of laws (e.g., DUI arrest rates) can be heavily influenced by resources (e.g., funding, staff/personnel) and other administrative or institutional factors. As such, these "response" indicators may reflect the level of resources and attention devoted to addressing a problem more than the underlying magnitude of the problem itself. For this reason, these types of indicators were not included in SEDS. Any State that elects to include such indicators in its profile should do so cautiously, noting the limitations associated with their use, and describing as best as possible the manner in which those measures are affected by the service system involved.

More generally, reasons for not including certain indicators and data sources in SEDS can be consolidated into three categories:

1. Although a national data source was identified, either unresolved questions regarding the data or changes currently being implemented in the data collection system remain that mitigate against inclusion of the measure. Exploration of these sources is ongoing, and it is possible that measures in this group will be added to SEDS in the future (see **Appendix Table A2**).

2. Although a national source was identified for a specific construct and measure, significant concerns were identified regarding the validity or utility of the measure for prevention planning (see **Appendix Table A3**).
3. No national data source providing relevant data at the State level or below was identified for the construct (see **Appendix Table A4**).

Appendix tables A2, A3, and A4 list the constructs and measures that fall into each of these groups, respectively, and provide explanations regarding the decisions made about each measure. This information may be useful to Epi Workgroups as they consider additional data they may want to include in their State Epi Profiles that are not available in SEDS. In particular, Epi Workgroups are encouraged to be cautious about including any measures that have been considered for SEDS but were not included for various reasons (as listed in **Table A3**). On the other hand, **Table A4** identifies several potentially useful constructs for which data may be available from sources within the State.

Developing an Epidemiological Profile

When developing an Epi Profile, SAMHSA/CSAP encourages States to begin with State-level data, to focus on substance-related consequences and consumption and the relationship between them, and to look at these aspects across the lifespan. Several guiding principles are useful to this task, including the following:

- **Start with State-Level Estimates** – State Epi Profiles should start with an examination of State-level data. State-level data provide an overall, “big-picture” view of substance abuse consequences and consumption patterns in the State, and they are necessary for identifying and monitoring substance abuse trends for the State prevention system as a whole. By focusing first on Statewide patterns and trends, it may become more apparent which issues then warrant a more detailed examination, including analysis by demographic subgroups or specific locations (e.g., counties or communities) within the State. Focusing these more detailed analyses and explorations on key issues as observed at the State level can help keep the process more manageable and consistent with the overall needs of the State. Accuracy, stability, and reliability of indicator estimates also are directly proportional to the size of the sample population from which they are estimated. As such, Statewide data will usually provide reasonably stable estimates of the substance use patterns and consequences of interest. Local area estimates, on the other hand, tend to be less stable due to smaller numbers of persons or events on which they usually are based.

To some extent, Jurisdictions and Tribal Entities will have access to fewer “State-level” data sources than will the 50 States. Additionally, the data sources that are available to them are likely to be based on smaller samples or smaller numbers of events, and thus prevalence and incidence rates may be less precise or stable than those obtained for larger entities. Nonetheless, Jurisdictions and Tribal Entities are encouraged to begin their Epi Profile development by assembling data that reflect their entire populations, based on whatever data sources are available. For these populations, breaking down the

epidemiological data into smaller geographic units will be even less of a priority than for the 50 States, for the reasons mentioned in the preceding paragraph.

- **Understand the relationship between consequences and consumption – Epi**
Workgroups are encouraged to conduct their descriptive assessment processes in steps, by first looking at data regarding consequences and subsequently conducting assessments of consumption. Among the several reasons for concentrating first on substance-related consequences are the following:
 - First, starting with details about preventable consequences provides the most information possible to design effective prevention strategies. By focusing on consequences, the scope of prevention assessment and planning may be broadened beyond consumption to include a wider array of causal factors implicated in each problem. For example, efforts to address alcohol-related motor vehicle crashes or alcohol-related poisonings may share some causal/risk and protective factors and strategies but also present some causal/risk and protective factors that are unique to the consequence—and thereby necessitate strategies specific to the particular consequence.
 - Second, because consumption data are often self-reported, they may not always reflect substance abuse problems as accurately as measures of consequences. Starting with an examination of consequences might help focus in on more specific issues for prevention that might not be indicated by looking at consumption data alone.
 - Third, policy makers' attention often is focused on the consequences of substance abuse and its associated costs. Thus, to understand the outcomes better, it is important to begin the descriptive epidemiological assessment process by looking at these outcomes and then examining related consumption behaviors.

After developing a better understanding of substance-related consequences and their distribution in a State, the next step is to explore the consumption patterns that lead to these consequences. Examining consumption data is important for a number of reasons. Perhaps most obviously, consumption is the risk behavior that prevention experts seek to change, but even a single consumption pattern (e.g., binge drinking) often results in multiple consequences. Prevention experts must also consider that not all substance use necessarily leads to negative consequences (e.g., a drink a day for persons in low-risk groups) and thus may not reflect outcomes on which prevention efforts need to focus. Finally, reliable and valid data are not always available on all substance-related consequences.

The relationships between consequences and consumption patterns are often complex and require expertise to understand. This is particularly the case for many substance-related problems that are multi-causal in nature, with numerous other factors contributing to the problem in addition to substance use. For example, although alcohol consumption is associated with violent crime, many other factors are also implicated; and the influence of

alcohol is difficult to disentangle from the effects of other factors. Other complexities include time lags, as some consumption patterns lead to consequences almost instantly (e.g., alcohol-related motor vehicle crash after drinking and driving), while others (e.g., cigarette smoking leading to lung cancer) take longer to manifest.

Using a sequential approach to prevention planning and assessment—that is, examining adverse consequences and subsequently their associated use patterns—keeps these relationships in mind and organizes descriptive inquiry for understanding them. Additionally, it helps keep the focus on consumption patterns that cause negative consequences.

- **Focus on the lifespan** – SAMHSA/CSAP recommends that States examine the distribution of substance use and related consequences across the lifespan. The consequences of substance use and associated patterns of use vary substantially across age groups. Whenever possible, disaggregating the data by broad age groups (e.g., youth, young adults, adults) is highly recommended. Prevention systems need to be equipped to understand and respond to issues arising across the lifespan.

Organizing and Assessing Data: Applying Epidemiological Dimensions

One of the lessons learned from States' experiences with empirically based prevention needs assessments is that having data does not automatically lead to maximally effective prevention planning. Deliberative strategies for presenting, interpreting, comparing, and synthesizing multiple indicators from different perspectives are required to translate empirical information into an understandable and meaningful epidemiological assessment.

Upon identifying key constructs and indicators regarding substance use and related consequences, a next logical step is to describe and draw inferences from the data using relevant epidemiological dimensions or parameters. This process of interpretation is one of the primary functions of the State Epi Profile.

Some of the more commonly used epidemiological dimensions are discussed below.

- **Size/Magnitude** – This epidemiological dimension explores the basic issue of addressing the size of the underlying problems in terms of occurrence. Magnitude can be described in terms of absolute numbers (e.g., total number of cases) or relative numbers that adjust for the underlying population size (e.g., percentages, incidence rates, prevalence rates). When comparing the size/magnitude of different indicators with the same population (e.g., comparing various types of deaths attributable to substance abuse), absolute and relative measures will provide identical pictures of these indicators' magnitude differences. When comparing indicators across different populations, however, standardized measures like incidence/prevalence rates take into account the variability in population size and therefore allow for comparisons across variable population size groups (see the bullet on “relative comparisons” below).

- **Trends Over Time** – This dimension focuses on the extent to which a problem is increasing or decreasing. Examining time trends helps in detecting emerging or growing problems that may warrant increased attention.
- **Relative Comparisons** – Comparing individual State indicator estimates and trends to some standard reference population may provide additional information to assist in data interpretation. Some of the commonly used relative comparisons are:
 - *Comparison to National Rates:* Such comparisons provide a standard reference for comparing indicator values (or trends) for a specific substance use pattern or consequence relative to the Nation as a whole. Statewide indicator values that are substantially higher or increasing more rapidly than the national rate may identify problems that warrant priority attention.
 - *Comparison to Other States' Rates:* Some States may choose to compare their estimates to those of an adjacent or similar State to determine their relative ranking. This comparison may be useful for States where the demographic distribution is significantly different compared to the nation.
 - *Comparison to State Set Standard:* Comparing indicator estimates to an already existing standard (e.g., Healthy People 2010 Objectives) may be useful in assessing a State's progress for a specific substance use/consequence.
- **Seriousness/Severity** – Some consumption patterns or consequences are potentially more severe in nature and have greater impact on individuals and society than others. For instance, it is widely known that compared to any alcohol use in the past month, binge drinking places individuals at greater risk of serious consequences. Measures available to quantify and compare severity across different constructs/indicators include:
 - **Years of Potential Life Lost (YPLL):** YPLL is a statistic that measures the total number of life years lost owing to premature death in a population from a certain cause. YPLL represents the burden of mortality on younger age groups (who have more years of life to lose) compared to crude mortality rates, which reflect the burden of mortality among older age groups owing to their greater frequency of death.
 - **Quality-Adjusted Life Years (QALY) or Disability-Adjusted Life Years (DALY):** The QALY and DALY are health-gap measures that extend the concept of YPLL to include equivalent years of “healthy” life lost by virtue of being in states of poor health or disability. The DALY combines into one measure both the time lived with disability and the time lost due to premature mortality. The World Health Organization (WHO) offers a toolkit that can be used to estimate DALY loss from alcohol abuse.

- **Economic Cost** – Substance abuse affects the lives of millions of people in the U.S. each year; and billions of dollars in economic costs are associated with mortality, morbidity, health costs, and loss of productivity.

The epidemiological dimensions above each provide different types of information about substance abuse problems and different ways of assessing their importance. Examining measures by a single dimension reveals only one aspect of the problem. Sometimes the results from looking at different dimensions will result in similar conclusions; at other times, these results will vary across dimensions. Using multiple dimensions to examine a measure allows multiple perspectives to be considered and often facilitates a more complete understanding of the extent and importance of substance abuse issues. Some examples of applying multiple dimensions are provided in **Table 2** below:

Table 2: Applying Two Dimensions: Time Trends and National Comparisons

	Above US Rate	Similar to US Rate	Below US Rate
Rising 	<i>Priority 1</i> Inhalants, Binge Drinking	<i>Priority 2</i>	<i>Priority 3</i> Alcohol Use Among Youth
Stable 	<i>Priority 4</i> Marijuana use	<i>Priority 6</i>	<i>Priority 7</i>
Falling 	<i>Priority 5</i>	<i>Priority 8</i>	<i>Priority 9</i> Tobacco Use

The graphic depiction of the priorities assigned in Table 2 reflects consideration of two epidemiological dimensions: relative comparisons and time trends. For example, the rate for alcohol use among youth compares favorably to the national rate as noted in the table’s third column (“Below U.S. Rate”). If the comparison to the Nation as a whole were the only dimension examined, current youth alcohol use would be a low priority, but when the second dimension (time trend) is included, the increasing rate of use among young people elevates this problem to a relatively high-priority status.

Table 3: Applying Two Dimensions: Magnitude and Severity		
	Annual Number of Deaths	YPLL
Cirrhosis of the Liver (unspecified)	7,000	135,000

Suicide	7,000	235,000
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In **Table 3** above, the number of deaths related to each substance-related problem is similar, yet comparison of those data with YPLL data reveals the greater burden of premature death associated with suicide. This is because suicide more often occurs among young persons, resulting in a greater number of years of life lost; while the same absolute number of deaths due to cirrhosis of the liver occurs among older people and is associated with fewer years of life lost.

Table 4: Applying Three Dimensions: Adding Magnitude to Time Trends and State to National Comparisons (Rate Ratio)

	Number (%)	Trend	Rate Ratio
30-day Alcohol Use	55%		0.80
30-day Binge Drinking	22%		1.90
30-day Tobacco Use	51%		0.70
30-day Marijuana Use	9%	Same 	1.50
30-day Inhalant Use	1%		2.10

Note: This is just an illustrative example to show how prioritization works with three epidemiological dimensions.

As shown in **Table 3**, a two-dimensional review of data implications might suggest but one thing. Table 4 above presents the same data but adds a third epidemiological dimension—size/magnitude—to examine the set of indicators. In the case of 30-day binge drinking, all three dimensions are consistent in indicating that this is a high-priority problem: the percent of the population affected is relatively large (42%), the time trend is for increasing prevalence of this problem, and the rates are well above the national average (rate ratio >1). By comparison, when a third dimension (magnitude/size) is added to the examination of 30-day inhalant use (which ranked high for both national comparisons and trends in Table 3), inhalant use continues to rank high for national comparisons and trends but has the smallest number in terms of users.

Table 4 also shows how a relatively large volume of epidemiological data may be summarized in a manner that is useful for decision makers to interpret major patterns and trends efficiently. Other sections of the Epi Profile might present these data in a more detailed manner (e.g., by showing the actual time trend plots, facilitating visual comparisons using histograms and other graphical displays, providing sample sizes and breakdowns by demographic categories, etc.).

The examples discussed above reveal how applying different dimensions can yield various take-away messages about data and the underlying problems they describe. Epi Workgroups will need to determine the dimensions that are most relevant to the assessment of their particular State's substance abuse issues and perspectives of decision makers. The various dimensions identified herein all embody their own particular assumptions regarding why attention to a particular problem is warranted. Determining the relative importance of different underlying assumptions (e.g., deciding how much weight should be given to a recent upward trend in a problem compared to its magnitude relative to other problems) is still very much a subjective process.

Further Examination of the Data: Subgroup Analyses

Substance use and its related consequences may not be distributed equally across members of a population; instead, they may depend upon a variety of population characteristics such as demographics (e.g., age, gender, race/ethnicity, etc.), geography (e.g., region, county), and interactions among these characteristics. Conducting subgroup analyses on the data may reveal differential patterns across subgroups in substance use and related negative consequences that are important in determining where and how to direct prevention efforts. For instance, a consistent finding is that binge drinking and its related negative consequences are highest among young adult males (in the 18- to 25-year-old age group) as compared to the rest of the population. Such data breakdowns may be useful for documenting differences and subsequently for exploring implications for interventions.

Conducting subgroup analyses on all of the substance use and related consequences data can be an intimidating task and may distract attention from the overall state level picture. The extent of such inquiries should be informed by State context (e.g., population demographics). Subgroup estimates may also be subject to statistical power/stability limitations due to lower

population/sample size at subgroup level. For example, in a State with little diversity in terms of racial/ethnic groups, further analysis of race/ethnicity differences is unlikely to provide additional information for use in prevention planning.

Nonetheless, subgroup analyses may provide an important means of further understanding and interpreting the burden of substance use and consequences within the State. This may be particularly important in States that are both large and diverse, where State-level averages tend to obscure subpopulation or sub-State differences. Some of the commonly used population demographic characteristics for subgroup analyses are:

- **Age** – Age is a common and readily available characteristic for data analysis. Most of the SEDS datasets provide data by age with adequate population/sample sizes in each age group to draw meaningful conclusions about the distribution of substance use and its related consequences by age.
- **Gender** – Substance use and its related consequences can vary by gender. SEDS provides data by gender for the majority of its indicators.
- **Race/Ethnicity** – Substance use and its related consequences may vary across racial/ethnic subgroups. In some cases, data disaggregated by race/ethnicity may be useful for identifying segments of the population that are especially affected by a particular negative consequence. Race/ethnicity subgroup estimates are subject to availability. SEDS provides disaggregated race/ethnicity data for some of its indicators.
- **Region/County** – The distribution of substance use and its related consequences may vary by region/county. Regional distribution is often used by states for allocation of prevention resources. For most States, region/county may provide a manageable unit of analysis. Region/county subgroup estimates are subject to availability. SEDS provides data by county for all consequence indicators.

A Word of Caution

Through the SPF SIG and other funding directed at developing State Epi Workgroups, SAMHSA/CSAP anticipates that all States will develop State Epi Profiles. As these profiles are developed, they are often made available on SAMHSA/CSAP's website and through other dissemination mechanisms, thus providing opportunities for idea sharing with regard to Profile construction techniques. States are strongly encouraged, however, to fully review and understand the context and purpose of each document before adopting components of any profile for use in their State. In particular, Epi Profiles developed under SPF SIG funding may represent a data summary for a particular stage in the SPF SIG decision-making process, but might not represent a comprehensive State-level profile as described in this document.

Technical Issues

Epi Workgroups may encounter a number of technical issues and limitations as their data work unfolds. How these issues are addressed may influence the interpretation of the data and subsequent planning decisions that are made based on those interpretations. The following is a summary of the more common and important technical issues that likely will need to be considered and strategies for addressing them:

Rates Versus Absolute Numbers

Nearly all of the recommended SEDS indicators are defined as either incidence or prevalence rates; however, there are numerous reasons why alternative definitions of indicators for some constructs may be necessary or desirable in some circumstances. For example, standardization by population size (e.g., number affected per 100,000 population) clearly facilitates relative comparisons across different geographic units and populations or subpopulations by identifying areas or groups where levels of problems or behaviors are atypically high in ways that cannot be explained simply by differences in population size. Depending on how these needs-assessment data are to be used and the overall goals of the initiatives they are designed to support, it may also be useful to know the absolute level of a certain problem in terms of sheer numbers and to compare those numbers across geographic units or population subgroups. A very large county, for example, that has only an average or even lower-than-average rate of a specific problem most likely may still contribute much more of the overall burden from that problem to the State than would a very small county with a high rate. This seemingly obvious point can sometimes be overlooked in needs-assessment studies conducted by researchers who are used to adjusting for differences in population size. For planning and resource allocation decisions, the absolute magnitude of a particular problem or consequence across planning units may still be a fundamentally important consideration.

Small Numbers

Drawing conclusions based on small numbers, whether they come from a sample population or a full one can be tricky. Accuracy, stability, and reliability of survey estimates are related to the size of the sample from which they are estimated and also influenced by the sampling designs and data collection procedures employed. Rates and percentages based on full population counts are also subject to random variation. The random variation may be substantial when the measure, such as a rate or percentage, has a small number of events in the numerator. Typically, epidemiological measures based on large numbers provide stable estimates of the underlying construct over time. Conversely, measures based on small numbers may fluctuate dramatically from year to year and therefore differ considerably from one small place to another small place, even when there is no meaningful difference. Caution must be used when presenting and comparing indicator estimates based on small numbers, as they may lead to misleading conclusions regarding substance use and its related consequences in a State. Some ways to address the challenges presented by small numbers include the following:

- Basing indicators on multi-year averages can generate stable estimates. It is generally easier to generate multi-year averages for consequence data, as most consequence data are based on all reported events (e.g., deaths due to alcohol can be directly summed across years, as can population denominators, to produce rates). For survey data, issues like survey design and methodology, especially if sample sizes vary substantially, must be taken into account.

- Combining smaller units into large single units can help to address small population/sample challenges that occur in many subgroup analyses. The bigger the unit of analysis, the more stable the estimate. This reinforces the idea of starting with State-level data, as it will generate the highest stability for the particular indicator.

Reporting estimates based on small numbers remains an option if the strategies identified above do not circumvent this issue. For instance, in States with small populations, even the State-level estimates for certain consequence indicators are sometimes based on small numbers of persons/events. Caution should be exercised and noted when reporting such estimates (e.g., flagging—or even deleting—unstable values, reporting confidence intervals, and reporting numbers in parenthesis along with rates/percents). For example, the Washington State Department of Health (WSDOH) recommends avoiding drawing conclusions regarding rates and differences in rates when they are based on fewer than 20 events. It also recommends reporting actual numbers rather than (or in addition to) rates. WSDOH guidelines for working with small numbers when developing and comparing rates for public health assessment may be found online at <://www.doh.wa.gov/Data/Guidelines/SmallNumbers.htm>. Pennsylvania’s Department of Health provides guidelines on calculating reliable rates and standardized ratios online at <://www.health.state.pa.us/hpa/stats/techassist/flow1a.htm> and on comparing rates and percentages at <://www.health.state.pa.us/hpa/stats/techassist/flow1b.htm>.

Approaches to Identifying Meaningful Differences

Because interpretations of epidemiological data are often guided by how one value or trend compares to another, users of the data will need to decide what criteria they will employ in determining the meaningfulness of observed differences. Although such decisions may be left to the users of the data, it is useful for some consideration of this topic to be included along with the data presented in the Epi Profile. The actual application of such criteria may also be helpful in constructing summary tables, such as **Table 4** above.

Varying levels of rigor can be applied to the assessment of differences. The following four approaches, ordered from least to most rigorous, provide an overview of possible alternatives:

1. Assessments made subjectively by “eyeballing” the data. This is a relatively risky method, however, and not recommended because it is prone to subjective judgments and thus may not be consistent across persons or categories of data.
2. Assessments based on objective criteria such as differences of plus-or-minus 10 (± 10) percent or more when comparing two rates or, in the case of comparing multi-year trends, differences of five percent or more in the average change per year.
3. The same as Number 2 above, but with extra cautions or restrictions applied in cases in which rates are based on small numbers (or small samples), when trend data fluctuate widely or show obvious nonlinear patterns, or when trend data are based on only two time points.

4. Application of formal tests of statistical significance for making comparisons and assessing trends. Simple *t*-tests or chi-square statistics may be used to compare two rates or proportions, and time series regression may be used for trend data.

State Epi Workgroups and decision makers must decide the level of rigor with which they are comfortable when interpreting data and drawing conclusions. In general, application of Level 3 at least would seem to be a prudent course for helping to avoid questionable interpretations. Level 4 provides an even stronger defense against misinterpretation and may be helpful to further support the interpretation of comparisons.

Adjusting for Differences in Age Structures Across Populations

When a number or rate for one population (e.g., a State) is compared to that for another, observed differences may be influenced by differences in the age structure of the two populations. For example, in comparing lung cancer death rates between a State and the nation as a whole, it is useful to bear in mind that deaths due to lung cancer typically occur in older adults. Therefore, a State with a relatively young population (e.g., Alaska) will tend to have a lower number of lung cancer deaths per 100,000 persons than the nation as a whole. The opposite is true for States that have relatively older populations (e.g., Florida). Typically, these influences are fairly mild at the State level, but they can become increasingly stronger as smaller population subgroups (e.g., counties, communities, and/or demographic subgroups) with more variability in age structure are compared. The solution to this is to calculate “age-adjusted” rates, which are calculated in a manner that removes the influence of variability in age structure across the populations being compared. The adjusted rates are calculated as the weighted sums of age group-specific rates, whereas the weights are based on the proportions of each age group in a standard referent population (e.g., the State or United States). The National Center for Health Statistics provides additional information online on the rationale and procedures for age adjustment ([://www.cdc.gov/nchs/dataawh/nchsdefs/ageadjustment.htm](http://www.cdc.gov/nchs/dataawh/nchsdefs/ageadjustment.htm)).

Adjusting for Differences in Attributable Fractions

As discussed earlier, a number of substance-related consequences are only partially due to substance use, and a measure of the proportion of such consequences that are directly attributable is referred to as the attributable fraction (AF). In comparing the magnitude of various consequences of substance use, it is useful to consider the AF of each consequence. Rates of specific consequences may be adjusted by their AF to represent more clearly the relative magnitude of various substance abuse attributable consequences. For example, a State may have substantially higher rates of homicides than deaths due to alcohol-related motor vehicle crashes. However, given that only 30 percent of all homicides are expected to be caused by alcohol misuse, whereas close to 100 percent of alcohol-related motor vehicle deaths are due to alcohol use, the AF-adjusted death rates could actually be substantially higher for motor alcohol-related motor vehicle crashes than for alcohol-related homicides. One caution to keep in mind when using AF-adjusted rates is that the attributable fractions themselves are usually average values based on studies of large populations—that is, they could vary, possibly substantially, across specific subpopulations and geographic areas.

Creating Indices by Merging Together Constructs and Indicators

Indices combine a set of indicators into an overall index and are one way to manage and understand a number of complex data implications. An index attempts to simplify complex data systems into a score by gathering information on a variety of indicators that describe an issue, scoring them so that they are comparable to each other, and aggregating them into a single score.

Several limitations and cautions are associated with the creation of indices. For example, merging groups of data or constructs (e.g., consumption and consequences) may create measures that are too broad and mask or obscure differences that may be important for prevention planning. An index that depends upon several component indicators may not be sensitive to change as prevention efforts are unlikely to address all components of the index. As such, summary scores should be viewed cautiously. If indices are created, data from the individual indicators used to create the index may need to be provided to assist decision makers in interpreting the index for use in prevention planning.

Use of Response Indicators for Assessment

Certain indicators (e.g., number of arrests, treatment data, school suspensions, etc.) typically are influenced by a variety of factors in addition to the underlying substance use patterns (e.g., funding, personnel/staff resources, institutional priorities, etc.). As a result, they may reflect a “response” to the problem rather than the underlying pattern of substance use or negative consequences. For example, a zero-tolerance policy implemented by law enforcement may result in increased driving under the influence (DUI) arrests without an actual increase in the percentages of people who drink and drive. Caution should be exercised when using and drawing conclusions from such “response” indicators.

“Short-Term” Versus “Long-Term” Consequences

Some long-term consequences indicators (e.g., alcoholic cirrhosis deaths) may not be useful for short-term evaluation as they may not change within a short frame of time. However, these consequences may indicate an underlying consumption pattern noteworthy of attention (e.g., chronic heavy use of alcohol) that may not be captured by existing population surveys. Epi Workgroups are encouraged to evaluate thoroughly the utility of such indicators in assessing the extent of negative consequences of substance use and/or underlying high-risk substance use patterns before making any decision to exclude those indicators from their Epi Profiles.

Acknowledging Data Limitations

Despite efforts directed at ensuring the quality of data collection and analyses, measures are often subject to limitations of availability, time lag, error (e.g., sampling, measurement, etc.), bias, and other shortcomings. These limitations are associated with almost all data to a certain degree. Epi Workgroups are encouraged to acknowledge and communicate the methodological and reporting issues related to the data used in their Epi Profiles. Discerning the gaps and shortcomings in different data sets is critical to excluding from consideration those data sets that have too many weaknesses to be informative. Additionally, identifying and understanding the limitations in the data are important to guide data analyses and interpretation of findings. Failure to consider the weaknesses in data sets can lead to inaccurate assessments of the problem and to the adoption of erroneous conclusions. If limitations or concerns with data quality arise that Epi Workgroup members believe would lead to misinterpretation of the data, the questionable data should not be included in the Epi Profile.

Summarizing and Presenting Epidemiological Data

Epidemiological summaries can take on many forms (e.g., an official Epi Profile, a set of problem statements, a PowerPoint™ presentation). Epidemiological summaries serve the purpose of summarizing and presenting data in such a way as to facilitate use of the data in prevention decision making.

Profile Outline

Below is a set of suggestions for summarizing and communicating data findings in a formal Epi Profile:

- *Table of Contents*: Providing a well-formatted table of contents at the beginning of the document can help to organize the profile and facilitate understanding of data to be presented.
- *Executive Summary*: Provide a brief Executive Summary of the Epi Profile’s contents (as some readers will not review the entire profile). This summary should highlight the purpose of the Profile, the data reviewed within it, and key findings. It may be formatted and changed to fit the needs of different audiences.
- *Introduction*: Write an introduction to the Epi Profile that provides a short overview of what readers can expect therein, with background and context to set the stage for the data

presented. This introduction will provide readers with a sense of the context and purpose of the document and thereby facilitate the use of the included data in decision making.

- *Data-Selection Processes*: Include a brief section in the body of the Epi Profile that describes the data criteria, processes, and decisions that led to the choice (and probable elimination) of data constructs and indicators provided in the profile. A detailed description of the methods may be provided in an appendix.
- *Data Dimensions*: Describe the dimensions of the data presented in the Epi Profile (e.g., magnitude, comparisons, etc). As noted above, data on all dimensions for each indicator may not be available. Nonetheless, a brief description of the dimensions chosen for portrayal in the Epi Profile will help readers to understand the data presentation better and may facilitate later use of the data for decision making. Some Epi Workgroups have provided concise tables of data by dimension in appendices to their Profiles.
- *Body of the Report*: Use logical categories to organize the body of the Epi Profile report. As noted above, something as simple as organizing the document by substance and clearly presenting consequence and consumption data for each substance can facilitate better understandings of the data. Clearly present the data to assist readers in understanding the relationships between the consequences under review and consumption patterns.
- *Limitations and Data Gaps*: Acknowledge the limitations of the data provided (and the Epi Profile report in general) to help readers fully understand the data presented. Provide a section on data gaps. Identifying data gaps discovered during the profiling process could both help the State plan future work to fill these gaps and also assist readers to understand fully how well the Epi Profile describes the substance abuse issues of the State. Information on data gaps may appear as appendices.
- *Conclusions*: Provide a summary of key findings gleaned from the profiling process.
- *Appendices*: Provide a table of constructs and indicators included in the Epi Profile. Provide a reference list of data sources and brief descriptions of each data source.

Presenting Data

An Epi Profile summarizes and presents data in a way that facilitates use of the data in prevention decision making. A good Epi Profile will balance text with graphical displays to communicate data effectively. Graphical displays of data should assist readers in thinking about the data being presented and facilitate interpretation of those data. Some common types of graphics used in presenting data include tables, charts, graphs, and maps.

- Tables can be used for presenting any quantitative data. As tables can represent multiple dimensions of data, they can be an effective way to summarize everything from simple to complex data.

- Charts generally are used to show only one dimension of data and are most appropriate for comparing data with discrete categories. The most common types of charts include bar and pie charts.
- Graphs can be used to plot data on x and y coordinates. Graphs can range from simple line graphs to more complex plots of survival curves. They are especially useful when displaying time trends for one or more indicators.
- Maps may be used to show the geographic distribution of data. Various types of software are available to assist in data mapping.

All graphical displays should be of the stand-alone variety—that is, readers should be able to make sense of the data contained within them without any explanatory text. To ensure that a graph can be interpreted easily, every item in the display should be labeled (e.g., rows and columns in tables, categories in charts, x and y axes in graphs, axes in maps, etc). Units of measurement in an Epi Profile should be clearly identified and, as much as possible, remain consistent throughout. A title should be provided that clearly identifies the data being presented. All codes, abbreviations, symbols, exclusions, and data sources should be explained in a footnote or footnotes.

Updating Epidemiological Profiles

To ensure that the Workgroups' data continues to be used and tracked over time, Epi Profiles must be updated regularly to provide decision makers with the most current data on substance abuse consequences and consumption patterns.

Determining how often to update an Epi Profile necessitates balancing such issues as how quickly trends change, technical issues related to the ability to detect such trends, and political pressures to have the most current data with the level of resources available for producing updated profiles. From a technical perspective, considering both how quickly most substance-related consequences and consumption patterns change, and the availability of methods to detect these changes, updating a profile every three to five years would likely be sufficient. However, many decision makers prefer data that are even more current and often demand annual data updates. Some compromise of the two approaches is probably best. Updates every two to three years should balance users' needs with resources and data realities. Of course, this assumes that the Epi Profile that is developed captures the critical substance-related issues in the State. As each Epi Workgroup begins to develop its Profile, it may choose to update the Profile annually until it arrives at a set of indicators and a format that appears to fully meet the State's needs for monitoring its critical substance-related problems.

VI. Summary and Conclusion

This Tool provided suggestions to State Epi Workgroups to assist in their efforts to identify and describe substance use and related consequences. Recognizing that States will vary in their preferred approaches to assessing, interpreting, and presenting epidemiological data and their implications, the Tool did not provide a specific template for States to follow in developing their Epi Profiles. Rather, it facilitated a thoughtful and deliberate process for developing State Epi Profiles and a well-informed approach to the interpretation and application of such data for decision making.

To begin the process of developing a State Epi Profile, this Tool emphasized beginning with the identification of appropriate constructs and indicators, discussing the distinction between constructs and indicators, and providing recommendations on where to start when assembling data. It provided an overview of the particular constructs and indicators available through SEDS and of the inclusion/exclusion criteria that can be applied to select constructs and indicators for assessing substance use and related consequences.

The Tool then focused on the process for developing the Epi Profile, noting that specific strategies must be employed to assess and compare the values and patterns represented in epidemiological data. It provided an overview of commonly used descriptive/comparative epidemiological considerations (or “dimensions”) that are used to display and interpret epidemiological data and understand the patterns of substance use and related problems. It also provided examples of the application of one or more epidemiological dimensions to compare different substance-related problems.

The Tool also addressed technical issues requiring caution in data interpretation or warranting some type of adjustment to make substance-use patterns more interpretable. It discussed a number of technical issues and limitations encountered in using epidemiological data such as the value of using rates versus absolute number and working with small numbers. It also offered recommendations and strategies for how Epi Workgroups might address technical issues and challenges.

The Tool concluded with guidance on how to summarize and present epidemiological data to facilitate decision making, noting how tables, charts, graphs, and maps each serve different purposes when presenting data.

Epi Workgroups are funded by SAMHSA/CSAP to promote data-driven decision making in State substance abuse prevention systems by bringing systematic data-driven thinking to help guide effective and efficient use of prevention resources. The Epi Profile provides a summary of critical information for such a data-driven system. The guidance provided in this document is based on the principle that having access to accurate and organized data on substance use and related consequences will enhance prevention planning and resource allocation decisions and thereby maximize the overall effectiveness of State and local efforts to prevent and reduce substance abuse and its negative consequences. This approach to substance abuse prevention planning will enable States to achieve measurable reductions in substance abuse and related consequences, and thereby improve health outcomes for youth and adults in States and throughout the nation.

APPENDIX: TABLES

- Table A1:** SEDS Substance Abuse Prevention Constructs and Indicators
- Table A2:** Indicators Currently Under Consideration for Inclusion in SEDS
- Table A3:** Indicators Available From National Sources That Were Considered But Not Included in SEDS
- Table A4:** Constructs Without National Data Sources for State-Level Indicators
- Table A5:** Acronyms Used for Data Sources

Table A1: SEDS Substance Abuse Prevention Constructs and Indicators		
Alcohol Consumption		
Construct	Indicator	Source
Current use	Percent of persons aged 12 and older reporting any use of alcohol in the past 30 days	NSDUH
	Percent of students in grades 9 through 12 reporting any use of alcohol in the past 30 days	YRBSS
	Percent of persons aged 18 and over reporting any use of alcohol in the past 30 days	BRFSS
Current binge drinking	Percent of persons aged 12 and older reporting having 5 or more drinks on at least one occasion in the past 30 days	NSDUH
	Percent of students in grades 9 through 12 reporting having 5 or more drinks on at least one occasion in the past 30 days	YRBSS
	Percent of persons aged 18 and older reporting having 5 or more drinks on at least one occasion in the past 30 days	BRFSS
Heavy drinking	Percent of adults aged 18 and older reporting average daily alcohol consumption greater than 2 (male) drinks or greater than 1 drink (female) per day	BRFSS
Age of initial use	Percent of students in grades 9 through 12 who report first use of alcohol before age 13	YRBSS
Drinking and driving	Percent of adults aged 18 and older reporting driving after having “perhaps too much to drink” in past 30 days	BRFSS
	Percent of students in grades 9 through 12 reporting driving in the past 30 days when they had been drinking alcohol	YRBSS
	Percent of students in grades 9 through 12 who report riding in a car driven by someone who had been drinking	YRBSS
Alcohol use during pregnancy	Percent of pregnant women reporting any use of alcohol during the last 3 months of pregnancy.	PRAMS
Apparent per-capita ethanol consumption	Total sales of ethanol (as estimated in gallons) in beer, wine, and spirits per capita aged 14 and over	AEDS

Table A1: SEDS Substance Abuse Prevention Constructs and Indicators (cont.)		
Alcohol Consequences		
Construct	Indicator	Source
Alcohol-related mortality	Number of deaths from chronic liver disease per 1,000 population	NVSS
	Number of deaths from suicide per 1,000 population	NVSS
	Number of deaths from homicide per 1,000 population	NVSS
Motor vehicle crashes	Percentage of fatal motor vehicle crashes for which at least one driver, pedestrian, or cyclist had been drinking	FARS
	Number of vehicle deaths in which at least one driver, pedestrian, or cyclist had been drinking per 1000 population	FARS
	Percent of drivers involved in fatal crashes who used alcohol	FARS
Crime	Number of violent crimes (e.g., aggravated assaults, sexual assaults, and robberies) reported to police per 1000 population	UCR
Dependence or abuse	Percent of persons aged 12 and older meeting DSM-IV criteria for alcohol abuse or dependence	NSDUH

Table A1: SEDS Substance Abuse Prevention Constructs and Indicators (cont.)		
Tobacco Consumption		
Construct	Indicator	Source
Current use	Percent of persons aged 12 and older reporting any use of cigarettes in the past 30 days	NSDUH
	Percent of persons aged 18 and older who report smoking 100 or more cigarettes in their lifetime and now smoke cigarettes either every day or on some days	BRFSS
	Percent of students in grades 9 through 12 reporting any use of cigarettes in the past 30 days	YRBSS
	Percent of students in grades 9 through 12 reporting any use of smokeless tobacco in the past 30 days	YRBSS
Daily use	Percent of adults aged 18 and older who report smoking 100 cigarettes in their lifetime and now smoke every day	BRFSS
	Percent of students in grades 9 through 12 who report smoking cigarettes on 20 or more days within the past 30 days	YRBSS
Age of initial use	Percent of students in grades 9 through 12 who initiated tobacco use before age 13	YRBSS
Tobacco use during pregnancy	Percent of pregnant women who report smoking during the last three months of pregnancy.	PRAMS
	Percent of pregnant women who report smoking any time during pregnancy.	NVSS
Total cigarette consumption per capita	Number of packs of cigarettes taxed at the wholesale level per capita purchased by persons aged 18 and older	State excise tax data
Tobacco Consequences		
Construct	Indicator	Source
Tobacco-related mortality	Number of deaths from lung cancer per 1,000 population	NVSS
	Number of deaths from COPD and emphysema per 1,000 population	NVSS
	Number of deaths from cardiovascular disease per 1,000 population	NVSS

Table A1: SEDS Substance Abuse Prevention Constructs and Indicators (cont.)		
Drug Consumption		
Construct	Indicator	Source
Current use	Percent of persons aged 12 and older reporting any use of marijuana in the past 30 days	NSDUH
	Percent of students in grades 9 through 12 reporting any use of marijuana in the past 30 days	YRBSS
	Percent of persons aged 12 and older reporting use of any drug other than marijuana, or an abusable product that can be obtained legally, in the past 30 days	NSDUH
	Percent of students in grades 9 through 12 reporting use of cocaine in the past 30 days	YRBSS
	Percent of students in grades 9 through 12 reporting use of inhalants in the past 30 days	YRBSS
Lifetime use	Percent of students in grades 9 through 12 reporting any use of specific classes of drugs in their lifetime	YRBSS
Age of initial use	Percent of students in grades 9 through 12 reporting first use of marijuana before age 13	YRBSS
Drug Consequences		
Construct	Indicator	Source
Drug-related mortality	Number of deaths from drug use per 1,000 population	NVSS
Crime	Number of property crimes (e.g., larceny, burglary, motor vehicle theft) reported to police per 1,000 population	UCR
Drug dependence or abuse	Percent of persons aged 12 and older meeting DSM-IV criteria for drug abuse or dependence	NSDUH

Table A2: Indicators Currently Under Consideration for Inclusion in SEDS

Domain	Construct	Measure	Source	Comments
Alcohol Consequences	Alcohol-related mortality	Total number of deaths attributable to alcohol	NVSS – mortality files	Can be estimated by summing all causes of death attributable to alcohol, each weighted by their attributable fractions. Published State-level estimates are available from CDC. Can also be expressed in terms of years of potential life lost (YPLL).
	Alcohol-related morbidity	Number of persons discharged from hospitals for alcohol-related injuries or conditions per 1,000 population*	State Inpatient Dataset (SID), 2003	Many States maintain a hospital-discharge database that may be able to provide this measure.
Tobacco Consequences	Tobacco-related mortality	Total number of deaths attributable to tobacco	NVSS – mortality files	Can be estimated by summing all causes of death attributable to tobacco, each weighted by their attributable fractions. Published State-level estimates are available from CDC. Can also be expressed in terms of YPLL.
	Tobacco-related morbidity	Number of persons discharged from hospitals for tobacco-related conditions per 1000 population*	State Inpatient Dataset (SID), 2003	Many states maintain a hospital-discharge database that may be able to provide this measure.
Drug Consequences	Drug-attributable HIV/AIDS	Number of newly diagnosed AIDS cases with injection drug use as the apparent route of transmission, per 100,000 population	APIDS	State health departments are required to collect these data and submit to CDC on semiannual basis. Numbers may be small at State level.
	Drug-related mortality	Total number of deaths attributable to drugs	NVSS – mortality files	Can be estimated by summing all causes of death attributable to drugs, each weighted by their attributable fractions. Can also be expressed in terms of YPLL.
	Drug-related morbidity	Number of persons discharged from hospitals for drug-related injuries or conditions per 1,000 population*	SID, 2003	Many States maintain a hospital-discharge database that may be able to provide this measure.

Table A3: Indicators Available From National Sources That Were Considered But Not Included in SEDS

Domain	Construct	Measures	Source	Comments
Alcohol Consumption	Use of alcohol by adolescents prior to sexual behavior	Percent of high school students reporting use of alcohol or drugs prior to having sexual intercourse	YRBSS	Measurement base and research evidence regarding causal influence of alcohol and drug use is limited.
	Heavy drinking by women of childbearing age	Percent of females 18-44 reporting 5 or more drinks on at least one occasion in the past 30 days	BRFSS	Measure of alcohol use by women who are pregnant would be a more appropriate construct. See PRAMS data currently included in SEDS.
Alcohol Consequences	Fetal Alcohol Syndrome (FAS)	Number of newborns diagnosed with FAS per 1,000 live births	FASSnet	Available, serious consequence but very small number. Changes over time are confounded with reporting changes.
	DWI/DUI	Number of DWI/DUI arrests per 1,000 persons aged 16 and older	UCR	Dependent largely on enforcement rather than actual level of underlying problem.
	Alcohol-related crimes	Number of arrests for alcohol-related crimes (e.g., drunk disorderly, liquor law violation) per 1,000 persons	UCR	Dependent largely on enforcement rather than actual level of underlying problem.
	Alcohol dependency or abuse	Number of persons receiving treatment for alcohol dependency or alcohol-related disorders from licensed public treatment facilities	TEDS	Reflects resources and structure of treatment system as much as and maybe more than the actual magnitude of the problem. For this reason, treatment is seen more as a response by the health care system rather than a consequence.
	Alcohol-related mortality for specific causes not captured separately	Number of deaths from each specific cause that is at least fractionally attributable to alcohol, per 1,000 population aged 15 and older	NVSS – mortality files	Although there are many alcohol-related causes of deaths, including poisonings, falls, and a number of cancers, the attributable fractions vary widely and the numbers are small relative to chronic liver disease deaths.

Table A3: Indicators Available From National Sources That Were Considered But Not Included in SEDS (cont.)

Domain	Construct	Measures	Source	Comments
Tobacco Consequences	Tobacco-related mortality for specific causes not captured separately	Number of deaths from each specific cause that is at least fractionally attributable to tobacco per 1,000 population aged 15 and over	NVSS – mortality files	Although there are many tobacco-related causes of deaths, including a number of cancers, the attributable fractions vary widely and the numbers are small relative to lung cancer, COPD, and emphysema.
	Fires caused by careless smoking	Number of residential and non-residential fires determined to be caused by careless smoking per 1,000 population	NFIRS	This indicator will be investigated further.
Drug Use Consequences	Drug-related crime	Number of arrests for possession or sales of drugs per 1,000 population	UCR	Dependent largely on enforcement rather than actual level of underlying problem.
	Drug-related crime	Number of arrests for crimes known to be fractionally attributable to drug use (e.g., larceny and other property crimes) per 1,000 population	UCR	Dependent largely on enforcement rather than actual level of underlying problem. Measures based on crimes known to the police are included in SEDS.

Table A4: Constructs Without National Data Sources for State-Level Indicators

Domain	Construct	Possible measures¹	Comments
Alcohol Consequences	Alcohol-related morbidity	Number of persons admitted to hospital emergency rooms (ERs) for alcohol-related injuries or conditions per 1,000 population *	This is a Healthy People 2010 (HP2010) indicator. Some states maintain an ER visit database that may be able to provide this measure.
	Alcohol-related motor vehicle crashes	Number of single-vehicle nighttime crashes per 1,000 population aged 16 and older *	Collected within states, this measure is a reasonable proxy for alcohol-related crashes, especially in small population areas.
	High-risk sexual behavior outcomes related to alcohol use (e.g., teen pregnancies, AIDS, STDs)	Number of events (i.e., alcohol-related outcomes from high-risk sexual behaviors) per 1,000 population ages 15 and older	Attribution of this construct to alcohol is not well defined. No known data sources for identifying incidents that are alcohol-attributable.
	Alcohol-related work problems/productivity		No appropriate measures or national data sources have been identified for this construct.
	Alcohol-related school problems	Alcohol-related suspensions or expulsions	No appropriate measures or national data sources have been identified for this construct. Alcohol-related suspensions or expulsions are likely to be highly affected by enforcement policies rather than by the actual magnitude of the underlying problem.
	Alcohol-related family problems		No appropriate measures or national data sources have been identified for this construct.
	Alcohol-related child abuse and neglect		No appropriate measures or national data sources have been identified for this construct.

Table A4: Constructs Without National Data Sources for State-Level Indicators (cont.)

Domain	Construct	Possible measures¹	Comments
Tobacco Consumption	Heavy smoking	Percentage of persons who smoke a pack per day or more of cigarettes*	No national source of State-level estimates has been identified.
Tobacco Consequences	Tobacco-related morbidity	Negative birth outcomes (e.g., low birthweight babies) attributable to mother's smoking	No national source of State-level estimates has been identified; possible sources are being investigated.
	Nicotine dependence	Number of persons receiving treatment (i.e., cessation services) for nicotine dependence	No national source of State-level estimates has been identified. Data, if available, would be subject to same concerns that apply to alcohol- and drug-dependence treatment indicators.
	Nicotine dependence	Percent of persons aged 12 and older meeting clinical criteria for nicotine dependence.	No appropriate measures or national data sources have been identified for this construct. Daily use may serve as an acceptable proxy for nicotine dependence.
Drug Consumption	Chronic use	Percent of persons age 12 and older who report daily use of marijuana or any other drug*	No national source of State-level estimates has been identified.
	Driving after using drugs	Percent of persons aged 16 and older who report driving after having smoked marijuana or used other drugs in the past month	No national source of State-level estimates has been identified. Contribution of drug use to motor vehicle crashes has not been studied extensively and will likely vary across drugs.
	Injection drug use	Percent of adults reporting injection drug use in the past year or during their lifetimes*	No national source of State-level estimates for adult use has been identified. A measure of injection drug use by high school students is available from the YRBSS and is included in SEDS.
	Drug use during pregnancy	Percent of women reporting the use of drugs during pregnancy*	No national source of State-level estimates has been identified.
	Use of drugs at work or school		No appropriate measures or national data sources have been identified for this construct.

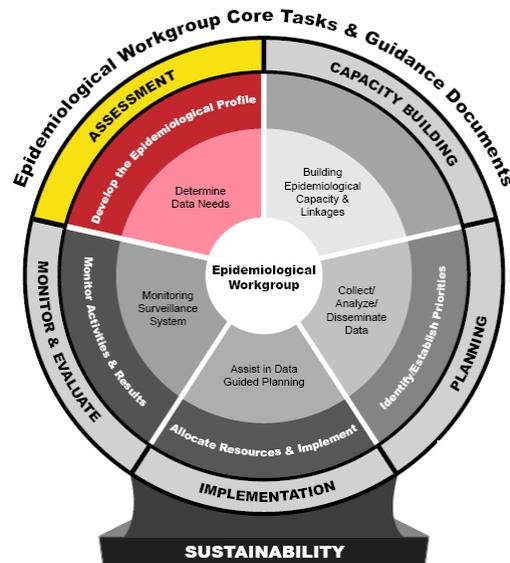
Table A4: Constructs Without National Data Sources for State-Level Indicators (cont.)

Domain	Construct	Possible measures ¹	Comments
	Misuse of prescription drugs	Percent of persons reporting use of prescription drugs in ways other than prescribed*	No national source of State-level estimates has been identified. Seriousness of using prescription drugs in ways other than prescribed may vary widely depending on the drug and pattern of use.
Drug Consequences	Drug-related morbidity	Number of persons admitted to hospital ERs for drug-related injuries or conditions per 1,000 population*	This is a HP2010 indicator. No readily available national source of State-level estimates has been identified. Some States maintain an ER visit database that may be able to provide this measure.
	Methamphetamine production	Number of methamphetamine labs identified by law enforcement per 100,000 population	No national source of State-level estimates has been identified. Lab seizures are likely to be highly affected by enforcement policies rather than by the actual magnitude of the underlying problem.
	Drug-related morbidity	Negative birth outcomes (e.g., low birthweight babies) attributable to mother's drug use	No national source of State-level estimates has been identified; possible sources are being investigated. Incidence rate of identifiable fetal defects due to drug use is believed to be relatively low.
	Motor vehicle crashes attributable to drug use		No appropriate measures or national data sources have been identified for this construct. Contribution of drug use to motor vehicle crashes has not been studied extensively and will likely vary across drugs.
	Drug-related work problems/productivity		No appropriate measures or national data sources have been identified for this construct.
	Drug-related school problems	Drug-related suspensions or expulsions	No appropriate measures or national data sources have been identified for this construct. Drug-related suspensions or expulsions are likely to be highly affected by enforcement policies rather than by the actual magnitude of the underlying problem.
	Drug-related family problems		No appropriate measures or national data sources have been identified for this construct.
	Drug-related child abuse and neglect		No appropriate measures or national data sources have been identified for this construct.

¹Measures listed are recommended or suggested measures for the construct, assuming an appropriate data source can be identified.

*Measures denoted with an asterisk appear to be particularly useful and consistent with criteria applied in selecting indicators for SEDS. Epi Workgroups are encouraged to investigate the availability of these measures within their States. All other measures will probably be less useful for reasons provided in the comments column.

Table A5: Acronyms Used for Data Sources		
Acronym	Name of Data System	Source Agency
AEDS	Alcohol Epidemiology Data System	National Institute on Alcohol Abuse and Alcoholism (NIAAA)
APIDS	AIDS Public Information Data Set	Centers for Disease Control and Prevention (CDC)
BRFSS	Behavioral Risk Factor Surveillance System	CDC
FASSnet	Fetal Alcohol Syndrome Surveillance Network	CDC
NFIRS	National Fire Incident Reporting System	Federal Emergency Management Agency (FEMA)
NVSS	National Vital Statistics System	CDC
PRAMS	Pregnancy Risk Assessment Monitoring System	CDC
SID	State Inpatient Data Set	Agency for Healthcare Research and Quality (AHRQ)
UCR	Uniform Crime Reports	Federal Bureau of Investigation (FBI)
TEDS	Treatment Episode Data Set	Substance Abuse and Mental Health Services Administration (SAMHSA)
YRBSS	Youth Risk Behavior Surveillance System	CDC



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Epidemiological Profile: Group Assessment

Description

This Tool supports the work of developing and updating an Epi Profile. It identifies 10 task dimensions from the Guidance Documents and provides a checklist to help Epi Workgroups plan and review their profile activities in a comprehensive manner. Designed for use in group settings, the tool supports and documents group self-assessments and can serve as a relatively low-risk entry point for groups that need to identify and explore performance problems, estimate future efforts, and resolve additional challenges.

The Guidance Document, *Developing a State Epidemiological Profile for Substance Abuse Prevention*, is the primary source for this Tool, which mirrors that document's organization and sequence. Consult the Guidance Document if further content detail is required.

Possible Use(s)

Depending on the group and the problem being addressed, the facilitator may wish first to distribute the above-noted Guidance Document to participants for review. With this document as a comprehensive reference, this Tool may be useful to support a facilitated discussion among Workgroup members on the dimensions of the tasks before them to ensure that those tasks, and the group's collective performance of them, are addressed. The facilitator should guide the group in discussing how well tasks have been accomplished and whether any task aspect should be revisited. The facilitator may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any action items.

Adaptation Notes

This Tool may be presented along with its companion Tool, *Epidemiological Profile: Individual Member Self-Assessment*, which focuses on individual Workgroup member knowledge about Epi Profile activities

and products. If new member orientation is being conducted in conjunction with the Workgroup's Epi Profile assessment, the facilitator may wish to provide both the Guidance Document and companion tool to first-time Workgroup participants.

1. Our constructs/indicators are appropriate and relate to consumption patterns and consequences for which there is strong research evidence regarding the causal influence of alcohol, tobacco, and/or drug use.

Notes/Comments/Actions

2. Our indicators were selected considering:

Availability

Validity

Consistency

Three to five years of available data

Sensitivity

Other Criteria? _____

Notes/Comments/Actions

3. Our SEDS data have been supplemented with State data that considers:

Validity

Periodicity

Consistency

Sensitivity

Other Aspects? _____

Notes/Comments/Actions

4. Our Epi Profile:

Began with State-level estimates

Focuses first on Statewide patterns and trends to ascertain which issues warranted more detailed examination

Lists substance-related consequences.

Explores the consumption patterns that lead to these consequences, recognizing that valid data are not always available for all substance-related consequences.

Examines the distribution of substance use and related consequences across the lifespan

Notes/Comments/Actions

5. Our data are organized and were assessed along the following epidemiological dimensions:

- Size/magnitude
- Trends over time
- Relative comparisons
- Seriousness/severity
- Economic cost

Notes/Comments/Actions

6. Subgroup analyses were conducted that considered the following factors:

- Age
- Gender
- Race/ethnicity
- Region/country

Notes/Comments/Actions

7. The following technical issues have been addressed and documented:

- Rates versus absolute numbers
- Small population numbers
- Identifying meaningful differences
- Adjusting for differences in age structures across populations
- Adjusting for differences in attributable fractions
- Use of response indicators for assessment
- Short- versus long-term consequences
- Acknowledgement of data limitations

Notes/Comments/Actions

8. The Epi Profile has been accepted as relevant and useful by stakeholders and decision makers.

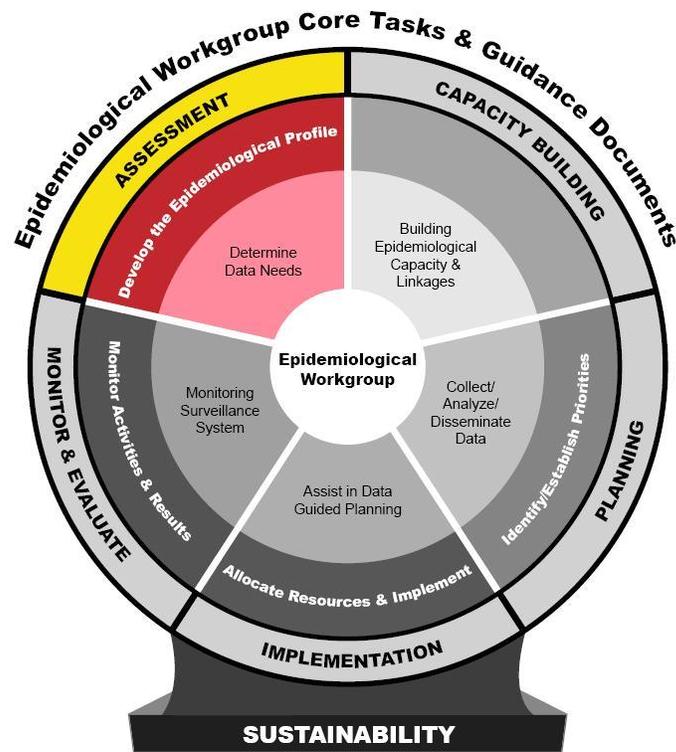
Notes/Comments/Actions

9. Profile data have been summarized and presented, and media or other communication messages have been recommended.

Notes/Comments/Actions

10. A process for regular review and updating of the Epi Profile is in place.

Notes/Comments/Actions



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Epidemiological Profile: Individual Member Self-Assessment

Description

This Tool addresses the preparation of individual Epi Workgroup members to communicate effectively about their group’s Epi Profile. It was designed to aid individual members in self-assessing their Workgroup-related knowledge and skills and to identify any elements of Workgroup activity for which they need assistance or support. Although not every member will be involved in every step of data analysis, every member must be able to communicate their Profile’s purposes, assumptions, and findings in ways that make sense to various decision makers and stakeholders. Thus, this Tool identifies, in checklist format, elements of knowledge or applied skills that should be evidenced by all Epi Workgroup members.

The Guidance Document, *Developing a State Epidemiological Profile for Substance Abuse Prevention*, is the primary source for this tool, which mirrors that document’s organization and sequence. Consult that document if further content detail is required.

Possible Use(s)

This Tool may be useful for new Workgroup members who not only wish to assess their readiness to participate but also identify any areas for which they need assistance or support. When working with new Workgroup members, facilitators may wish first to distribute the above-noted Guidance Document for review prior to presenting this Tool.

This Tool also may be useful in group settings (e.g., with an entire Epi Workgroup) to support a facilitated discussion of group members' knowledge and skill expectations, especially since Workgroup staffing and membership changes periodically. Additionally, it may be useful for Workgroups that are making progress toward sustainability. Discussion facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any action items.

Adaptation Notes

This Tool may be presented along with its companion tool, *Epidemiological Profile: Group Assessment*, which focuses on group assessment of Epi Profile activity and products.

Facilitators may wish to distribute both the Guidance Document and companion tool to new Workgroup members.

Epidemiological Profile Self-Assessment

Epi Workgroup members bring different skills and expertise to bear in their Workgroup involvement. All members, however, must be able to communicate effectively to others about their Workgroup's Epi Profile. The following checklist reflects Workgroup consensus about what every member should know and be able to do.

1. In general, I can describe or explain:

- what an Epi Profile is and the principles used to develop it;
- the difference between constructs and indicators and how Workgroup members use each in developing the Epi Profile;
- the SEDS and how Epi Workgroups use it;
- the criteria used to determine each Profile indicator and why each was selected;
- how Epi Workgroups use the following common dimensions to examine substance abuse problems and assess their importance, singly and in combination:
 - ___ size/magnitude,
 - ___ trends over time,
 - ___ relative comparisons,
 - ___ seriousness/severity, and
 - ___ economic cost;
- an example that illustrates the appropriate time to use multiple dimensions to examine a measure;
- why my Workgroup decided to examine the data further by analyzing subgroups, and why it selected certain groups and not others; and
- why starting the Epi Profile process with a set of key constructs/indicators is important.

Epidemiological Profile Self-Assessment

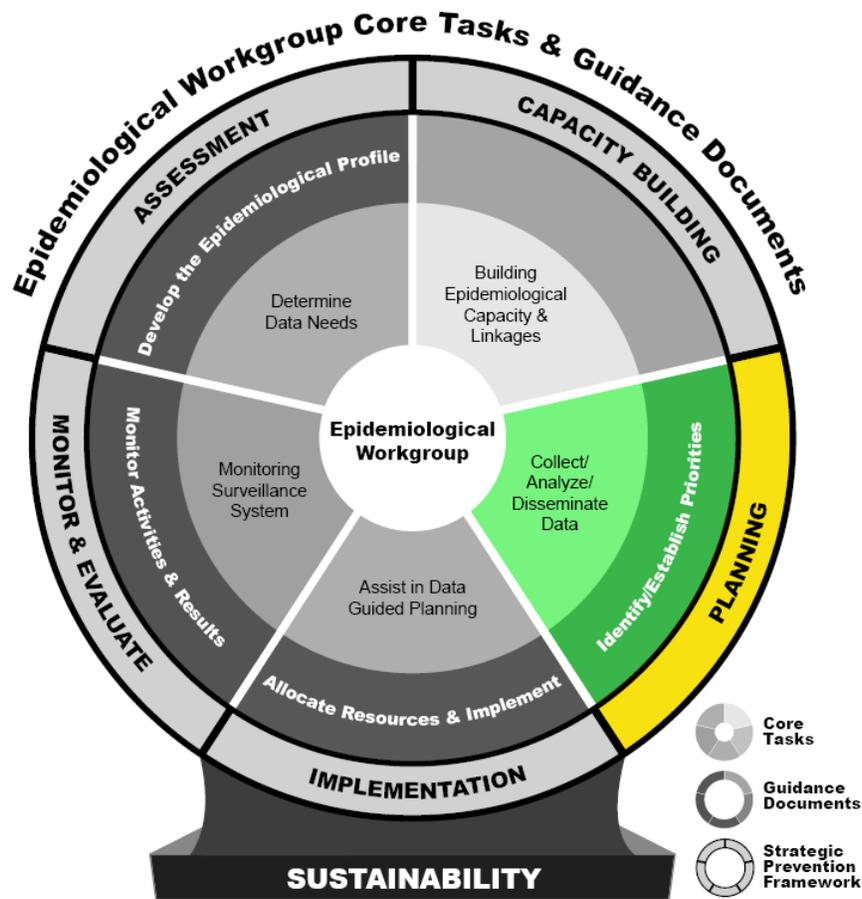
2. Regarding my Workgroup's Epi Profile, I can explain:

- why rates rather than absolute numbers were used;
- the types of problems that are associated with small sample numbers;
- how to increase confidence in the Profile's conclusions;
- the circumstances under which I would use each of the following approach(es) to identify meaningful differences in data:
 - ___ eyeballing the data or making a subjective assessment;
 - ___ applying objective criteria;
 - ___ applying criteria to discern trends toward small numbers or small samples, wild data fluctuations, or data based on only two time points; and
 - ___ applying formal tests of statistical significance for making comparisons or discerning trends;
- when I would adjust for the following:
 - ___ differences in age structures across populations;
 - ___ differences in attributable fractions (AF);
 - ___ response indicators for assessment; and
 - ___ short- versus long-term consequences; and
- when I would exclude data from consideration in an Epi Profile.

3. In presenting my Workgroup's Epi Profile to State decision makers and stakeholders, I can:

- describe decision maker and stakeholder interests and preferences in data displays; and
- summarize and communicate data findings in several data displays.

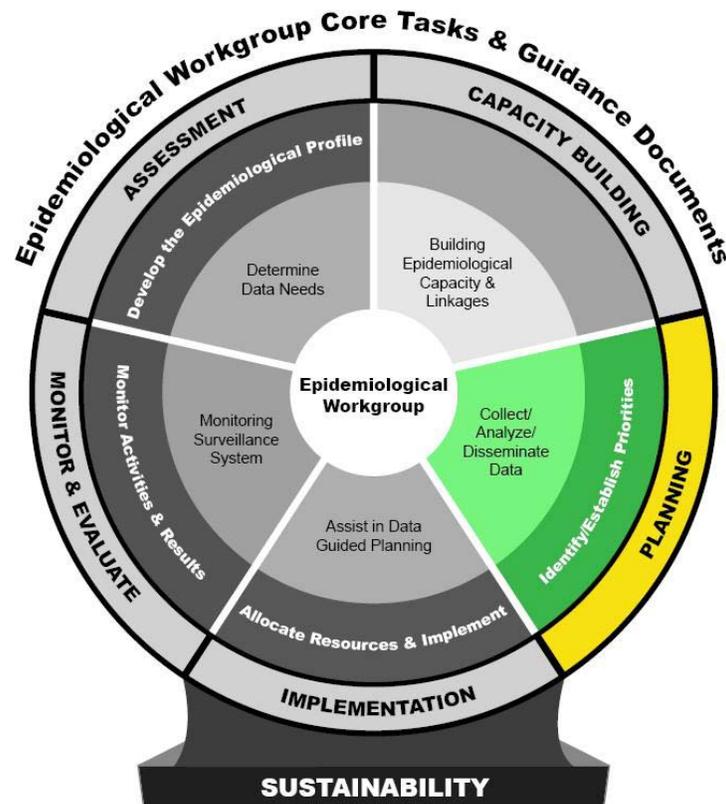
Questions? Not sure about your knowledge or ability in any of these elements? See [TA provider name] for assistance and support.



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

IDENTIFY / ESTABLISH PRIORITIES

1. *Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups*
2. **Priority Setting: Group Assessment**
3. **Priority Setting: Individual Member Self-Assessment**



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Description

This Tool provides guidance on interpreting and comparing different forms of epidemiological data to establish substance abuse problem priorities for SPF SIG States*. It recognizes that public concern about and the resources to address substance use and substance-related problems in States vary from year to year; however, it asserts that specifying, *a priori*, which data will be used to establish priorities and the process for assessing those data will ensure a transparent, comprehensible, and credible priority-setting process for all stakeholders involved in making prevention decisions. This Tool also details a method for developing a data-driven process for problem prioritization and provides examples of methods States have used. It concludes with lessons learned from State experiences.

Possible Use(s)

This Tool may be useful for members of the SPF SIG Epi Workgroups who are charged to address Core Task D: *Assist in determining substance abuse prevention priorities, based on epidemiological data, and outline how they inform State planning and resource allocations.*

* Although the focus is on guidance for SPF SIG States, the methods described are likely to be informative to priority setting and resource allocation for purposes and funding streams other than SPF SIG-related ones.

Setting Priorities for Substance Abuse Prevention:

Guidance for State Epidemiological Workgroups

Foreword

All States¹ and several Tribal entities have received Federal funding from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish Epidemiological Workgroups (hereafter, Epi Workgroups). These workgroups are networks of people and organizations that bring analytical and other data competencies to substance abuse prevention. 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. Their deliberate focus is on using data to inform and enhance prevention practice.

In some cases, Epi Workgroups are part of a SAMHSA/CSAP Strategic Prevention Framework State Incentive Grant (SPF SIG) initiative. In areas that lack SPF SIG funding, CSAP makes additional funding available to support Epi Workgroups locally.² CSAP also provides technical assistance to support Epi Workgroup development and data work in the form of data resources, one-on-one interactions, and multi-State/other cross-State learning opportunities. The Epi Workgroups promote data-driven decision making in the substance abuse prevention systems developed within States.

Such data-driven decision making necessitates the development of a State monitoring system for substance abuse. Such a system can help inform assessment (“*What do substance use and related consequences look like in the State?*”), planning (“*What are the current prevention priorities that emerge after needs assessment?*”), and monitoring/evaluation activities (“*How are we doing in our efforts to address these issues?*”) to enhance substance abuse prevention.

Through its Epidemiological Workgroup effort, CSAP has defined a series of data-driven activities to assist States further develop their State monitoring systems by:

- developing a key set of indicators to describe the magnitude and distribution of substance related consequences and consumption patterns across the State;
- 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 based on the established priorities; and

¹ In this Toolkit, the term *States* refers collectively to States, the District of Columbia, and Federally recognized Tribal and U.S. territories.

² Twenty-three of the 65 funded workgroups are SEOWs (State Epidemiological Outcome Workgroups in areas without SPF SIGs. SEOW are not required to address Task D: *Assist in determining substance abuse prevention priorities, based on epidemiological data, and outline how they inform State planning and resource allocations.* In this Toolkit, the term *Epi Workgroup* will be used when referring to both SEWs and SEOWs unless a specific distinction is made otherwise.

- developing a systematic, ongoing monitoring system of state substance related consequences and consumption patterns to track progress on addressing prevention priorities and detecting trends.

To assist States with these tasks, CSAP has developed several resources. One of these, the State Epidemiological Data System (SEDS), provides a set of constructs and indicators identified as relevant, important, and available for preliminary substance use prevention planning. Information on the SEDS can be found at <http://www.epidcc.samhsa.gov/>.

CSAP also provides five guidance documents to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Developing a State-level Substance Abuse Monitoring System: Guidance for States

State Epidemiological Workgroups: Preliminary Lessons Learned

TABLE OF CONTENTS

Foreword	i
Table of Contents	1
Introduction	2
Data-Driven Prioritization	4
Phase I: Using Epidemiological Data to Assess Problems	5
Phase II: Considering Other Factors in Establishing Priorities	13
Making Prioritization Decisions	15
Lessons Learned	16
Conclusion	17
Appendix A: Priority-Setting Worksheet	18
Appendix B: Examples of State Prioritization Processes	21
Hawaii	22
Illinois	26
Indiana	29
Michigan	32
North Carolina	36
Wyoming	38
Kentucky ³	42

³ The State Prioritization Process from the State of Kentucky goes slightly beyond prioritization and begins to address resource allocation. This example is provided last to encourage the reader to view more basic examples first.

Introduction

States face a wide array of substance-related problems. The magnitude, severity, and trends over time of these problems vary, as do such factors as public concern, resources, and preventability. As a result, States must make choices about the level of attention any specific problem warrants or which problems best fit specific funding streams through a priority-setting process. Specifying *a priori* which data will be used and how those data will be assessed helps ensure a transparent priority-setting process that is comprehensible and credible to the wide array of stakeholders in prevention decisions.

This document describes methods for developing a data-driven process for setting priorities for substance abuse prevention. The guidance in this document provides information for moving from the Epi Profile stage through the stage of interpreting Epi Profile data for problem prioritization and effective prevention planning. To accomplish this goal, this document will:

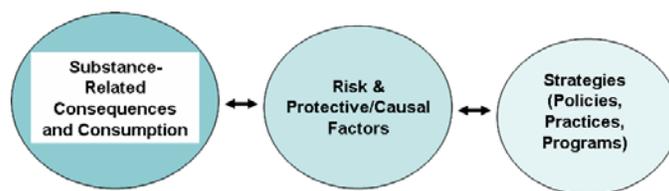
- Describe strategies for data-driven problem prioritization;
- Provide examples that show how States have used these strategies in determining their substance abuse priorities; and
- Discuss emergent issues and lessons learned from States' experiences with data-driven processes.

States are often in the position of needing to establish prevention priorities for various purposes and with respect to different funding streams and programs. This document focuses on prioritization for those States that have received Strategic Prevention Framework State Incentive Grants (SPF SIGs)—that is, it provides guidance on interpreting and comparing different forms of epidemiological data (and possibly other information) to establish substance abuse problem priorities for SPF SIG States. Although the focus is on identifying SPF SIG priorities, the methods described and guidance provided are likely to be informative in priority setting for purposes and funding streams other than the SPF SIG States.

Outcome-Based Prevention

The work of the Epi Workgroups is framed by an outcomes-based prevention model (**Figure 1**) that grounds prevention in a solid understanding of alcohol, tobacco, and drug use and related consequences. The State Epidemiological Profiles (hereafter Epi Profiles) developed by the Workgroups summarize the nature, magnitude, and distribution of substance use and related consequences in the State. Understanding the nature and extent of the array of substance use and related consequences in the State is critical—a critical as a first step for determining prevention priorities. Following the outcomes-based prevention model, once priorities are established, prevention planners then identify the factors influencing the prioritized use patterns and consequences to align relevant and effective strategies to address them.

Figure 1: Outcomes-Based Prevention Model



SAMHSA/CSAP recommends that Epi Profiles and related prioritization processes focus predominantly on substance-related consumption and consequences as they implement an outcomes-based approach to prevention.

CONSUMPTION:

Consumption is defined as the use and high-risk use of alcohol, tobacco, and drugs. Consumption includes patterns of substance use including initiation of use, regular or typical use, and high-risk use.

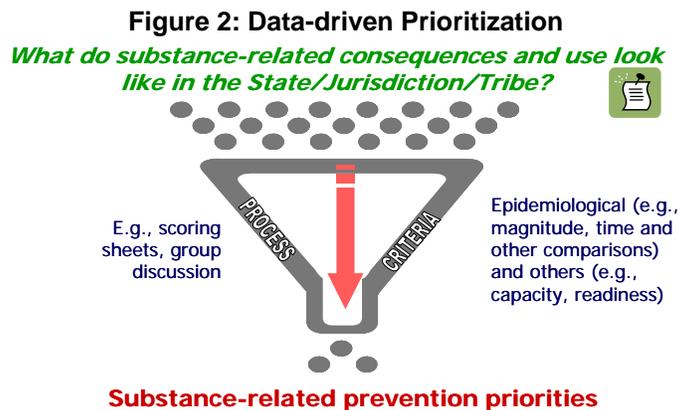
CONSEQUENCES:

Substance-related consequences are defined as adverse social, health, and safety consequences associated with substance use. Consequences include mortality, and morbidity, and other undesired events for which alcohol, tobacco, and/or drugs clearly and consistently are involved. Although a specific substance may not be the single cause of the consequence, scientific evidence must support a link to substance use as a contributing factor to the consequence.

Focusing on consumption and consequences in the prioritization process does not undermine, by any means, the importance of measuring and understanding causal factors that lead to substance abuse and substance abuse-related consequences. Understanding the factors that contribute to substance use and related problems (also referred as “risk and protective factors” or “causal factors”) is the logical next step after the State has developed a full understanding of the substance-use patterns and consequences it seeks to address and for which it has established priorities.

Data-Driven Prioritization

The goal of the prioritization process is to move from a broad understanding of substance use and consequences across the State to a determination of priorities through a systematic, data-driven prioritization process (see **Figure 2**).



Three key questions can help Epi Workgroups determine their State’s data-driven prevention priorities⁴:

- What criteria will be used to compare and contrast substance-related problems?
- What process(es) will be used to synthesize data and define priorities?
- Who will be involved in the prioritization process, and what are their roles?

Data describing the epidemiological dimensions of substance-related problems (e.g., magnitude, severity, trends) provides the basis for the prioritization process; however, most States acknowledge that their prevention decisions are not determined by epidemiological data alone. Other social, political, and practical characteristics of substance use and related consequences may play a role in setting substance abuse prevention priorities. Given these realities, this document recommends a two-phase prioritization process. Phase I focuses on the comparison of different substance use patterns and related consequences solely by epidemiological dimensions. Phase II starts with the product of Phase I—that is, the epidemiological data priorities—and applies other considerations (e.g., public concern, preventability/changeability of problem) to establish final priorities.

⁴ This document focuses on the prioritization of problems (i.e., substance-related consequences and/or consumption patterns). Some SPF SIG States choose to prioritize communities rather than problems by arriving at a set of high-priority communities. Priority is assessed through the development of indices that merge multiple indicators of multiple problems. Although this process can yield a set of high-risk communities, once chosen, the resulting index must be “unpacked” to determine why each community is deemed high-priority. Using a combined index of multiple problems may mean that one community is deemed high-priority due to an exceptionally high rate of smoking, another due to a high rate of alcohol-related cirrhosis, and so forth. To align these designations with an outcome-based prevention approach, SPF SIG States are encouraged to focus on the prioritization of problems rather than on populations (e.g., communities) across problems.

Phase I: Using Epidemiological Data to Assess Problems

Several steps are involved in using epidemiological data to assess substance-related problems. Detail discussion about each of these steps is provided in the sections that follow.

Step 1: Determine epidemiological dimensions for prioritization

Through the process of developing a State Epi Profile, Epi Workgroups can establish a core set of substance use patterns and substance-related consequences. Each use pattern and consequence must be expressed through a set of indicators (e.g., measures). These indicators have multiple dimensions, and each dimension can provide the answer to a somewhat different question. The dimensions are used in the Epi Profile development process to assist States in comparing, synthesizing, and interpreting multiple indicators to form a broad picture of substance abuse in their communities.

To begin the task of prioritization, Epi Workgroups first must decide what dimensions they will use to make comparisons across problems for prioritization purposes. These dimensions, once chosen, form the criteria for the Workgroup's prioritization decisions. The prioritization process may involve all of the dimensions reflected in the Epi Profile or the Workgroup may choose to focus on a subset of dimensions believed to be critical for its particular context.⁵

Epidemiological Dimensions

Some commonly used epidemiological dimensions of data include:

- *Size/magnitude*: Data on size/magnitude explore the basic question, “how big is the problem?” in terms of its occurrence. Magnitude can be described in terms of absolute numbers (e.g., total number of cases), frequency of occurrence (e.g., percents), or rates (e.g., number of cases per some standard unit). Incidence and prevalence rates must be adjusted for population variations and are often expressed per 100,000 people. Such standardization is important when comparing data on magnitude from populations of different sizes.
- *Time trends*: Data on time trends explore the question, “How are problems changing over time?” Comparisons over time help identify emerging or growing problems that may warrant increased attention.
- *Other relative comparisons*: Comparisons to other geographic areas and/or reference populations (e.g., other States, the nation) help answer the question, “How does the problem in this State compare when weighed against a reference population?” Comparisons to national rates provide a relative position or rank of a State on a specific substance abuse problem. States sometimes find it more useful to make comparisons to similar States such as those in the same region of the country. Alternatively, comparisons to standards such as the targets in *Healthy People 2010* can help track a State's progress on a particular issue.

⁵ By comparing State to national data, Utah's Epi Profile shows that Utah has much lower rates of substance use and related consequence problems than the rest of the nation. The Utah SPF SIG team thus determined that a nationwide comparison was not a relevant dimension to assist it in determining State SPF SIG priorities.

- *Seriousness/severity*: Measures of seriousness/severity examine the potential impact or level of outcomes on individuals or society that are associated with different problems. Seriousness/severity addresses the issue, “How serious is the nature/extent of outcomes associated with the problem compared to those of other problems?” For example, among tobacco-related consequences, acute bronchitis (a short-duration illness) is a less severe problem than oral cancer or heart disease, which are chronic, life-threatening diseases that can cause substantial disability and death. Measures available to quantify problem severity include:
 - Years of Potential Life Lost (YPLL)—YPLL measures the total number of life years lost due to premature death (i.e., usually defined as death before age 65) from a certain cause in a population and reflects the social and economic losses to society associated with a problem. YPLL highlights the impact of premature death on younger segments of the population and balances mortality rates, which are much higher among older age groups.
 - Quality-Adjusted Life Years (QALY) or Disability-Adjusted Life Years (DALY)—QALY and DALY are health-gap measures that extend the concept of YPLL to include equivalent years of “healthy” life lost by virtue of being in states of poor health or disability. The DALY combines into one measure both the time lived with disability and the time lost due to premature mortality.

- *Economic costs/social impact*: Economic costs represent a way to quantify the dollar amounts associated with substance use and related consequences. Economic costs/social impact measures answer the question, “How much does it cost individuals, organizations, or States to deal with the consequences resulting from different patterns of use?”

Applying Epidemiological Dimensions in Prioritization

In prioritization, decisions must be made about what dimensions will be used as criteria to set priorities. In some cases, one epidemiological dimension may be used to for comparative purposes (e.g., a problem will be considered high-priority if it causes a large number of deaths). In most cases, however, it is prudent for groups to consider several dimensions of epidemiological burden before deciding which problems represent high priorities. This is the case as problems often stack up differently against one another when different epidemiological criteria are examined. Sometimes the results from looking at different dimensions will result in similar conclusions; at other times, they will vary across dimensions.

The priorities assigned in **Table 1** reflect a consideration of two epidemiological dimensions: relative comparisons (e.g., State versus national) and time trends. For example, the rate for alcohol use among youth in the State compares favorably to the national rate as noted in the third column of the table (“Below U.S. Rate”). If the comparison to the nation as a whole was the only dimension examined, current youth alcohol use would be a low priority. However, when the second dimension (time trends) is included, the increasing rate of use among young people results in this problem being ranked as relatively high among State priorities.

Table 1. Prioritization: Applying Time Trends and Comparing State Rates to the National Rate

	Above US Rate	Similar to US Rate	Below US Rate
Rising 	Priority 1 Inhalants, Binge Drinking	Priority 2	Priority 3 Alcohol Use Among Youth
Stable 	Priority 4 Marijuana use	Priority 6	Priority 7
Falling 	Priority 5	Priority 8	Priority 9 Tobacco Use

Table 2 presents the same data as **Table 1** but adds a third epidemiological dimension: size/magnitude. In the case of 30-day binge drinking, all three dimensions are consistent in indicating this to be a high-priority problem. The percent of the population affected is relatively large (42%), the time trend is for increasing prevalence of this problem, and the State rates above the national average (rate ratio >1) are high. By comparison, when the dimension of magnitude/size is added to the examination of 30-day inhalant use, which ranked high for both national comparisons and trends in **Table 3**, inhalant use is notable for its small number of users.

Table 2. Prioritization: Adding Magnitude to Time Trends and Comparing State Rates to the National Rate (Rate Ratios)

Note: This table presents an illustrative example to show how prioritization works when three epidemiological dimensions are considered.

	Number (%)	Trend	Rate Ratio
30-day Alcohol Use	55%		0.80
30-day Binge Drinking	22%		1.90
30-day Tobacco Use	51%		0.70
30-day Marijuana Use	9%	Same 	1.50
30-day Inhalant Use	1%		2.10

Step 2: Choose process and method for priority setting

Epi Workgroups also must decide which analytic method—“the nuts and bolts” of the data-interpretation process—they will use to develop rankings and compare problems. That is, they must integrate data on multiple epidemiological dimensions that are likely to vary in relative importance to make decisions about which problems to prioritize. To do this, Workgroups must determine what scoring or assessment strategy they will use to synthesize data on different epidemiological dimensions (e.g., categorical ratings, numerical scoring) and decide what tools they will use to support analytical processes (e.g., worksheets, matrices, etc.). Workgroups must also consider the rules they will apply to the interpretation of their research products (e.g., problem-importance scores, categorical lists of problems) to develop their final epidemiological data priorities.

Applying a systematic and explicit approach to the analytical methods for prioritization is important for several reasons. Defining the “rules of the game” upfront—that is, before trying to establish priorities—helps Workgroups ensure common understanding and buy-in among participants, which contributes to a smoother functioning group process. At the end of the prioritization process, Workgroup members will have a clear understanding of how the priorities list was developed and why any item is on or off the list. A well-defined approach is also important for communicating and justifying priorities to the public, most of whom will not have been involved in decision making. Finally, a clear and methodical process is critical to determining the quality of the end product—the priority list—which is the foundation for the next steps, implementation, and evaluation.

Using a systematic analytic approach to prioritization is critical, but the prioritization process does not need to be complicated. Several reasonable and simple approaches that consider available information may be used. These approaches are described below.

Categorical Ratings

A simple method for comparing and evaluating the different substance use problems that confront the States is to assign categorical ratings (e.g., *High*, *Medium*, *Low*) to each indicator by epidemiological dimension. The categories used for ratings represent an ordinal scale to which no numbers are assigned but which reflect a hierarchy or continuum (e.g., *High* is greater than *Medium*, etc.).

Matrices can be constructed to assess problem categories. They can have as many rows as there are substance abuse problems, and as many columns as there are epidemiological dimensions under consideration, with each rating entered into a cell. The end product, for example, could reveal that two problems are categorized as high-priority, three are classified as medium-priority, and four are among the low-priority group. To determine the relative importance of each problem within groups, further analysis and discussion may be needed for each grouping.

Table 3 provides an example of a matrix that was used to structure individual ratings for four substance abuse problems across four epidemiological dimensions: magnitude, relative comparison, severity, and economic cost. To create this matrix, the Workgroup computed the number of high, medium, and low ratings for each problem to develop a priority list. The Workgroup also created a list of problems with the most *High* scores, the most *Medium* scores,

and the most *Low* scores. This approach involved no numerical scores; rather, it facilitated grouping the problems into high-, medium-, and low-priority groups based on epidemiological criteria ratings.

Table 3: Categorical Rating Table							
Problem	Incidence Rate	Rate Ratio (compared to States in same region)	DALY	Economic Cost	Total High-Priority	Total Medium-Priority	Total Low-Priority
Alcohol-related motor vehicle fatalities	H 17.3 per 100,000 pop.	L 0.70	H 23,450	H \$3.2 million annually	3	0	1
Neonatal complications due to smoking during pregnancy	M 5.9 per 100,000 pop.	H 1.80	M 10,445	H \$2.8 million annually	2	2	0
Drug overdoses/poisonings	L 1.2 per 100,000 pop.	M 1.05	L 1,440	L \$0.35 million annually	0	1	3
Injection drug-related HIV/AIDS	L 1.6 per 100,000 pop.	M 1.16	H 30,278	M \$1.3 million annually	1	2	1

Unweighted Scoring

Another approach to problem assessment involves computing simple unweighted scores to create a numerically ranked list of problems. For example, Workgroup members can use numerical ratings (e.g., *High* = 3 points, *Medium* = 2 points, *Low* = 1 point; or 1 = *Low* to 10 = *High*) to assign point values to each epidemiological dimension, either individually or as a group. **Table 4** provides a sample tool for recording numerical assessments across dimensions. Once each epidemiological dimension has been rated, a total Problem Importance Index (PII) or score can be calculated for each problem. If each group member has completed a rating sheet, an average PII can be calculated for each problem. Based on the total PIIs, an initial list or rank order can be created, with the highest-scoring problem listed on top and lesser problems listed in descending order. It is important to keep in mind that this scoring process is a heuristic device for compiling and assessing different information about problems, not an exact science. Thus, a problem that receives a score of 10 is not necessarily twice as important as a problem with a score of 5.

Table 4: Prioritization Using Unweighted Scoring					
Problem	Incidence Rate	Rate Ratio (compared to States in same region)	DALY	Economic Costs	Total Score
Alcohol-related motor vehicle fatalities	<i>H = 3</i> 17.3 per 100,000 pop.	<i>L=1</i> 0.70	<i>H=3</i> 23,450	<i>H=3</i> \$3.2 million annually	10
Neonatal complications due to smoking during pregnancy	<i>M=2</i> 5.9 per 100,000 pop	<i>H=3</i> 1.80	<i>M=2</i> 10,445	<i>H=3</i> \$2.8 million annually	10
Drug overdoses/poisonings	<i>L=1</i> 1.2 per 100,000 pop.	<i>M=2</i> 1.05	<i>L=1</i> 1,440	<i>L=1</i> \$0.35 million annually	5
Injection drug-related HIV/AIDS	<i>L</i> 1.6 per 100,000 pop.	<i>M</i> 1.16	<i>H</i> 30,278	<i>M</i> \$1.3 million annually	1

Weighted Scores

If some dimensions likely are more important than others and thus should have greater influence in determining the total score, a quantitative method for interpreting epidemiological data for priority setting that involves weighted scores should be used. Applying weights ensures that certain characteristics have more influence in the final priority ranking.

Table 5 presents data obtained from use of a weighted scoring approach. In this example, raters scored each data construct for the epidemiological criteria considered—that is, the size of the problem (A), the severity of the problem (B), and the economic costs of the problem (C). The weights for YPLL and economic costs, in this instance, are 3 and 2, respectively. Total scores for each problem were computed as the sum of the products of the rating given to each epidemiological dimension and its multiplier. The following formula was used to produce the total score:

$$\text{Prevalence} + 3(\text{YPLL}) + 2(\text{Economic Costs}) = \text{Total Score}$$

Table 5: Prioritization Using Weighted Scoring				
	Prevalence Rate (PR) Score	YPLL Score	Economic Cost (EC) Score	Total Priority Score
Problems	(weight = 1)	(weight = 3)	(weight = 2)	(PR + YPLL + EC)
Tobacco-related lung cancer	2 x 1 = 2	3 x 3 = 9	2 x 2 = 4	15
Alcohol-related violence	4 x 1 = 4	4 x 3 = 12	3 x 2 = 6	22
Drug-related crime	3 x 1 = 3	2 x 3 = 6	5 x 2 = 10	19

Appendix A contains a priority-setting worksheet adapted from the *Healthy People 2010 Toolkit: Setting Health Priorities and Establishing Objectives* that can be used to develop weighted scores for individual problems.

Step 3: Organize data to facilitate comparisons

After the Workgroup has selected the epidemiological dimensions it wants to use to weigh different problems, it must organize its data in a manner that facilitates the prioritization process. The method used to summarize State consumption and consequence data should serve to organize the data according to key dimensions in a way that is concise and informative and that supports decision making. In many cases, this is likely to be accomplished most easily by creating tables or matrices that organize problem constructs, relevant indicators, and epidemiological dimensions into rows and columns, as shown in **Table 6** below.

Table 6: Template for Organizing Results of Epidemiological Dimension Analyses				
Data	Number	Time Trend	Rate Ratios	Other
Problem/Construct 1				
Indicator A				
Indicator B				
Problem/Construct 2				
Indicator A				
Etc.				

A WORD OF CAUTION

Indicators are measures of a broader construct, and more than one indicator may provide a measure of a single construct. It is critical for Epi Workgroup members to keep in mind that prioritization is focused on the larger construct or problem, not on the individual indicators. Generally, it does not make sense for a prioritization process to arrive at the conclusion that one indicator of a single construct is a high priority while another indicator of the same construct is a low priority. If a Workgroup concludes that its members have scored individual indicators of a single construct very differently, the group should discuss what each indicator is measuring and why such indicators may vary.

For example, several SPF SIG Workgroups have scored drinking and driving as a very low priority while scoring alcohol-related crashes as a high priority. If alcohol-related crashes are indeed a high priority, then by default States must focus on drinking and driving as the consumption variable of key importance.

However, the Epi Workgroup must consider carefully how such anomalies occur. Is its drinking and driving measure unreliable? Has it misclassified crashes as alcohol-related? Careful consideration of the relationships between indicators of the same construct, and of the relationship between consequences and consumption, will further develop Workgroup understanding of the issues confronting States and the final priorities chosen.

Step 4: Apply the priority-setting process to the data

Once a Workgroup has determined the epidemiological dimensions, the decision-making process, and the analytical method for ranking problems, it can apply those data to decision making. Although rating or scoring each epidemiological dimension for each problem under consideration may seem tedious, such a methodical process will help maintain objectivity. It will also allow Workgroup members to contrast and compare reviewers and understand the final outcome of the prioritization process.

Multiple scoring methods are available to facilitate the prioritization process. Typically, the first step is to ask individual raters to fill out worksheets, the results of which are summarized to produce a group rating. Alternatively, Workgroup members can complete the ratings together as a group and then discuss and score each indicator by dimension, thus producing an overall group score collectively.

Step 5: Interpret and refine results

Irrespective of the scoring mechanism used (individual or group), after scores have been assigned and tallied, it is important for the Epi Workgroup to review the results and exercise their own judgment. Does the order of the epidemiological priorities make sense? If not, the Workgroup should re-examine their data. Did a single rater's scores heavily influence the group score? Do the raters' scores reflect the data provided? If individual raters produce widely divergent scores, the Workgroup should discuss the scoring criteria and/or the process to reach agreement on the scores provided.

Step 6: State final priorities based on epidemiological criteria

The end product of Phase I is the establishment of a set of priorities based on epidemiological data. For some States, this may be the end of the prioritization process; others may choose to include other considerations beyond the epidemiological data to develop their rankings and final priorities (see Phase II).

Phase II: Considering Other Factors in Establishing Priorities

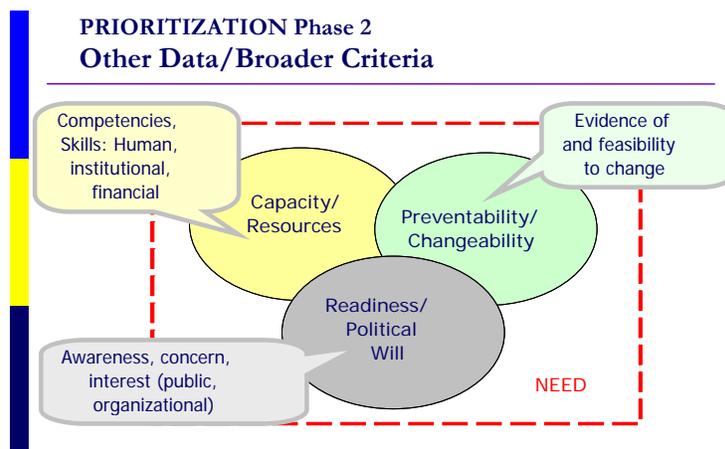
The results of Phase I are based on the epidemiological data used to compare and contrast substance use and related consequences. In Phase II, Workgroups may overlay additional and often more subjective considerations on the findings of their epidemiological analyses to see whether further refinement is necessary to establish the final problem priorities.

SPF SIG States are encouraged to base their priorities on the epidemiological dimensions of the problems under consideration. If States choose to consider additional criteria in their decision making, they should:

- document why such additional criteria are important in their prioritization process; and
- ensure that the results of Phase I prioritization are not lost in the Phase II process.

A review of the prioritization literature⁶ suggests that three broad categories of other criteria often are used in prioritization processes. These categories are: (1) preventability/changeability, (2) readiness/political will, and (3) capacity/resources (see **Figure 3**).

Figure 3: Phase II Prioritization Factors



⁶ For example, see Feldman, D. L., Hanrahan, R. A., and Perhac, R. 1999. Environmental Priority Setting Through Comparative Risk Assessment. *Environmental Management*, 23(4): 483-493; North Carolina Department of Health and Human Services. February 2002. *Community Assessment Guidebook, Healthy Carolinians, North Carolina Community Assessment Process*. Monograph prepared by the Office of Healthy Carolinians/Health Education and the State Center for Health Education. Available online at <http://www.healthycarolinians.org/pdfs/02Guidebook.pdf>; and U.S. Department of Health and Human Services. 2002. *Healthy People 2010 Toolkit: A Field Guide to Health Planning*. Developed by the Public Health Foundation, under contract with the Office of Disease Prevention and Health Promotion, Office of Public Health and Science, available online at <http://www.healthypeople.gov/state/toolkit/>.

- **Capacity/Resources:** Capacity/resources may include the availability of human, institutional, or financial resources (e.g., number of agencies that can provide resources and expertise, the level of commitment of community groups, possibility of continued funding, etc.) as well as the commitment of these resources. If the Workgroup determines that a problem at the top of the epidemiological data priority list is receiving adequate resources, it may decide to move another problem, one receiving fewer resources, for example, up the priority list.
- **Preventability/Changeability:** Assessment of the preventability/changeability of substance abuse problems may focus on the opportunities that may affect present or future burden, feasibility to prevent or control the problem or its consequences, scientific evidence about effectiveness of interventions to change the problem, and application of knowledge about effectiveness of interventions to the current context. In some instances, Epi Workgroups may also be concerned with choosing problems that offer the probability of quick success. Such initial quick successes may be important to building support and momentum for prevention efforts that later can be applied to more intransigent problems.
- **Readiness/Political Will:** Assessment of readiness/political will may include a focus on the current levels of awareness, concern, and interest at the public, political, and organizational levels to support addressing a particular issue. It may also include a focus on the public/political level of acceptability and support associated with addressing the issue. For example, despite the problems associated with binge drinking among adults, some view drinking as a normative behavior. To the extent that such perceptions prevail, a decision may be made to make an issue with more political concern support a higher priority. That perception may also prompt a Workgroup’s decision to begin educating key decision makers about the nature of substance issues that the epidemiological data prove to be serious problem but that have yet to receive the decision makers’ attention and commitment.

As with the epidemiological dimensions, these other considerations can be assessed using categorical or numerical ratings. **Table 7** provides an example of a scoring sheet for additional criteria. Generally, these broader criteria are more difficult to assess as they are harder to quantify and rate and often reflect judgment and/or opinion. Nonetheless, such criteria may be important in establishing a State’s final prevention priorities.

Table 7: Scoring Sheet for Additional Criteria			
Criteria	High 5 points	Medium 3 points	Low 1 point
Extent of public concern			
Gap between resources and need			
Evidence of interventions’ ability to change problem			
SCORE			

Combining Epidemiological Criteria With Additional Criteria

States that choose to conduct a Phase II prioritization process should first complete the Phase I prioritization process to establish epidemiological data priorities. Once these epidemiological priorities are established, additional broader social, political, and economic criteria may be applied. The sequential processing of the objective data, followed by the review of broader, more subjective information allows Workgroups to discover and apply what they have learned in stepwise fashion rather than by merging both types of criteria into an overall process or score. In this way, the epidemiological data assessment forms the basis for prioritization, with the subjective data overlaid upon the epidemiological data priorities to facilitate final priority determination. **Appendix B** presents several examples in which States applied epidemiological and other criteria to prioritization work via a two-phased process.

Making Prioritization Decisions

Before any priorities can be set, a decision-making process must be established. That process must detail the prioritization process that will be used to make decisions. It must also identify precisely who has what role in each stage of the process. Most importantly, the decision-making process must clearly define who has final authority for priority setting. In SPF SIG States, decision-making authority has varied greatly across grantees. In a few cases, the State Epi Workgroup has been charged to set final priorities. In most cases, however, the Workgroups have conducted the Phase I prioritization process and provided a set of recommendations to the SPF SIG Advisory Council or to an SPF SIG management team who then applied Phase II criteria to arrive at final priorities. In some instances, the Epi Workgroup and the SPF SIG Advisory Council jointly made decisions about the highest priorities for prevention through a combined Phase I and Phase II prioritization process. No matter which approach is taken, the decision-making process must fit the grantee context. What is most important is that the process is well articulated from the beginning, with the roles of all stakeholders clearly defined.

The decision-making process and its application must be clearly documented throughout all processes. Decisions about priorities have significant implications for resource allocation. Rarely can all stakeholders be involved in all aspects of prioritization or agree with its outcome. Regardless of whether all stakeholders participate in or agree with the decisions, clear documentation of the decision-making process allows everyone involved at any stage of the process to understand how decisions were made and to recognize that the process is credible. Additionally, stakeholders, staff, and decision makers may change, making documentation of the process and product critical to ensure continuation of ongoing processes and application of results, even with new players.

Lessons Learned

The following lessons learned were derived from a review of the prioritization processes undertaken by SPF SIG grantees. Some reflect guidance provided in this document that experience has shown to be critical aspects of transparent, data-driven prioritization.

Establish decision rules at the start: Perhaps the most important lesson learned from the SPF SIG process is that clearly establishing a prioritization process and defining who makes what decisions is essential to producing concrete, data-driven priorities. Grantees who did not clearly define who could make final decisions about priorities or how those decisions would be made wasted considerable time laboring under uncertain tasks.

Be transparent: Conducting the prioritization process in a transparent, well-documented way facilitates the acceptance of decisions once made. Workgroups should keep records, preferably in written format, to document decisions made about criteria and process and to track analyses and products carefully so that it is a clear how priorities were developed. Both the process and the results of the process are important, as Workgroups must be able to explain both to various stakeholders. Although no decision-making process is perfect, transparent processes enable all stakeholders to understand how decisions were made even if they do not like or agree with the final priorities.

Keep it simple: Given the range and complexity of substance abuse problems across the States and the politics surrounding resource allocation in a constrained environment, the prioritization of problems will be, as a matter of course, a complex process. Considerable effort should be devoted toward creating and implementing a prioritization process that is as simple as possible to enable multiple stakeholders to participate, when and/or if appropriate, or, at minimum, to understand both the process and product of prioritization efforts. Complicated decision-making processes, data analyses, or prioritization schemas can slow down the prioritization process and create confusion around both the process and its products.

Acknowledge both the strengths and limitations of data available: All data have strengths and limitations. Epi Workgroups that acknowledged these limitations yet clarified the value of what data they had available moved through the prioritization process more quickly. Those that focused heavily on data limitations were stalled in the process and tended to minimize the use of the data they did have in the process, turning to less reliable influences (e.g., political pressure, capacity measures) for help in making decisions.

Organize data to match the prioritization process chosen: Unless data are provided and organized to facilitate their use in the prioritization process, they can easily be ignored. Workgroups that provided data that were clearly organized by construct, indicator, and dimension reported increased use of their data and consistent application of their data across raters in the prioritization process.

Conduct the process in phases: Workgroups should determine what their epidemiological data indicate about their priorities before considering other criteria.

Workgroups also should examine the data sequentially by clusters of criteria (e.g., magnitude, economic costs, seriousness first then capacity, changeability) to help maintain a level of consistency for interpreting results and moving on to the next step. Aggregating scores across disparate criteria can obscure “hot spots” within important dimensions (e.g., high mortality and low public concern) and lead to an overall score that lacks clear meaning.

Keep the data experts involved: Even if data experts are not involved in making decisions about State priorities, it is important for Workgroups to keep them involved. Questions about indicator data often surface as the prioritization process evolves, and finding answers to those questions often engages others who may be new to the effort. Data experts are best able to provide accurate information to answer such questions, and keeping them “in the loop” can improve Workgroup efficiency.

Remember that context matters: The application of seemingly “uniform” criteria and scoring techniques takes on different meanings across different sub-units (e.g., interpreting the weight of resource gaps at the State versus rural/urban county level). Workgroups should always consider their data in light of this reality.

Conclusion

Moving from creating a State Epi Profile to addressing problem substance-use patterns and related consequences is not an easy task, but it need not be an overwhelming one. That process will require, however, that States employ methods for getting “from A to Z” that begins with interpreting indicator data and ends with determining priority areas to steer effective prevention planning. Moreover, given that States are often in the position of needing to establish prevention priorities for various purposes and with respect to different funding streams and programs, this information is likely to be instructive for priority-setting purposes supported by other funding streams.

Toward these ends, this document presents a thorough discussion of strategies that Epi Workgroups can use to achieve data-driven problem prioritization and key lessons learned from their experiences. It also offers an appendix that is rich in examples of how States have implemented data-driven processes to determine their substance-use prevention priorities.

APPENDIX A:

Priority-Setting Worksheet From the U.S. Department of Health and Human Services

U.S. Department of Health and Human Services



Priority-Setting Worksheet

Potential criteria and methods to weigh the importance of a health event (e.g., cancer, HIV/AIDS, substance abuse)

Health Event: _____

To Use ✓	Sample Criteria (Tailor to ensure that criteria can be applied to all health issues being weighed)	Measure (Cite specific measure and data source, if available)	Score (Score data, assign points, or rank items using identified method)	Weight* (Assign value to criteria, if desired)	Weighted Score (Score multiplied by weight)	Priority Score (Sum of weighted scores for each criterion used)
	Prevalence					
	Mortality rate					
	Lost productivity (e.g., bed-ridden disability days)					
	Premature mortality (e.g., years of potential life lost [YPLL])					
	Medical costs to treat (or community economic costs)					
	Other:					
	Other:					

* A weight ensures that certain characteristics have greater influence than do others in the final priority ranking. A sample formula might be: 2(Prevalence Score) + Community Concern Score + 3(Medical Cost Score) = Priority Score. In this example, the weight for prevalence is 2 and medical cost is 3. Users might enter data or assign scores (from, for example, 1 to 5) for each criterion and use the formula to calculate a total score for the health event.

Source: U.S. Department of Health and Human Services. (2002). *Healthy people 2010 toolkit: A field guide to health planning* (Developed by the [Public Health Foundation](#) under contract with the [Office of Disease Prevention and Health Promotion, Office of Public Health and Science](#)). Washington, DC: Public Health Foundation. Available online at <http://www.healthypeople.gov/state/toolkit/>

APPENDIX B:

**EXAMPLES OF STATE
PRIORITIZATION PROCESSES**

Hawaii

Indicator Selection

Prior to beginning the problem-prioritization process, Hawaii's Epi Workgroup used five criteria—availability, validity, consistency, periodic collection, and sensitivity—to screen 197 indicators from 29 data sources. This initial data screening reduced the number of indicators to 46, which were included in further priority-setting decision processes.

Indicator Assessment

The Epi Workgroup, formally the Hawaii Drug Information Network, systematically applied three criteria to evaluate the priority of the above-noted 46 indicators:

- **Prevalence** –the total number of cases, adjusted for a standardized population;
- **Rate of change** –the extent to which a problem increases or decreases between two points in time; and
- **Relative comparisons** – comparisons of Hawaiian problem data to data from other States and nationwide data.

For each of these three criteria, the Workgroup used the following rate-of-change formula to create a State score for the indicators:

$$(T_2 - T_1) \div T_1 = \text{Rate of Change}$$

A total score for each indicator was then calculated based on its three component scores,

$$\text{Total Score} = \text{Prevalence Score} \times \text{Rate of Change} \times \text{Relative Comparisons}$$

The Workgroup used two approaches to identify the group of indicators with the highest priorities: a top-down approach and a bottom-up approach.

Top-down approach

The top-down approach involved screening substance types to select two of the three substances with the highest priority scores for construct-level analysis. The Hawaii Workgroup then selected a set of five constructs and their indicators based on the total score of constructs. At the first level of analysis—substance type—the Workgroup examined 46 indicators to identify a balanced and comparable set of indicators for alcohol, tobacco, and illicit drugs. This review resulted in the selection of nine indicators: one consequence indicator and two consumption indicators for each substance. The Workgroup then calculated the total score for each substance type by adding together the scores of the three indicators within each substance. For example for alcohol, the three indicators were alcohol-related death rate, early initiation of alcohol use by high school students, and current use of alcohol by persons aged 12 and older. The total scores, ranked from high to low, were alcohol (20.6), illicit drugs (17.2), and tobacco (13.0). Thus, the Workgroup selected alcohol and illicit drugs for its construct-level analysis.

At the second level of analysis for the top-down approach, the Workgroup reviewed the 46 indicators to select five that best represented each construct. A total of 19 indicators were

identified, each associated with a substance construct, except for the construct “current use” for all substances where two indicators were identified. The total score for each construct (e.g., crime/public safety, morbidity) equaled the total score of its indicators or the average of the two indicators representing it. Thus, the top five constructs based on total score were: mortality due to illicit drug use (10.8), antisocial behaviors relating to alcohol use (6.0), current use of alcohol (5.3), antisocial behavior relating to illicit drug use (4.1), and age of initial drug use (3.7).

Bottom-up Approach

The Epi Workgroup utilized a bottom-up approach to conduct its analysis at the indicator level. Each of the previously screened 46 indicators was assessed using the same criteria (i.e., size of population affected, rate of change and relative seriousness compared to other States and the Nation). The group conducted this analysis to prevent any significant indicators from being inadvertently screened out in the top-down approach. Subsequently, it calculated and compared the total score for each of the 46 indicators. The top 5 indicators emerging from this indicator-level analysis were: current use of alcohol by persons aged 12 and older (15.0), current use of alcohol by persons aged 18 and older (12.9), deaths from illicit drug use (10.8), current binge drinking by adults aged 18 and older (7.8), and deaths from lung cancer (7.4).

Final results for population-based data

The top-down and bottom-up approaches each identified five indicators with the highest total scores. The Workgroup thus placed these 10 indicators on its high-priority short list (**Table B3**). To present an overall view of the top 10 indicators in terms of their impact in the State, the group also examined prevalence rates and estimated number of people affected for each indicator and found that the largest number of people were affected by current alcohol use:

- 520,204 for current use of alcohol by persons aged 12 and older
- 501,326 for current use of alcohol by persons aged 18 and older
- 243,117 for current binge drinking by persons aged 12 and older
- 160,931 for current binge drinking by adults aged 18 and older
- 72,175 for current heavy use of alcohol by adults aged 18 and older.

The next-closest indicator was 22,114 for offered/sold illegal drugs on school property.

Table B3: High-Priority Short List – Hawaii

Substance	Domain	Construct	Indicator	“Top-Down” Rank	“Bottom-Up” Rank
Alcohol	Consumption	Current use	Current Use of Alcohol by Persons Aged 12 and Older		1
			Current Use of Alcohol by Persons Aged 18 and Older		3
			Current Binge Drinking by Persons Aged 12 and Older	3	
			Current Binge Drinking by Adults Aged 18 and Older		4
			Current Heavy Use of Alcohol by Adults Aged 18 and Older	3	
	Consequences	Antisocial behaviors	Drank on School Property by High School Students in Past 30 Days	2	
Illicit Drugs	Consumption	Age of initial use	Early Initiation of Marijuana Use by High School Students	5	
	Consequences	Antisocial behaviors	Offered/Sold/Given Illegal Drugs on School Property by High School Students in Past 12 Months	4	
		Mortality	Deaths From Illicit Drug Use	1	2
Tobacco	Consequences	Mortality	Deaths From Lung Cancer		5

Focus-area assessment

To understand the differential use of substances within the State and provide insights on the geographic areas and subpopulations that are most in need of prevention services, the Workgroup conducted a detailed analysis on the selected focus area using the latest State-specific data with county and subpopulation information (e.g., sex, age/grade, race/ethnicity). To inform prevention decisions and develop strategies that yield the greatest impact, the Workgroup’s analysis focused on the following: prevalence rates, consumption patters of current users, access and perceptions of availability, and risk and protective factors.

Indicator ratings

In addition to examining the Epi Workgroup’s priority analysis and focus area assessments based on population-based data, the State also reviewed the Workgroup’s indicator ratings on 7 criteria:

- Prevalence
- Rate of change
- Seriousness compared to other States
- Severity
- Urgency
- Readiness for change
- Change potential within five years.

This assessment was conducted to determine how individuals from various community agencies and groups regarded the proposed criteria. The Workgroup’s information filled in the data gaps

and provided validation for the priority-assessment outcomes—that is, the Workgroup provided the highest overall ratings for the constructs age of initial use of alcohol and current use of alcohol.

Final Priority Areas

In general, the results of the analyses of the population-based data from Federal and State sources and the information from the Hawaii Epi Workgroup led to **Hawaii’s decision to focus SPF SIG efforts on the reduction and prevention of underage drinking. Reducing consumption—for example, increasing the age of initial use of alcohol and reducing the current use of alcohol—should lead to a reduction in negative consequences** such as antisocial behaviors related to alcohol use.

Illinois

Indicator Selection

The Illinois Epi Workgroup used a three-stage process to narrow down its list of potential indicators and identify the top-priority substance-related problems in the State. The first two stages involved assessments of the epidemiological data—first, the quality of data sources; and second, the burden of problems based on multiple epidemiological criteria such as magnitude and trends over time. The final stage involved reviewing the results from the earlier stages of analysis, which resulted in the identification of 14 high-priority indicators, and examining the feasibility of intervening in each problem. This feasibility assessment yielded three priority indicators/problems.

Indicator Assessment

The Illinois Workgroup started its prioritization process by considering 61 of the more than 100 possible indicators identified through its initial brainstorming. To further narrow down these indicators, Workgroup members engaged in a *data-quality screening process*. They reviewed both the *Data Notebook*—which provides analyses of the indicators over time and by demographics—and the indicator data source methodology literature to assess the availability, reliability, and validity of their data sources. As a result, 18 of the 61 indicators were eliminated due to data inconsistency or lack of availability; 43 indicators were retained.

To further reduce and prioritize, the Workgroup members conducted a *burden assessment*, which involved examining several epidemiological criteria as well as determining data confidence. Again, they reviewed the *Data Notebook* and the indicator data source methodology literature. They next ranked each of the 14 top indicators using the following rating criteria:

- **Magnitude** or extent of the problem within the substance abuse domain (i.e., an alcohol indicator is scored relative to all other alcohol indicators, not to illicit drugs and tobacco). On a 5-point scale, a rating of 1 equaled “low incidence or prevalence” and a rating of 5 equaled “high incidence or prevalence.”
- **Trends** over time (scored on a scale of 1 to 5, with a rating of 1 indicating “rapid improvement over the past five years” and a rating of 5 indicating “rapid deterioration over the past five years.”)
- **Severity of consequences**, rated on a 5-point scale from 1 (“not life threatening/no immediate danger”) to 5 (life-threatening and debilitating to the individual and to society”).
- **Benchmark comparison**, comparing Illinois data to national data on a scale from 1 (“better than benchmark”) to 5 (“worse than the benchmark”).
- **Data source confidence**, a criterion that considered whether the data source for the indicator was relatively valid and reliable (a “High” rating signified good quality and reliable data; a “Medium” rating signified average “generalizability” and reliability; and a “Low” rating signified poor data quality and limited generalizability).

Following its analyses of the epidemiological data and indicator data sources, the final step in the Illinois Epi Workgroup's prioritization process was the conduct of a *feasibility screening*. , Workgroup members discussed and ranked the feasibility of each of the 14 problem indicators identified during the burden assessment as either *High* (highly feasible), *Moderate* (moderately feasible), or *Low* (not very feasible). They used the following feasibility question to ground their discussion and consensus:

- Can the indicator be influenced at the community level (within the next 5 years) largely through prevention systems?
- Are any evidence-based programs, policies, and practices available to effect change in this problem indicator?
- Does the problem indicator have political support or no clear political opposition?

SPF SIG project staff and the State Advisory Council (SAC) chair evaluated the results of the Workgroup's feasibility ratings. Based on the SAC members' feedback, the chair and SPF SIG staff found it difficult to identify a single priority problem without excluding communities with significant substance-related issues (a concern expressed by the SAC). They subsequently agreed that the 14 indicators should be grouped into the following four priority problem areas and that problem statements should be drafted to clarify the key issues noted for each at the State level:

- **Risky use of alcohol and underage drinking**—Three critical problems were associated with alcohol misuse in Illinois:
 - Underage drinking (particularly past 30-day use) was found to be a problem, with the largest increases noted between youth from eighth grade to age 20. Among Cook County, Illinois, youth, White and Hispanic youth were most likely to report past 30-day alcohol use than were African American youth. Among underage college students, Native, Hispanic, and White Americans were more likely to report using alcohol in the past 30 days than were either Asian or African Americans.
 - Episodic binge drinking in the past two weeks was found to increase dramatically from 8th to 12th grade among Illinois youth and then decrease over the lifespan. Among Illinois adults, males were more likely to binge drink than females, whereas gender differences in binge drinking were less pronounced among youth.
 - Alcohol-related motor vehicle injuries and deaths were found to be a concern in Illinois. The highest Illinois DUI arrest rate was seen among individuals from 21 to 24 years old.
- **Tobacco use**—Tobacco use was found to be a special problem among Illinois youth, peaking at around 12th grade and declining over the lifespan. Of additional concern was the use of tobacco during pregnancy, particularly among older women (aged 25 to 44); and among Hispanic and African American women, who reported lower rates of smoking cessation during the first trimester of pregnancy.
- **Marijuana use**—Marijuana use was highest among Illinois adults aged 18 to 25 years. Illinois youth in grades 8 through 12 reported past 30-day marijuana use rates above the national average for their age group.

- **Illicit Drug Use**—Drug-induced deaths were the most serious consequence of illicit drug use in Illinois, and substantial disparities were noted between the rate of drug-induced deaths among African Americans and all other race groups. Another concern noted was the rise over time in methamphetamine lab seizures, particularly in the most southerly counties in Illinois. Early inhalant use among youth in 8th grade and below was also a problem, particularly among White American youth.

Final Priority Areas

In its feedback to the SPF SIG staff, SAMHSA/CSAP raised concerns about the number of priorities identified. The staff members responded that they originally had proposed using 14 data indicators that fell within four priority areas, representing 10 or more problems across alcohol, tobacco, and illicit drug usage domains, and that they also had targeted various youth and adult populations. SAMHSA/CSAP recommended that the number of priorities be limited only to those presented. It further recommended that the grant RFP be revised to allow communities to identify and justify a second priority to which a smaller portion of funds might be allocated.

Taking into consideration SAMHSA/CSAP's feedback and to honor the work of the Epi Workgroup and the leadership of the State Advisory Council (SAC), the SPF SIG staff agreed that the Illinois SPF priority was to reduce the misuse of alcohol. It accepted the results of the Epi Workgroup's feasibility screen, which narrowed the priority problem indicators down to the following three indicators with high levels of feasibility:

- adolescents who report using alcohol in the past 30 days,
- people who engage in binge drinking of alcoholic beverages, and
- alcohol-related deaths from motor vehicle crashes (total number of people who died in crashes).

Subsequently, Illinois communities were directed to select one of the above indicators as their priority problem and to select a second priority from the problems on the SAC's recommended priority list, which included tobacco use, marijuana use, illicit drug use, and one of the two remaining alcohol priorities. Communities were allowed to use up to 30 percent of their time and funds to address the second priority. Communities that select a second priority were directed to justify their need for additional funding based on data.

Indiana

Indicator Assessment

To identify its State priorities, Indiana's Epi Workgroup first reviewed data on the consumption and consequences of alcohol, tobacco, marijuana, cocaine, heroin, methamphetamine, prescription drug use, and poly-substance use. The Workgroup considered the following three primary factors in its evaluations and cross-substance comparison of the epidemiological data,:

- **Size/Magnitude** – the overall current rate and estimated number of people affected by each substance;
- **Severity** – the extent and nature of commonly identified short- and long-term consequences associated with the abuse of each substance; and
- **Time trends** – recent trends in patterns of consumption and consequences associated with each substance.

In most instances, the Indiana Workgroup members attempted to identify areas within the State that exhibited significantly higher than national rates in consumption and/or negative consequences associated with each substance. After careful analysis and review of the available data, Workgroup members identified a list of prevention targets of significant epidemiological concern.

After careful examination and lengthy discussion, they subsequently revised the list to provide additional guidance to the Governor's Advisory Council (GAC) and to highlight the relative importance of each item via a rating system. This rating was done using a balloting process in which voting members of the Epi Workgroup evaluated each problem area using a rating scale for overall significance, overall magnitude, trends over time, severity, and changeability. The revised final list included the following six priorities, which were divided into two groups:

Data-based priorities reflecting Statewide concerns:

- Prevent and reduce underage drinking and binge drinking among 18- to 25-year-olds.
- Prevent the first use of tobacco among 12- to 17-year-olds and reduce tobacco use among 18- to 24-year-olds, Blacks, and individuals with lower incomes and/or less than a high school education.
- Prevent the first use of marijuana among 12- to 17-year-olds and reduce the use of marijuana among 18- to 25-year-olds.

Data-based priorities reflecting more localized concerns (i.e., concentrated within certain sub-populations, communities, or regions of the State):

- Prevent the first use and reduce the use of cocaine among 18- to 25-year-olds.
- Prevent and reduce the abuse of prescription drugs among 12- to 25-year-olds.
- Prevent and reduce the use of methamphetamine among Black youth and among White women and men between 18 and 44 years of age.

Given that the amount of SPF SIG funding was limited, the GAC determined that additional criteria should be applied to select a subset of the six priorities for which additional SPF SIG funding would be made available. With SAMHSA/CSAP’s advice and counsel, the following three additional criteria were identified:

- existing capacity and resources,
- preventability and changeability, and
- community readiness and political will.

The GAC was committed to using SPF SIG funding to expand the capacity of the State to address high-need areas more effectively, thus it gave greater weight to its assessment of the State’s existing capacity (e.g., existing funding, available infrastructure, level of integration of prevention providers working on a particular substance, potential for leveraging non-SPF SIG funding, potential for sustainability, etc.). In collaboration with the Epi Workgroup and its Executive Committee, the GAG developed a matrix to guide the selection of priority problems as the focus of SPF SIG funding (see **Table B6**). That matrix takes into account the available data on capacity and funding, the intervention science literature, and the political situation across Indiana.

Table B6: Assessment of Indiana Substance Abuse Priority Areas Based on Secondary Criteria			
Priority	Existing Capacity/ Resources	Preventability and Changeability	Community Readiness/ Political Will
Alcohol	Weak	High	High
Tobacco	Strong	High	High
Marijuana	Weak	Low	Low
Cocaine	Weak	Modest/Low	High
Methamphetamine	Weak to Moderate	Modest	High
Prescription Drugs	Weak	Low	Low

Final Priority Areas

Because the GAC’s primary concern was improving the State’s capacity to address its substance abuse problems, it decided that tobacco should not be a focus of SPF SIG funding because approximately 85 percent of Indiana’s prevention dollars at the time were dedicated to reducing tobacco use. Within the five remaining priorities, the GAC judged that marijuana and prescription drug use should not be the focus of SPF SIG funding because of their relatively low preventability/changeability and low levels of political will and community readiness to address these substances. Consequently, it decided that State SPF SIG funding should be dedicated to combating alcohol, cocaine, and methamphetamine abuse. Given the significantly larger number

of State residents affected by alcohol abuse, the Council targeted 60 percent of the available SPF SIG programmatic funding for communities identified as having high needs for alcohol prevention. The remaining funds were targeted for communities with high prevention needs with regard to cocaine (20 percent) and methamphetamine (20 percent) abuse. (Of course, the final allocation decisions will be based on the quality of SPF SIG applications received and thus may vary somewhat from these targets.)

Michigan

Indicator Assessment

Michigan's Epi Workgroup developed a three-tiered, systematic process for rating and prioritizing indicators across various dimensions and criteria. These processes resulted in the identification of several key priority substance abuse problems.

Tier One: Data-Guided Burden Assessment Process

The first tier of the Michigan Epi Workgroup's prioritization process Workgroup members compared each substance abuse indicator in the Epi Profile to other indicators in the same broad constructs as well as within the overall Profile. They rated each indicator as low-, medium-, or high-priority and then calculated total and average scores for each. They also tabulated overall scores for each indicator group and ranked the indicators in descending order by group average. **Table B4** presents the results of this ranking process based on the data-guided rating scores.

Tier Two: The Knowledge-Based Impact Assessment Process

The second tier of the needs-assessment process, the knowledge-based impact assessment, provided the Michigan Epi Workgroup with a mechanism for assessing the State's ability to change the identified substance abuse problems at the State level. This process served to identify priority substance abuse problems for which Michigan communities already have the resources and capacity in place to address. This process also helped the Workgroup to assess the extent to which Michigan communities have the ability to realize change in the factors contributing to the identified priority substance abuse problems during the five-year span of the SPF SIG project.

The knowledge-based impact criteria rated for each substance abuse-related problem included the following:

- capacity and resources;
- preventability and changeability; and
- readiness and political will.

Workgroup members individually rated each problem based on the three criteria using a Likert-type scale ranging from 1 to 5 (1 = *Low*, 3 = *Medium*, 5 = *High*) to allow added variation between scores. **Table B5** presents the results of this ranking process.

Tier Three: The Priority-Problem Selection Process

In the final stage of the Michigan process, Workgroup, SAC, and IG members integrated the scores and feedback from the two preceding rating processes. Each member selected three substance abuse problems that appeared to be priority concerns in the State based on the information attained from the preceding assessment tiers. Each participant in this process was provided with copies of the materials utilized in the needs-assessment process, including the burden document, the Epi Profile, and charts that organized the indicators by descending rank based on the group rating scores resulting from the earlier assessments.

The raters were asked to examine the indicators and pay close attention to those problems that had received average high ratings from both the data-guided and knowledge-based processes. They were also asked to consider the implications of any varying scores within each criterion category such as, for example, indicators that received low scores for capacity/resources but high

scores for changeability/preventability and readiness/political compared to indicators that received low scores for changeability but high scores for capacity/resource and readiness/political will.

Raters utilized this process to formulate broader, overarching substance abuse-related priorities as well as to link various consumption patterns and intervening factors to similar substance abuse consequences. For example, alcohol-related traffic crash deaths and DWI (driving while intoxicated) arrests both received high ratings as a result of the data-driven and knowledge-based processes. Binge drinking, 30-day alcohol use, and drinking while driving also appeared to be highly prevalent among Michigan's population. To avoid the problem of interrelated indicators with similar intervening and contributing factors competing against each other, the raters formulated broader substance abuse problem areas pertaining to alcohol-related traffic crash deaths and DWI arrests. This resulted in the identification of the following as the top-10 substance abuse problems in the State of Michigan:

- Alcohol Abuse/Dependence
- Alcohol-Related Traffic Crash Deaths and Driving While Intoxicated
- Lung Cancer Deaths
- Alcohol-/Drug-Related Suspensions/Expulsions
- Alcohol-Related Hospitalizations of Pregnant Women
- Drug Abuse/Dependence (e.g., marijuana, cocaine, heroin)
- Juvenile Drug Abuse and Dependence
- Drug-Related Hospitalizations
- Alcohol-Related Homicide
- Alcohol-Related Liver Disease

Final Priority Areas

After the three-tiered process was complete, the SAC was given the responsibility of providing recommendations to the Michigan Department of Community Health's Office of Drug Control Policy (MDCH/ODCP) on State-level priority substance abuse problems to be addressed by Michigan's communities in the initial phase of the SPF SIG. The following were selected as the five highest-priority problems:

- Alcohol Abuse/Dependence
- Alcohol-Related Traffic Crash Deaths and Driving While Intoxicated
- Alcohol-Related Hospitalizations of Pregnant Women
- Lung Cancer Deaths
- Alcohol-/Drug-Related Suspensions/Expulsions

Following SAMHSA/CSAP's guidance to start small and prioritize the problems that are most universal, MDCH/ODCP determined that alcohol-related traffic crashes would be the only problem addressed in the initial phase of the project in the State of Michigan.

Table B4. Michigan Substance Abuse Problems/Indicators Identified by the State Epi Workgroup’s “Data-Guided” Rating Process, Ranked in Descending Order (High to Low Scores)

Data-Guided Rating Scores¹	Problems/Indicators	Knowledge-Based Rating Scores²	Preventability/Changeability	Capacity/Resources	Readiness/Political Will
H (2.509)	Alcohol-Related Traffic Crash Deaths	M/H (3.75)	M/H (3.62)	M (3.0)	M/H (3.5)
H (2.487)	Alcohol Abuse/Dependence (Treatment Admissions Data) ³	M (3.21)	H (4.16)	M/L (2.66)	M/L (2.83)
H (2.421)	Alcohol-Related Hospitalizations of Pregnant Women	M/H (3.58)	H (4.0)	M/H (3.5)	M (3.25)
H (2.353)	Drug-Related Hospitalizations	M/L (2.73)	M/L (2.7)	M/L (2.6)	M/L (2.9)
H (2.338)	Driving While Impaired Arrests	H (4.04)	H (4.375)	M/H (3.875)	M/H (3.875)
H (2.337)	Lung Cancer Deaths	M/H (3.77)	H (4.11)	M (3.44)	M/H (3.77)
M/H (2.258)	Marijuana, Cocaine, Heroin Drug Abuse/Dependence (Treatment Admissions) ³	M (3.0)	M/H (3.67)	M/L (2.67)	M/L (2.67)
M/H (2.221)	Chronic Obstructive Pulmonary Disease Deaths	M (3.15)	M/H (3.55)	M/L (2.66)	M (3.22)
M/ H (2.168)	Alcohol-Related Homicides	M (2.958)	M (3.25)	M (2.87)	M/L (2.75)
M/H (2.137)	Injecting Drug Use (IDU)-Acquired AIDS Cases	M/L (2.93)	M/H (3.7)	M (2.9)	L (2.2)
M (2.014)	Alcohol-Related Liver Disease	M (3.21)	M/H (3.625)	M/H (3.5)	M/L (2.5)
L (1.853)	Drug-Related Deaths	L (2.23)	L (2.2)	L (2.4)	L (2.1)
L (1.634)	Methamphetamine Abuse/Dependence (Treatment Admissions Data) ³	M (3.4)	M (3.0)	M (3.33)	H (4.0)
L (1.597)	Alcohol-Related Suicides	M (2.958)	M/H (3.63)	M/L (2.5)	M/L (2.75)
N/A	Alcohol/Drug-Related Suspensions/Expulsions ⁴	M (3.33)	H (4.25)	M (3.125)	M/L (2.625)
N/A	Juvenile Drug Abuse Treatment ^{3,4}	M (3.2)	H (4.0)	M (3.0)	M (3.0)
N/A	Corrections-Related Drug Abuse Treatment (Probationers, Parolees) ^{3,4}	L (2.4)	M (3.0)	L (2.33)	L (2.0)

Table B5: Michigan Substance Abuse Problems/Indicators Identified by the State Epi Workgroup’s “Knowledge-Based” Rating Process, Ranked in Descending Order (High to Low Scores)

Data-Guided Rating Scores¹	Problems/Indicators	Knowledge-Based Rating Scores²	Preventability/Changeability	Capacity/Resources	Readiness/Political Will
H (2.338)	Driving While Impaired Arrests	H (4.04)	H (4.375)	M/H (3.875)	M/H (3.875)
H (2.337)	Lung Cancer Deaths	M/H (3.77)	H (4.11)	M (3.44)	M/H (3.77)
H (2.509)	Alcohol-Related Traffic Crash Deaths	M/H (3.75)	M/H (3.62)	M (3.0)	M/H (3.5)
H (2.421)	Alcohol-Related Hospitalizations of Pregnant Women	M/H (3.58)	H (4.0)	M/H (3.5)	M (3.25)
L (1.634)	Methamphetamine Abuse/Dependence (Treatment Admissions Data) ³	M (3.4)	M (3.0)	M (3.33)	H (4.0)
N/A	Alcohol/Drug-Related Suspensions/Expulsions ⁴	M (3.33)	H (4.25)	M (3.125)	M/L (2.625)
H (2.487)	Alcohol Abuse/Dependence (Treatment Admissions Data) ³	M (3.21)	H (4.16)	M/L (2.66)	M/L (2.83)
M (2.014)	Alcohol-Related Liver Disease	M (3.21)	M/H (3.625)	M/H (3.5)	M/L (2.5)
N/A	Juvenile Drug Abuse Treatment ^{3,4}	M (3.2)	H (4.0)	M (3.0)	M (3.0)
M/H (2.221)	Chronic Obstructive Pulmonary Disease Deaths	M (3.15)	M/H (3.55)	M/L (2.66)	M (3.22)
L (1.597)	Alcohol-Related Suicides	M (2.958)	M/H (3.63)	M/L (2.5)	M/L (2.75)
M/H (2.168)	Alcohol-Related Homicides	M (2.958)	M (3.25)	M (2.87)	M/L (2.75)
M/H (2.137)	Injecting Drug Use (IDU)-Acquired AIDS Cases	M/L (2.93)	M/H (3.7)	M (2.9)	L (2.2)
M/H (2.258)	Marijuana, Cocaine, Heroin Drug Abuse/Dependence (Treatment Admissions) ³	M/L (2.8)	M (3.2)	L (2.2)	M (3.0)
H (2.353)	Drug-Related Hospitalizations	M/L (2.73)	M/L (2.7)	M/L (2.6)	M/L (2.9)
N/A	Corrections-Based Drug Abuse Treatment (Probationers, Parolees) ^{3,4}	L (2.4)	M (3.0)	L (2.33)	L (2.0)
L (1.853)	Drug-Related Deaths	L (2.23)	L (2.2)	L (2.4)	L (2.1)

North Carolina

Indicator Selection

Prior to initiating its prioritization process, the North Carolina Epi Workgroup had reduced the number of constructs for consideration down to five (e.g., health and injury, mortality/death, adult and juvenile crime, education disruption, and treatment), with a total of 24 indicators across these constructs and three substances (alcohol, tobacco, and illicit drugs). Upon completion of its data collection and reduction process, the Workgroup engaged in the analysis and prioritization of the State's substance abuse indicators.

Indicator Assessment

The Workgroup considered four criteria:

- **Problem Prevalence** – This was determined by dividing the rate per 100,000 individuals into deciles, resulting in a score from 1 to 10, where 1 equaled the highest prevalence and 10 equaled the lowest prevalence.
- **Severity** – The Workgroup ranked severity per individual case (to individual and community) on a subjective rating scale from 1 to 10, where 1 equaled the worst and 10 equaled the best. Workgroup members scored each construct for each substance on severity (e.g., death is a more severe consequence than illness).
- **National ranking** – The Workgroup divided national ranking criteria into quintiles and then assigned a value to each quintile (0.7 if in the bottom or worst fifth, 0.9 if in the bottom-middle fifth, 1.0 in the middle fifth, 1.1 in top middle fifth, and 1.3 if in top [best] fifth).
- **Trends** – The Workgroup analyzed trends over the past three years using a multiplier of 0.9 if it found those trends to be increasing, 1.0 if same, and 1.1 if decreasing.

The Workgroup used a two-part equation to calculate need or final priority scores as follows:

$$\text{Degree of Problem} = \text{Prevalence} \times \text{Severity Per Case}$$

$$\text{Need} = \text{Degree of Problem} \times \text{Rank} \times \text{Trend}$$

In the first step of the algorithm above, the Workgroup established the degree of the problem, regardless of national ranking and trend. In the second step, it adjusted the degree of the problem upward or downward depending on rank and trend to generate a final need score (lower scores indicate greater need).

Final Priority Areas

After calculating need scores for all 24 indicators, the North Carolina Epi Workgroup was tasked with selecting the six highest prevention priorities for the State. Rather than select these priorities solely on the basis of need score (which would have resulted in all priorities addressing alcohol consumption-related issues), the Workgroup decided to ensure that each substance type was

represented among the highest priorities. Thus, it selected as priorities those outcomes with the lowest need scores in each substance type. The six priorities identified at this stage were:

- DWI-disposed cases,
- total alcohol-related traffic deaths,
- youths in grades K-12 in possession of a controlled substance in violation of the law,
- adults 18 or older arrested for drug law violations,
- drug overdose mortality, and
- tobacco-related mortality

The Workgroup then re-evaluated the six high-need areas with respect to two issues: changeability and “evaluability.” Changeability referred to the likelihood that the impact or level of a problem can improve within a given time frame (i.e., within the four- to five-year span of the SPF SIG). The Workgroup considered the following issues to determine changeability: time (i.e., some outcomes represent long-term effects of use, such as lung cancer, that are difficult to change in the short term), magnitude (i.e., some consequences are rare enough at the community level that a change in actual occurrences may be highly unstable and/or difficult to ascertain), strength of relationship (i.e., extent to which changing consumption patterns may be expected to result in changes in consequence).

Evaluability referred to the ease of measurement of a change in an outcome. The Workgroup considered the following aspects of evaluability: ready availability of data, timeliness of data (i.e., time period between data collection and release not lengthy), and existence of outcome measures or good proxies.

After considerable discussion, the Workgroup eliminated several priority issues based on evaluability and changeability. First, it decided that indicators that were contingent on law enforcement systems, including both DWI arrests and drug law violations, were difficult to evaluate because they are not only a function of violations of the law but also of resources and efforts of law enforcement (e.g., more arrests could mean more drug use or better law enforcement efforts). For those measures, the Workgroup could not determine a clear definition of measurement; therefore, those measures were deemed not easily evaluable. Additionally, tobacco-related mortality data were deemed unlikely to demonstrate change within the four-year timeframe of the SPF SIG. Given that drug overdose mortality data were rare at the community level, the Workgroup reasoned that it would be difficult to measure change reliably. After applying the changeability and evaluability considerations, the **North Carolina Workgroup selected reducing total alcohol-related traffic deaths as the best statewide priority based on overall prevalence, severity, national rank, trends, changeability, and evaluability.**

Wyoming

Indicator Selection

Wyoming began the prioritization process by first examining possible data sources. Of the 86 data sources reviewed, 35 were eliminated. The State's Epi Workgroup then turned its attention to indicators, identifying 269 different indicators as relevant to the needs assessment. All of these indicators were ranked based upon seven equally weighted criteria:

- 1) Value – the percentage of a specific population engaging in the behavior (rate);
- 2) Ratio – the comparison between Wyoming's value on an indicator and that of the nation;
- 3) Rank – Wyoming's position relative to other States;
- 4) Trend – changes over time in values;
- 5) Size – the estimated number of people in Wyoming engaging in a behavior (absolute number or count);
- 6) Availability – access to the indicator at the county level; and
- 7) *Healthy People 2010* – target indicators in *Healthy People 2010*.

Through a process of consensus, the Wyoming Epi Workgroup narrowed down its list of 269 initial indicators to a pool of 25 final indicators, each of which would be assessed in the prioritization process.

Indicator Assessment

First, the Epi Workgroup assigned ratings to each indicator across three dimensions:

- Size – based on the absolute number of people in the State directly affected by the problem (scored on a scale of 1 to 3, with 1 equaling *Low*, 2 signifying *Medium*, and 3 indicating *High*);
- Seriousness – based on assessments of urgency, severity, economic loss, and involvement of others (1 for *Low*, 2 for *Medium*, and 3 for *High*); and
- Changeability – based on the potential for change in problem occurrence over the next five years (0 for *None*; 1 for *Low*, 2 for *Medium*, and 3 for *High*).

Then the Workgroup applied the following formula to the ratings:

$$\text{Indicator Score} = [\text{Size} + 2(\text{Seriousness})] \times \text{Changeability}.$$

Last, the Workgroup arrayed the indicators in rank order based on the final indicator scores as well as their ranking based on the first seven criteria. The scores and rankings for consumption and consequence indicators, respectively, are shown below in **tables A1** and **A2**.

Table B1: Ranking of Final Consumption Indicators – Wyoming

Indicator	Data Source	Size	Seriousness	Changeability	Final Score
Percentage of students who smoked cigarettes in the past 30 days	YRBS	2	3	3	24
Percentage of students who had 5 or more drinks of alcohol at one time in the past 30 days	YRBS	3	3	2	18
Percentage of 18- to 25-year-olds who had 5 or more drinks at one time in the past 30 days	NSDUH	3	3	2	18
Percentage of students who had their first drink of alcohol (other than just a sip) before age 13	YRBS	3	3	2	18
Percentage of students who, during the past 30 days, rode in a car or other vehicle driven by someone who had been drinking alcohol	YRBS	3	3	2	18
Percentage of students who, during the past 30 days, drove a car or other vehicle when they had been drinking alcohol	YRBS	2	3	2	16
Percentage of births to mothers who smoked during pregnancy	Kids Count	2	3	2	16
Percentage of students reporting any use of alcohol in the past 30 days	YRBS	3	2	2	14
Percentage of students who drank alcohol or used drugs before their last sexual intercourse	YRBS	2	2	2	12
Percentage of students reporting any use of cocaine in their lifetime	YRBS	2	3	1	8
Percentage of students reporting any use of inhalants in their lifetime	YRBS	2	3	1	8
Percentage of students reporting any use of methamphetamine in their lifetime	YRBS	2	3	1	8
Percentage of students reporting any use of injecting drugs in their lifetime	YRBS	1	3	1	7
Percentage of students who used smokeless tobacco on one or more days in the past 30 days	YRBS	2	1	1	4

Table B2: Ranking of Final Consequence Indicators – Wyoming					
Indicator	Data Source	Size	Seriousness	Changeability	Final Score
Alcohol dependence or abuse	NSDUH	3	3	2	18
Suicide deaths per 100,000 population	CDC Wonder	1	3	2	14
Alcohol-related vehicle deaths per 100,000 population	FARS	1	3	2	14
DWI arrests	UCR	2	2	2	12
Drunkenness and liquor law violation arrests	UCR	3	1	2	10
Accidental deaths per 100,000 population	CDC Wonder	1	3	1	7
Vehicle and traffic deaths per 100,000 population	CDC Wonder	1	3	1	7
Chronic lower-respiratory disease deaths per 100,000 population	CDC Wonder	1	3	1	7
Drug-related arrests per 100,000 population	UCR	2	2	1	6
Larceny arrests per 100,000 population	UCR	3	1	1	5
Chronic liver disease deaths per 100,000 population	CDC Wonder	1	3	0	0

Final Priority Areas

Based upon the scores and rankings shown in **tables B1** and **B2** above, the Epi Workgroup identified the eight most important substance-related problem areas in Wyoming. The shaded areas represent those indicators that stood out and led to the Workgroup focusing its attention on four consumption areas (past month binge drinking, illicit drug use, past month cigarette use, and smoking among pregnant women) and four consequence areas (suicide, alcohol dependence and abuse, alcohol and motor vehicle accidents, and alcohol and crime).

Once the eight priority consumption and consequence areas were identified, the Epi Workgroup reviewed full data profiles on each. These profiles included a summary of statistics on each problem area, an assessment of current resources targeting each problem, and basic county-level data. The Workgroup then engaged in intensive discussions to narrow their focus to the one area that would be targeted by the SFP SIG project. Workgroup members agreed that each area was of major concern in Wyoming, but they made their final decisions based upon their examination of two major issues. The first issue involved the current level of resources being spent on each problem relative to the size of the problem. The second involved the relationship between the four consumption areas of concern and the four consequence areas of concern. The Workgroup’s review of the data revealed that past month cigarette use, smoking among pregnant women, and illicit drug use benefited from the most resources. Additionally, the Workgroup found that three substance-related consequence areas (alcohol dependence and abuse, alcohol and motor vehicles, and alcohol and crime) were related to one consumption area (binge drinking). As a result, **it**

recommended that Wyoming target misuse of alcohol in its SPF SIG efforts, with underage drinking and adult binge drinking as the primary focus of its Statewide prevention efforts. The Workgroup further recommended that the major consequences of misuse of alcohol in the State—alcohol dependence, alcohol-related motor vehicle crashes, and alcohol-related crime—be considered as the State’s secondary prevention focus.

Kentucky

Kentucky used a three-stage process to: 1) examine Statewide epidemiological data to identify priority areas of concern; 2) use data on prevalence, consequences, and risk/protective factors at the county level to identify hot spots and a manageable number of communities to assess in more detail; and 3) assess the readiness for strategic planning among the “finalist” communities so that a final proposed grantee could be selected for each priority substance area.

Indicator Assessment

To begin the Kentucky substance abuse problem-prioritization process, the State Epi Workgroup’s Data Analysis Committee conducted an examination of global State data from all sources. The Committee members relied heavily on quantitative data about consumption and consequences available from reputable and reliable sources (e.g., NSDUH, BRFSS, YRBS, Kentucky’s KIP survey of school-aged youth). They organized and summarized their data findings and presented them to the Workgroup’s Strategic Planning Committee (SPC) along with a set of recommendations.

The SPC’s review, discussion, and decision-making processes were facilitated by the use of prioritization chart worksheets. These worksheets helped them to organize their thoughts on the following key issues and variables associated with particular substances:

- **prevalence and incidence,**
- **trends,**
- **severity of consequences,**
- **estimated cost to society, and**
- **current level of effort/resources already allocated.**

SPC members also evaluated Kentucky’s substance abuse problems in light of the estimated costs of those problems to the State, the current level of effort/resources already allocated toward those problems, the availability of evidence-based programs or practices for each problem area, the political will to address the problem, and the evidence of geographic and/or demographic variability.

Final Priority Areas

In all its deliberations, the Committee’s primary concern was to document the link between the prevalence of a given substance and its consequences. This was most readily documented with tobacco (e.g., rates of cancer and heart disease) and underage drinking (e.g., school violations, DUIs, juvenile collisions, arrests). The SPC had more difficulty linking methamphetamine and diverted prescriptions to specific consequences because current data on arrests, DUIs, health, and similar variables typically do not specify substances at that level of specificity. Committee members did, however, identify a compelling link, which has been well documented in the literature, between use of inhalants and serious health consequences (e.g., neurological impairment) among early adolescents with evidence of high rates of use.

Through systematic discussion and formal vote, the SPC selected the following problems as Kentucky SPF SIG priority areas of concern: 1) tobacco (all ages); 2) underage drinking (on

college campuses and in communities); 3) diverted prescriptions (with a focus on the State’s Appalachian counties); 4) methamphetamine use (with a focus on the State’s western counties); and 5) inhalants (with a focus on those counties that reported the highest rates of self-reported use by 8th graders).

Identifying Hot Spots and High-Need Communities

Once the priority areas of concern were identified, the State Epi Workgroup as a whole was tasked to pinpoint prevalence, consequences, and risk/protective factors at the community (county) level across the State. This was done to narrow the focus to the State’s substance abuse hot spots and identify a manageable number of communities to assess in more detail. This part of the process involved drilling down into State data sets and organizing those data to focus on the county and regional substance use.

Data identifying communities (counties) with both high-magnitude and high-priority needs was subjected to a community resource-mapping process—that is, those data were examined to determine the communities’ current state of affairs with respect to programmatic and financial resources across the State prevention system. This allowed the SPC to determine overall variability in prevention resources across the State and among high-need communities, and ultimately helped them narrow the field by determining high-need communities with relatively low resources.

Assessing Programmatic Resources

To determine the availability of programmatic resources throughout the State, the Workgroup members conducted a comprehensive review of Kentucky’s Prevention Data Set (PDS). This resulted in a data extraction that yielded the total number of participants in all “science-based or promising” youth and adult-oriented prevention programs (CSAP Level 3 or higher) per county for the prior 18-month period (January 1, 2004, through June 30, 2005). Ultimately, 34 GIS maps were created and presented to the SPC. Each map contained the name of one science-based or promising prevention program, a brief description of the program, the number of participants in the program per county, and the data source*. Thus, at a glance, SPC members were able to “see” which counties were currently (or had recently been) utilizing science-based or promising programs and how many participants were being served in each county for the prior 18 months. The Workgroup created several additional maps that showed the total number of participants in all such programs by county, the rate of participation (per 1,000 population) in those programs by county, and the total number of different science-based and promising programs by county.

Assessing Funding Resources Across the State

A process similar to that used to assess programmatic resources was used to assess Kentucky’s Statewide prevention funding resources. the Workgroup’s comprehensive review of all known significant (\$10,000 or more) Federal and State prevention funding resources yielded eight GIS maps to enhance the work of the SPC. These maps contained the following:

- Regional Prevention Center (RPC) annual budgets for FY06;

* In most cases the data source was the PDS. In one instance, Kentucky State Police data on participation in the Drug Abuse Resistance Education (DARE) program was used as the data source because it was considered more accurate.

- RPC funding rate (per 1,000 population) for FY06;
- FY05 funding, by county, for Champions for a Drug-Free Kentucky recipients;
- Kentucky Agency for Substance Abuse Prevention (KY-ASAP) funding for FY05, by county;
- 2001 through 2004 Drug-Free Communities Support Program grantees, by county;
- Robert Wood Johnson Foundation Reclaiming Futures grantees, by county, from 2003 to 2007;
- FY06 allocation rate (per 1,000 population) of Tobacco Prevention/Cessation Funding to Kentucky Health Department Districts; and
- Operation UNITE funding across relevant counties from 2003 to the present.

SPC members reviewed the data from each of these program resource and prevention funding resource maps and began to identify low-resourced areas throughout the State. The data maps allowed them to determine the overall viability and potential for success of each potential finalist community. Disparities in funding resources across counties, along with information about the use of science-based or promising interventions, were key factors in their decision-making, which culminated in a formal vote to determine the top high-priority (finalist) communities for each of the five priority substance areas.

Conducting Community Readiness Assessments

Once the finalist communities were identified, the Workgroup members sought to learn more about each finalist community and assess its readiness for strategic planning. Workgroup members approached this task earnestly by engaging in a two-step process. The first step involved a key informant survey conducted with all 14 Regional Prevention Center (RPC) directors. Each director was asked to rate all the counties in his or her region on five dimensions of readiness derived from SPF SIG staff knowledge of factors that correlated with previously successful collaborative and strategic planning efforts across the State. These dimensions included the following:

- level of RPC involvement in each county,
- quality of RPC relationships with community leaders in each county,
- level of effective interagency collaboration demonstrated in each county,
- demonstrated capacity to develop strategic plans that were acceptable to prevention funding agencies, and
- demonstrated commitment to implementation of funded prevention programs.

All ratings were aggregated, organized, analyzed, and formatted as GIS maps.

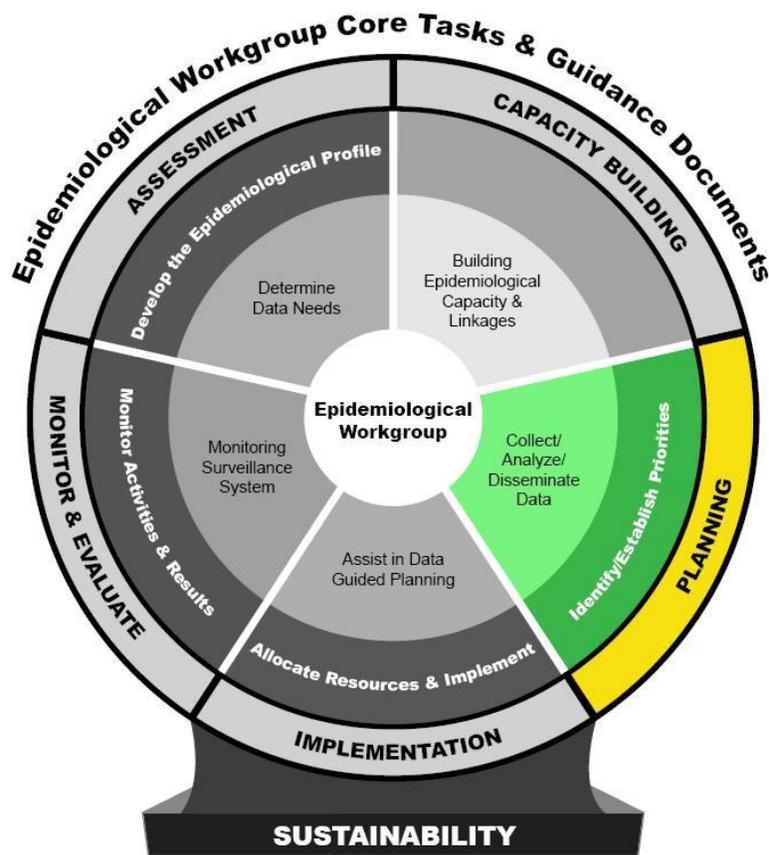
Step two of the community readiness assessment involved the conduct of comprehensive site visits to each finalist community to determine the potential SPF SIG grantees': 1) overall knowledge and commitment to the SPF; 2) desire to engage in a structured, long-term prevention planning with an evidence-based focus; and 3) estimated time needed for capacity building prior to implementation.

Using an adapted version of the NIDA Community Readiness Inventory, the Workgroup's site visit teams conducted focus groups with stakeholders from each county to learn more about each

county, and gather and organize information on the following seven factors of community readiness: 1) problem definition/agreement; 2) recognition of problem by community; 3) existence of and access to resources; 4) vision and plan; 5) energy to mobilize and sustain prevention activities; 6) networking with and support of stakeholders; and 7) talent, leadership structure, and sense of community.

Identifying Finalist Communities

Based on the site visits, the Kentucky Workgroup selected eight counties to receive SPF SIG funding to address State priority areas: Owsley County (Tobacco), Owen County (Underage Drinking), Letcher and Clinton Counties (Diverted Prescription Drugs), Letcher and Clinton Counties (Methamphetamine), and Clay and Monroe Counties (Inhalants).



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Priority Setting: Group Assessment

Description:

This Tool supports the development of a process and methodology for identifying substance abuse prevention priorities based on State Epi Profiles. The Tool focuses on nine critical aspects of the priority-setting process. Designed for use in group settings, this Tool supports and documents group assessments and can serve as a relatively low-risk entry point for Epi Workgroups that need to identify and explore performance problems, estimate future needs, and resolve challenges.

The Guidance Document, *Setting Priorities for Substance Abuse Prevention*, is the primary source for this Tool, which mirrors that document's organization and sequence. Consult the source document if further content detail is needed.

Possible Uses:

This Tool may be used to support facilitated discussions among Epi Workgroup members about the tasks before them to ensure that those tasks, and the group's collective performance of them, are addressed. The facilitator should guide the group in discussing how well tasks have been accomplished and whether any task aspect should be revisited. Facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any

action items. They may also wish to share the above-noted Guidance Document with Workgroup members.

Adaptation Notes:

This Tool may be presented with its companion tool, *Priority Setting: Individual Member Self-Assessment*, which focuses on individual Epi Workgroup member's ability to communicate effectively about their group's priority-setting process and methodology.

Assessing Priorities

Updated: _____

1. The Workgroup's priority-setting process and players are well established and group members' roles in that process are appropriate and documented.

Comments.... Good Practices.... Improvements Needed... Actions

2. The Workgroup's comparison/contrast criteria and analysis processes and products are documented and available.

Comments.... Good Practices.... Improvements Needed... Actions

3. The Workgroup selected and applied the following epidemiological dimensions to the data, as appropriate:
 - a. Size/magnitude,
 - b. Time trends,
 - c. Other relative comparisons,
 - d. Seriousness/severity, and/or
 - e. Economic costs/social impact.

Comments.... Good Practices.... Improvements Needed... Actions

4. The Workgroup considered all applicable techniques, including categorical rating and unweighted and weighted scoring, and made an appropriate selection.

Comments.... Good Practices.... Improvements Needed... Actions

Assessing Priorities

Updated:

5. The Workgroup considered other criteria to apply, including capacity/resources, preventability/changeability, and readiness/political will.

Comments.... Good Practices.... Improvements Needed... Actions

6. The Workgroup organized its data by construct, indicator, and dimension to facilitate their use in priority setting.

Comments.... Good Practices.... Improvements Needed... Actions

7. The Workgroup kept its work transparent and kept its processes as simple as possible.

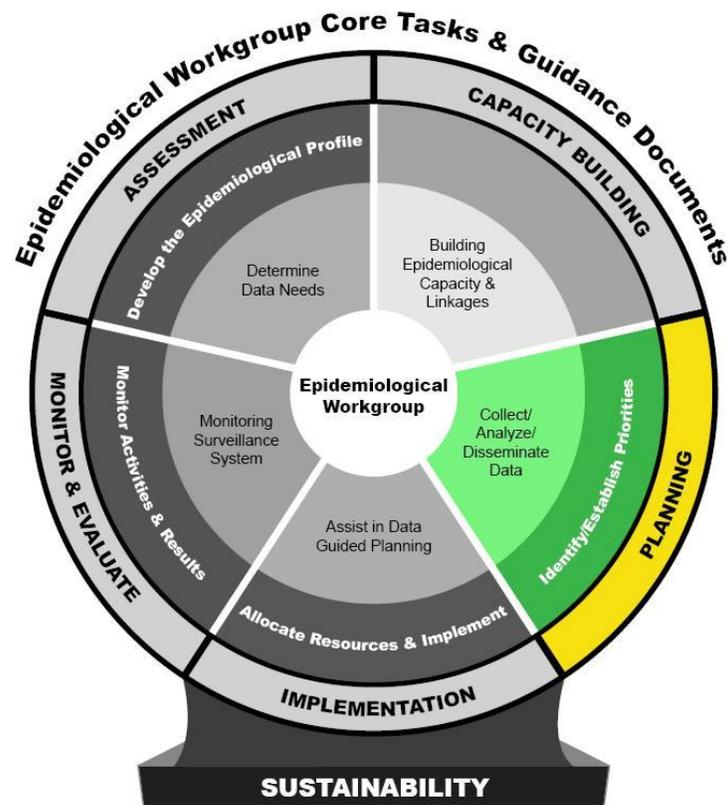
Comments.... Good Practices.... Improvements Needed... Actions

8. The Workgroup's data and priority-setting products and documents are clear and easy to read and understand, and they take into account all relevant contextual factors.

Comments.... Good Practices.... Improvements Needed... Actions

9. The Workgroup kept data providers and other stakeholders involved in the priority-setting process.

Comments.... Good Practices.... Improvements Needed... Actions



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Priority Setting: Individual Member Self-Assessment

Description

This Tool addresses the preparation of individual Epi Workgroup members to communicate effectively about their Workgroup’s priority-setting process and methodology. Although not every member will be involved in every step of the priority-setting process, every member must be able to communicate about it in ways that make sense to various decision makers and stakeholders. Thus, this Tool identifies, in checklist format, eight elements of knowledge or applied skill that should be evidenced by all members. It was designed to assist individual Workgroup members in self-assessing their knowledge and skills and to identify elements for which they need assistance or support.

The Guidance Document, *Setting Priorities for Substance Abuse Prevention*, is the primary source for this Tool, which mirrors its organization and sequence. Consult that document if further content detail is required.

Possible Use(s)

This Tool may be useful for new members who wish to assess their readiness to participate in Epi Workgroup activities and to identify any activity areas in which they need assistance or support. Discussion facilitators may wish to distribute the above-noted Guidance Document to new Workgroup members.

This Tool may also be useful in group settings (e.g., with an entire Epi Workgroup) to facilitate discussion of member knowledge and skill expectations. Additionally, it may be useful for Workgroups that are making progress toward sustainability. Facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any action items.

Adaptation Notes

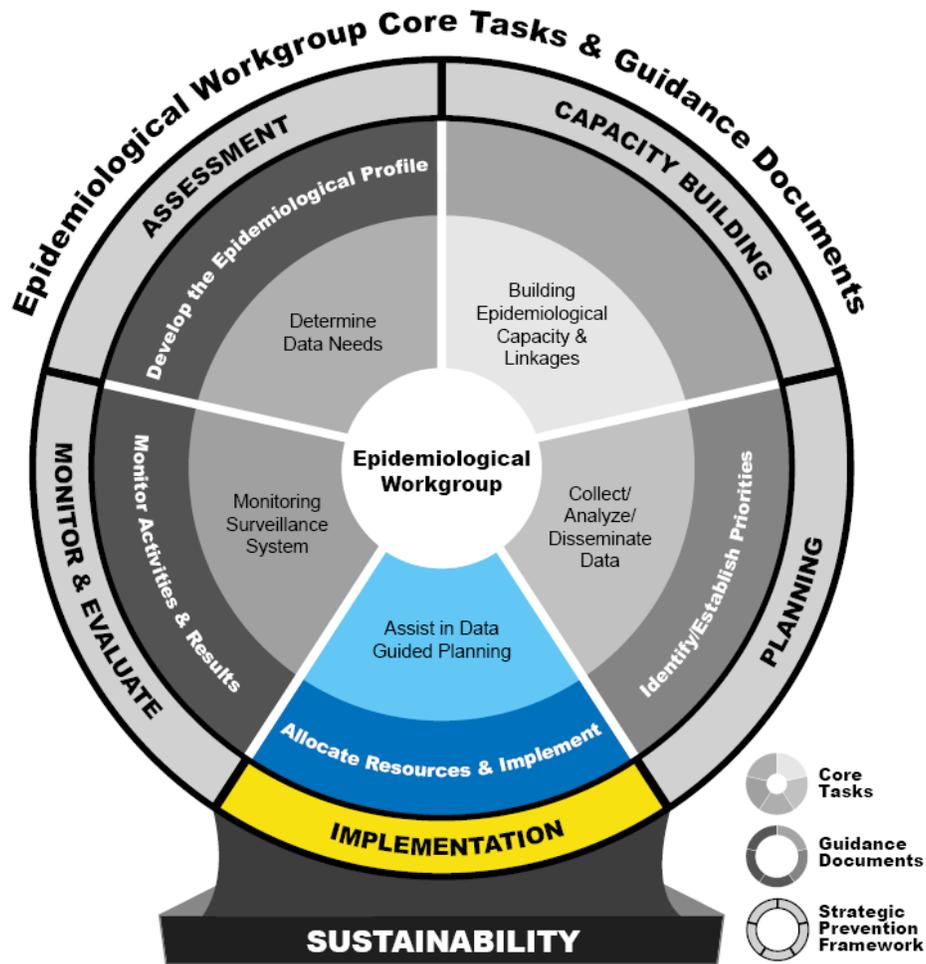
This Tool may be presented along with its companion tool, *Priority Setting: Individual Member Self-Assessment*, which focuses on Workgroups' assessment of their priority-setting process and methodology. Facilitators may wish to distribute both the above-noted Guidance Document and companion tool to new members.

Setting Priorities: Self-Assessment

Epi Workgroup members bring different skills and expertise to bear in their Workgroup involvement. All members, however, must be able to communicate effectively to others about their Workgroup's priority-setting process and methodology. The following checklist reflects Workgroup consensus about what every member should know and be able to do.

I can explain:

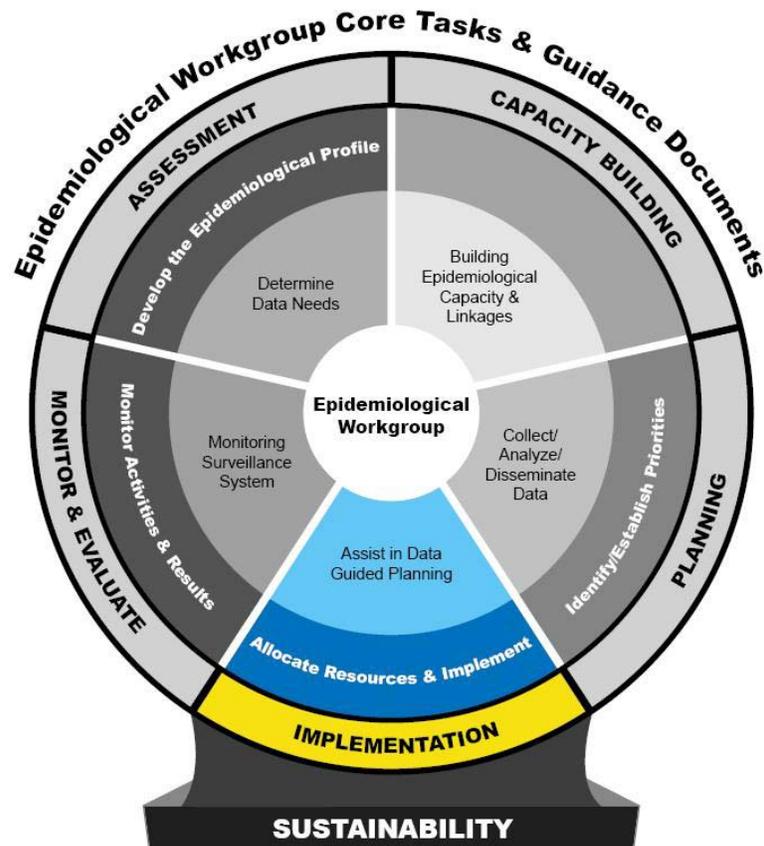
- the goal of data-driven prioritization;
- three key questions that help determine data-driven priorities;
- three of the common epidemiological dimensions and when more than one dimension should be considered;
- the process and methodological options for priority setting, how each works (i.e., categorical ratings, unweighted scoring, weighted scoring) and why my Workgroup selected the option it chose;
- how my Workgroup organized its data to facilitate comparisons;
- how it applied its priority-setting process to the data available;
- how my Workgroup interpreted and refined the results of that process, and the questions it asked and answered;
- how it addressed other important criteria such as:
 - a. Capacity/Resources,
 - b. Preventability/Changeability, and
 - c. Readiness/Political Will



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

ALLOCATE RESOURCES & IMPLEMENT

1. *Allocating Resources to Address State-Level Substance Abuse Prevention Priorities: Guidance for States*
2. Resource Allocation: Group Assessment
3. Resource Allocation: Individual Member Self-Assessment



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Description

This Tool describes methods for developing a data-driven process for allocating resources to address prevention priorities, with the goal of using data to allocate *sufficient* resources to improve targeted health outcomes. Its guidance is focused on allocating SPF SIG funds to address SPF SIG priorities¹. It describes four data-guided resource allocation planning models: 1) Equity; 2) Highest Contributor; 3) Highest Rate (sometimes referred to as Highest Need); and 4) Hybrid. It also provides specific examples of data-guided approaches that States have used for allocating resources. The Tool concludes with a discussion of the mechanisms used for allocating funds to address prevention priorities, citing specific examples from States.

Possible Use(s)

This Tool may be useful for State-level administrators and members of State Epi Workgroups who are charged to address Core Task D: *Assist in determining substance abuse prevention priorities, based on epidemiological data, and outline how they inform State planning and resource allocations.*

¹Although the focus is on guidance for SPF SIG States, the methods described are likely to be informative to priority setting and resource allocation for purposes and funding streams other than SPF SIG-related ones.

Allocating Resources to Address State-Level Substance Abuse Prevention Priorities:

Guidance for States

Foreword

Each State¹ has received Federal funding from SAMHSA/CSAP to establish a State Epidemiological Workgroup (hereafter, “Epi Workgroup”). These workgroups are comprised of a network of people and organizations that bring analytical and other data competencies to substance abuse prevention. 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 the State and community levels. Their deliberate focus is on using data on substance use outcomes to inform and enhance prevention practice.

Of the 65 existing State Epi Workgroups, 42 have been funded under the Strategic Prevention Framework State Incentive Grant (SPF SIG) program. Separate funding has supported another 23.² Despite the grant or contract instrument that supports them, all Epi Workgroups share the common purpose of developing structures and procedures that connect epidemiological data to substance abuse prevention decision making.

Such data-driven decision making necessitates the development of a State monitoring system for substance abuse. Such a system can help inform assessment (“*What do substance use and related consequences look like in the State?*”), planning (“*What are the current prevention priorities that emerge after needs assessment?*”), and monitoring/evaluation activities (“*How are we doing in our efforts to address these issues?*”) to enhance substance abuse prevention.

Through its Epi Workgroup effort, CSAP has defined a series of data-driven activities to assist States in developing their own monitoring systems by:

- developing a key set of indicators to describe the magnitude and distribution of substance related consequences and consumption patterns across States;
- collecting, analyzing, interpreting, and communicating these data through the development of Epi Profiles;
- establishing prevention priorities for State resources based on data analyzed and interpreted through the profiling process;
- allocating resources to populations based on the established priorities; and
- developing a systematic, ongoing system of monitoring State substance-related consumption patterns and consequences and tracking States’ progress in addressing prevention priorities, detecting trends, and using data to redirect resources if needed.

¹ In this Toolkit, the term *States* refers collectively to States, the District of Columbia, and Federally recognized Tribal and U.S. territories.

² Twenty-three of the 65 funded workgroups are SEOWs (State Epidemiological Outcome Workgroups in areas without SPF SIGs. SEOW are not required to address Task D: *Assist in determining substance abuse prevention priorities, based on epidemiological data, and outline how they inform State planning and resource allocations.* In this Toolkit, the term *Epi Workgroup* will be used when referring to both SEOWs and SEOWs unless a specific distinction is made otherwise.

To assist States with these tasks, CSAP has developed several resources. One of these, the State Epidemiological Data System (SEDS), provides a set of constructs and indicators identified as relevant, important, and available for preliminary substance use prevention planning. Information on the SEDS can be found at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/).

CSAP also provides five guidance documents to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

State Epidemiological Workgroups: Developing a State-level Substance Abuse Monitoring System: Guidance for States

State Epidemiological Workgroups: Preliminary Lessons Learned

TABLE OF CONTENTS

Foreword	i
Introduction	2
Resource-Allocation Planning Models	4
Data-driven Resource Allocation	8
Applying Planning Models: Examples	10
Allocation Mechanisms	13
Summary	14
Appendix	16

Introduction

States face a wide array of alcohol, tobacco, and drug use-related problems, and multiple factors affect States' response to these realities. Often the magnitude and severity of the problems and the level of public concern about them has influenced whether and how a State responds to a particular substance use pattern or consequence. As a result, States must make choices about which patterns of use and consequences are priority concerns and how to channel available funding streams toward these priorities. Other guidance documents developed for Epi Workgroups have asserted that these decisions must be based on data that identify the substance use patterns and related consequences that have the most significant impacts on the State as a whole. Once the most significant problems are established by data, resources should then be allocated to address these priority problems.

This document describes methods for developing a data-driven process for allocating resources to prevention priorities with the explicit goal of using data to allocate sufficient resources to improve targeted health outcomes. The guidance in this document builds on information previously provided in the following documents: *Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Outcome Workgroups* and *Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Outcome Workgroups*. Specifically, this document:

- describes alternate approaches for using data to allocate resources;
- provides examples of data-guided approaches that States have used for allocating resources; and
- discusses emergent issues and lessons derived from States' experience of using data to inform resource allocations.

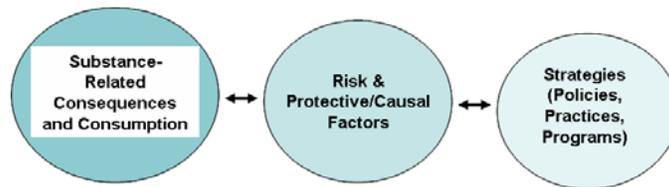
To these ends, this document: 1) provides basic descriptions of four data-guided allocation planning models; 2) details the rationale for the use of each model, as well as some of their benefits and potential drawbacks; 3) describes how various types and combinations of data indicators may inform selection and application of an allocation model (and ultimately grant recipients); and 4) provides examples of data-guided planning models and how States have used them for resource allocation.

States often must allocate resources for various purposes and for different funding streams and programs. This document focuses on resource allocation for the Strategic Prevention Framework – State Incentive Grantees (SPF SIGs); that is, on allocating SPF SIG funds to address SPF SIG priorities vis-à-vis reducing substance use/abuse and related consequences (or improving substance-related outcomes). Although the focus herein is on allocating SPF SIG resources, the methods and guidance provided will be informative to resource allocation for purposes other than SPF SIGs.

Outcome-Based Prevention

The work of the Epi Workgroups is framed by an outcomes-based prevention model that grounds prevention in a solid understanding of substance use and related consequences (see **Figure 1**). The State Epi Profiles developed by these Workgroups summarize the nature, magnitude, and distribution of substance-use and related consequences in the States. This is a critical first step for determining prevention priorities. Following the outcomes-based prevention model, once priorities are established, State planners can then identify the factors influencing the prioritized-use patterns and consequences to align relevant and effective strategies to address them.

Figure 1: Outcomes-Based Prevention Model



SAMHSA/CSAP recommends that State Epi Profiles and related prioritization processes focus predominantly on substance-related consumption and consequences as they implement an outcomes-based approach to prevention.

CONSUMPTION:

Consumption is defined as the use and high-risk use of alcohol, tobacco, and drugs. Consumption includes patterns of substance use including initiation of use, regular or typical use, and high-risk use.

CONSEQUENCES:

Substance-related consequences are defined as adverse social, health, and safety consequences associated with the use of alcohol, tobacco, and/or drugs.

Consequences include mortality and morbidity and other undesired events for which alcohol, tobacco, and/or drugs are involved clearly and consistently. Although a specific substance may not be the single cause of the consequence, scientific evidence must support a link to alcohol, tobacco, and/or drugs as a contributing factor to the consequence.

Focusing on consumption and consequences in the prioritization process does not undermine, by any means, the importance of measuring and understanding causal factors that lead to substance abuse and substance abuse-related consequences. Understanding the factors that contribute to substance use and related problems (also referred as “risk and protective factors” or “causal factors”) is the logical next step after State planners have developed a full understanding of the substance-use patterns and consequences it seeks to address and their determined priorities. This activity may occur concurrently with data-driven resource allocation, the goal of which is to

provide adequate resources to produce positive outcomes vis-à-vis substance priorities. The following steps frame this outcomes-based allocation process:

- Determine a planning model that best defines the State’s approach for allocating SPF SIG funds based on the nature of the specific priority(ies).
- Identify indicator data that describes the substance prevention priority(ies) so that *how* the State plans to allocate resources matches *what* the State is trying to change.
- Gather and organize such data, if they are not already available from the State Epi Profile.
- Apply indicator data as framed by the resource-allocation planning model approach.

Resource-Allocation Planning Models

Once State prevention priority concerns have been identified, decisions must be made about how best to distribute available resources. A process must be adopted that will guide how funding is dispersed among a certain number of entities to address the problem(s) targeted for intervention. The goal of a resource-allocation planning model is to develop an approach for addressing priorities in a manner that is likely to achieve the desired effect given the existing resources. In developing such models, State administrators must consider and ultimately reflect a firm understanding of the nature of prevention priorities as well as all available resources, financial and non-financial, in the State.

Although other resource-allocation models exist, States typically use the following three planning models to determine the distribution of their SPF SIG funds: Equity, Highest-Contributor, and Highest-Rate (sometimes referred to as Highest-Need). States may also use any combination of these models to form unique hybrid planning models, and some States add other contextual features to stratify further their planning approaches. However, the three models described in this document provide clear examples of the methods States can use to balance their desire to change outcomes with the realities of limited resources.

The Equity Resource-Allocation Planning Model

As its name implies, this model dictates equitable distribution of funds across all sub-State communities. According to this model, the same amount of money is awarded to each community that, taken together, constitutes the State total, without applying other criteria. Variations of an Equity model might include adjusting the amount of money provided by overall population to allocate funds on a per-capita basis.

Generally, the Equity model is appropriate only if the following two criteria are met:

- **Data indicate that the priority substance-use pattern or substance-related consequence is distributed evenly across the State.** Certain substance-use patterns and substance-related consequences (e.g., underage drinking) may well be widely distributed across the State at levels high enough for concern and thus suggest the appropriateness of using an Equity model. Other problems, however, may not. For example, in a State where methamphetamine use and its related harm are heavily concentrated in only one region, the wisdom of providing funds to all entities to address methamphetamine is questionable.

- **The State has enough resources to fund each entity across the State at a level adequate to make changes in the targeted priority outcomes.** Strong political pressures may exist to fund all regions of a State, but State prevention staff must determine whether such pressures might dissipate their resources so broadly that no entity will have adequate funding to achieve change. Given the large populations and/or geographic size of most SPF SIG States, only a few have considered using an Equity model for their resource-allocation planning. If, however, States determine that they have adequate funds to fund all relevant sub-State entities, an equity model is feasible.

Thus, an Equity model is relevant only in cases where the targeted problem is distributed widely and uniformly *and* sufficient resources are available to distribute funding evenly without diluting their potential to effect change.

If a State chooses to use an Equity model, and the majority of its sub-State entities are successful in reducing the rate of the targeted problem in their coverage areas, it is likely that the State will see a concomitant reduction in the overall rate of the problem Statewide. With the level of funding provided by the SPF SIG, States with small populations can expect positive State-level outcomes using an Equity model. States with large populations, however, are not advised to select this model due to its likely diluting effect on funded programs, practices, and policies.

The Highest-Contributor Resource-Allocation Planning Model

The Highest-Contributor model uses the State's overall number of priority problem cases as the metric for comparing sub-State entities. This model identifies and ranks problem areas that, according to the data, contribute the greatest number of cases to the overall State total in terms of absolute numbers of persons affected. For example, a State that prioritizes alcohol-related motor vehicle crashes using a Highest-Contributor model may use county-level data to identify those regions with the highest numbers of alcohol-related motor vehicle crashes, not those with the greatest rate of cases (i.e., number of cases relative to population size). Examining the data from this perspective often reveals that highly populated areas contribute a large number of cases to a State's total priority problem, even though that area might actually have a low rate of problem incidence when its number of cases is divided by its population size. By contrast, a less-populated area might contribute fewer cases to the overall State total for a priority problem but present a higher rate when its number of cases is divided by its small population size.

For example, a county with a population of 1 million residents might have a relatively low rate of alcohol-related motor vehicle crashes (5.4 cases per 100,000), but it would contribute an absolute number of 54 cases to the Statewide total occurrence. By contrast, a low-population area of fewer than 25,000 residents but with a considerably higher rate of such crashes, 19.3 per 100,000, would contribute less than five cases to the State-level problem.

Allocation based on highest contribution concentrates funding within a subset of communities or regions that contribute the highest number of cases to a State total. **Application of this model has the potential to improve Statewide prevention rates when decreases within communities accounting for a large number of a State's cases likely lead to decreases at the**

State level. It is unlikely, however, that small communities will be funded under such a plan. Even small communities with relatively high rates of the State's priority concerns simply will not have the number of cases presented by larger communities.

The Highest-Rate Resource-Allocation Planning Model

This planning model (often referred to as a Highest-Need model) directs funding to those communities or regions that have the highest rate of substance-use pattern or substance-related consequence vis-à-vis the priority pattern or consequence. For example, a State addressing underage drinking using the Highest-Rate model may use county data from student behavioral surveys indicating the ratio of youth reporting any drinking or binge drinking in the last 30 days compared to that number on a Statewide basis. (NOTE: rates of alcohol-related motor vehicle crashes among persons under age 21 can be used as a proxy for underage drinking if a direct measure of underage drinking is not available at the level needed.) In contrast to the Highest-Contributor model, which examines community contributions to the State total, the Highest-Rate model compares each sub-State entity's cases to its own population numbers to determine the prevalence of a problem within different regions or groups. Accordingly, the absolute number of people affected is not the focus; rather, the extent of the problem across communities is expressed relative to each community's population (rates).

Like the Highest-Contributor model, the Highest-Rate model concentrates funding within a subset of communities, but it has less potential to improve Statewide rates because rate is a function of population, and it is possible for even very small communities to have high rates. **A State's decision to allocate funding according to the Highest-Rate model signals its commitment to decreasing a substance-related problem or consequence where it is being felt most acutely (a target area) and where the State can reasonably be expected to lower those rates substantially. It is less likely, however, that this method will yield decreases at the State level unless the highest-rate communities are also the most highly populated areas.**

Hybrid Resource-Allocation Planning Models

At times, application of a single planning model will not allow a State to disperse funding in a way that will sufficiently address a targeted problem, especially across varied sub-State contexts. In these instances, a hybrid resource-allocation planning model such as, for example, one that combines Highest-Contributor and Highest-Rate approaches, can be considered.

Hybrid models concentrate funding on "hot-spot" problem areas as defined by both prevalence numbers and rates. **By crafting hybrid data-guided allocation planning approaches, States can maximize their opportunities to achieve declines in the number of Statewide occurrences as well as targeted rate reductions in highly affected communities.** Moreover, hybrid models can help States achieve greater parity across different community types (e.g., urban, suburban, rural, frontier).

Contextual Influences and Resource-Allocation Planning

Most SPF SIG funds are distributed using the three basic and hybrid resource-allocation planning models. Some States, however, use a regionally stratified planning model. This option is used in States where the substance prevention infrastructure is comprised of regional entities that historically have played a significant role in planning and administration, and where strong emphasis is placed on preserving that structure. **If a State commits to allocating prevention resources within each region before it considers the more substantive issues related to data-guided resource-allocation planning, its planning approach can be described as regionally**

stratified. Within State regions, however, basic models of resource-allocation planning may be in effect (e.g., a regionally stratified Highest-Rate model).

A community-stratified planning model is somewhat similar to a regionally stratified one in that it begins with a commitment to make some type of allocation to areas across the State, but the basis for allocating resources is not rooted in the substance abuse prevention infrastructure. This approach has been employed in Mountain States with small urban populations and large rural and frontier areas. Prior to examining epidemiological data on problem prevalence, these States determined that each type of “community” will receive prevention funds. The level of resources within each community type is determined based on epidemiological data-based factors.

A comparison of the data-guided resource-allocation planning models discussed in this section is presented in **Table 1**.

Table 1. Comparisons Across Resource-Allocation Planning Models		
Planning Model	Recipients of Resources	Implications for Problem Reduction
Equity	All communities	Spreading resources thinly may reduce impact Statewide reduction of the problem dependent on which communities are successful
Highest-Contributor	Subset of communities that contribute most number of cases to overall Statewide problem	Favors larger population areas High potential to reduce total problem incidence at State level
Highest-Rate	Subset of communities where problem (relative to community population size) is being experienced most acutely	Smaller population “hot spots” may get funded even if they do not contribute most to total cases Less likely than Highest-Contributor model to affect overall problem occurrence
Hybrid	Subset of communities based on different conceptions of need (e.g., contribution, rate)	Maximizes opportunity to achieve a decline in number of Statewide occurrences as well as targeted rate reductions in highly affected communities Overall problem reduction tied to relative mix of highest=contributor versus highest-rate communities funded
Stratified	Subset of communities across a range on a variable of interest (e.g., population density) before applying need criteria	Ensures that resources are distributed by need within other dimensions of importance Problem reduction may be attenuated by communities at low end of continuum of the variable used for stratification (e.g., low capacity, low population density) as well as need criteria (high rate versus high contributor) Trade off in problem reduction may be acceptable if other considerations (e.g., building prevention resources where low capacity exists, equity across areas of varying population densities) are highly valued

To pick the most appropriate resource-allocation planning model, States must consider carefully how need, as defined by data about the priority, is distributed Statewide. If the data indicate that the prevalence of a priority problem is widespread—that is, the problem affects communities fairly equally and consistently across the State—then an Equity model may be most appropriate. It is not always practical, however, to spread funding across an entire State substance abuse prevention system, particularly in States with large populations. In such cases, States may determine that the potential benefits of targeting funding to high-need communities (i.e., in terms of number of contributors or rates) may outweigh the greatest potential drawback—namely, the possibility of little or no change in the target indicator.

Data-driven Resource Allocation

Identifying Resource-Allocation Indicators That Reflects Priority(ies)

If a State selects a resource-allocation planning model that applies data (i.e., on contribution and/or rate), then it must also identify places of high need according to that planning model. It should begin by identifying the unit of analysis (e.g., region, county, age group) for allocation and then select the best available indicator(s) that measures the State-level priority at the desired sub-State level. In many cases, the State may have made a decision about the unit of analysis very early on; subsequent layers of decision making, especially as informed by epidemiological assessment and prioritization results, may lead to a more deliberate process to determine the best allocation model to use irrespective of an established pattern of resource allocation. Given that the SPF SIG program encourages community-led planning activities, it may make sense for States to allocate funding according to the geographic units by which sub-State entities naturally tend to identify themselves (e.g., cities, counties). No matter how the decision is made, it will have implications for determining which indicator(s) will be most useful in determining need.

The most straightforward approach to linking a State priority with indicator data to determine resource allocations begins with the identification of one indicator that is a direct or very close reflection of the State priority. Decisions about allocation thus become a simple function of funding those communities that demonstrate the greatest need, by number or rate, based on a single indicator. For example, if a State selects underage drinking as its substance prevention priority, then selecting self-reported binge drinking among youth as a priority indicator would be an appropriate choice, as this indicator represents a severe form of problem drinking within the underage population. Likewise, if alcohol-related traffic crash fatalities and injuries are the State's priority, alcohol-related traffic crash deaths would be an obvious indicator on which the State should base its prevention allocations.

In some cases, States may determine a need to use multiple indicators to allocate resources addressing a single priority. For example, a State that identifies underage drinking as a priority may identify 30-day binge drinking among youth as well as alcohol-related vehicle crashes among persons under age 21 as the basis for its priority status and use these same indicators to guide its allocations to address those areas. The State's Epi Profile and other data-related products are rich sources of information in this and other regards. A State may decide, for example, to utilize multiple indicators of underage drinking because the extent of the underage drinking problem is clearer when both consumption and consequence indicators are considered.

If a State's prioritization processes result in multiple priorities, however, data indicators must be defined and applied for each priority.

When two or more indicators are selected for one priority, a State may find it more difficult to determine how each indicator should be used in making decisions about resource allocation. It may be useful to design an approach that can combine multiple indicators into an overall resource-allocation planning approach. Continuing with the example noted in the preceding paragraph, in such instances the State might choose to allocate funds to counties with a youth alcohol-related traffic crash death rate that is equal to or greater than the Statewide rate and a binge drinking rate in the top 25th percentile.

To streamline the process for examining data, States may create a kind of data indicator index (i.e., single statistic index) to combine multiple indicators. Creating such an index may help to streamline understanding via an additive process that assigns equal importance to each indicator. Alternately, a State may implement a more complex process that involves the weighting of individual indicators to assign them greater importance in the allocation process.

Despite their appeal, the use of indexes in data-guided resource-allocation planning presents several limitations. Among the greatest of these drawbacks is the loss of critical information about how each component of an index affects the composite. Additionally, adding multiple indicators together makes interpretation of index scores difficult. For example, if a particular county within a State has a high index score comprised of three separate indicators, identifying which indicator(s) contributes most to the score may be challenging. Referring back to the data from which the index was created, if those data are available, may help to answer the question, but doing so defeats the purpose of using an index in the first place. Thus, States may find it worthwhile to consider examining data from two or more indicators separately in a systematic process or at least doing so prior to pursuing a formula approach that combines multiple indicators.

The Absence of Indicator Data

What options are available when a State has minimal data available, especially at the sub-State level, to define its substance prevention priorities or when no indicator at all is available at the unit of analysis it has chosen for allocation purposes (e.g., region, county, etc.). What can be done when the process of identifying a State's priority problem is not as straightforward as simply examining the data on deaths from alcohol-related traffic crashes? Using a proxy indicator—that is, a measure that is related conceptually to the priority problem though not a direct assessment—presents a good alternative. For instance, if a State has prioritized underage drinking, it might select alcohol-related traffic crashes involving youth under age 21 as a closely related proxy measure.

Another way of addressing the absence of appropriate indicators at the sub-State level is to generate sub-State indicator estimates from Statewide data. Frequently, however, some of the best data sources for State-level data do not appear upon first review to produce reliable sub-State estimates, particularly in a single sample year. In such instances, more reliable estimates can be obtained by merging several years of data. Consider, for example, a State's selection of alcohol-related traffic crash deaths as the indicator to guide its resource-allocation planning and

the possibility that some counties would have few or no crashes in the most recent year or two in which data were collected. By compiling five years of data, a full data set can be created, with figures for every county, and allocation decisions can be made based upon these more available and stable data. The primary drawbacks of this approach is that by collapsing several years of data, information about trends across time is lost, and older data may not reflect current consumption rates.

In the absence of good sub-State indicator data, a State may choose to generate synthetic estimates as a last resort. To do so, States must have reliable Statewide data for the indicator of interest as well as data on the distribution of other important, related variables within the sub-State regions of interest. For example, if a State has reliable Statewide data on binge drinking among youth but does not have similar sub-State data, it could use the State-level binge drinking data, along with data on other key variables at the sub-State level (e.g., demographic data, consumption and consequence data related to the priority, etc.) to generate synthetic estimates of binge drinking for each sub-State area. Clearly, this is the least desirable approach to data-based resource-allocation planning because it is essentially an artificial estimate; however, in the absence of good sub-State indicator data, it is a valid approach for guiding resource allocation.

Considering Variables Beyond Need

Although identification of resource-allocation indicators that describe the priority represents the core of many resource-allocation planning models, in some cases States may wish to account for additional factors when making funding decisions. This may be particularly likely when wide disparities exist across the State in variables such as prevention capacity, resources, and readiness. When a State's prevention infrastructure is strong, generally few concerns arise about the capacity and readiness of State entities to implement the interventions that eventually will be selected to address State priorities. When the prevention infrastructure is minimal or weak, however, it would behoove States to consider whether any of its entities are capable of organizing and implementing the appropriate interventions, particularly in areas that merit a significant investment of resources based on available indicator data.

Large discrepancies in the extent to which a priority problem affects diverse populations may suggest the importance of including demographic considerations in the allocation process. For example, the State of New Mexico gave extra points to proposals representing broad community initiatives that specifically focused on particular population groups—Native American males and Hispanic males—that suffer inordinately high rates and numbers of deaths, respectively, from alcohol-related motor vehicle crashes.

Applying Planning Models: Examples

After wedding a State's resource-allocation planning model to the appropriate indicators, a variety of feasible resource-allocation approaches may be expected. For the purpose of consistency and efficiency, all the resource-allocation models described below employ the county as the unit of analysis/allocation. Given variability in context across SPF SIG grantees, other site examples may illustrate the use of alternative and more appropriate units of analysis such as Tribes or municipalities.

A State may consider the **Equity Model** (a non-data-guided model), in which all counties would receive money to implement prevention programs, practices, and/or policies targeting the priority problem. If, for example, the priority problem is drunk driving and the allocation indicator is alcohol-related motor vehicle crashes, then each county would get funds to target reductions in those types of crashes. A variation on this model might call for adjustments in the allocation amount based on the population of each county. It is worth reiterating that this approach is not ideal for large States with many counties, but would be best suited for small States with few counties/communities.

An example of applying the equity model for SPF SIG resource allocations comes from the 10 Wisconsin American Indian Tribes that participate in the Great Lakes Inter-Tribal Council (GLITC) SPF SIG. Based on problem prioritization, the GLITC Advisory Council identified two alcohol consumption patterns as priority concerns: binge drinking and underage drinking. In distributing its SPF SIG funds, the Advisory Council chose to provide each Tribe with one-tenth of the subrecipient funding total. The Advisory Council reasoned that substance abuse patterns were equally important among the Tribes; however, the more-populated Tribes, despite having more people with needs, were further along in the process of addressing those needs and already had in place more sophisticated prevention systems. It thus seemed fair to allocate the funds to each Tribe equally. The Advisory Council's needs assessment also revealed some uniformity of "high-need" with regard to this priority across all Tribes.

To make allocations based on the **Highest-Contributor Model**, a State would generate a list of counties by the number of cases or respondents for the allocation indicator, ranking them from highest to lowest. Thus, allocations could be made to counties with at least a minimum number of cases, to counties above a certain percentile, or to any number of the "top" counties (i.e., those with the highest number of cases or respondents) as resources allow. In the case of alcohol-related motor vehicle crash fatalities, a State could choose to fund (or consider applications from) counties with more than 10 deaths in the reporting period as a way of prioritizing the highest contributors.

In **Massachusetts**, for example, the problem priority selected for intervention was the prevention and/or reduction of opioid-related health consequences, specifically unintentional fatal and non-fatal opioid overdoses. A modified highest-contributor funding model was selected for dispersing SPF SIG funds to eligible communities. To be eligible to apply for funding, municipalities had to meet the minimum criterion of having an average of 30 or more cases of unintentional fatal and non-fatal opioid overdoses during the three-year period from 2003 to 2005. The rationale behind choosing this criterion was to ensure that 1) sufficient cases were present to warrant an intervention, and 2) sufficient cases were present for statistical testing to assess whether significant changes in opioid overdose occurred after the intervention. By focusing on the number of cases rather than the crude rate of cases, the State also avoided the possibility of disproportionately funding smaller communities that had high crude opioid overdose rates yet only a few (in some cases only a half dozen).actual overdose cases.

Texas also used the Highest-Contributor model to disperse SPF SIG funds to address its priority concern: binge drinking among 12 to 25 year olds. The State used the number of alcohol-

involved drivers in fatal crashes as a proxy indicator for binge drinking. To identify the geographical areas where the problem was most frequent, the State's Epi Workgroup collected data on the total number of relevant events or episodes (e.g., total number of fatalities) and calculated the percentage attributable to each county, using the total number as the denominator and the episodes per county as the numerator. Subsequently, among the seven highest-need counties thus identified, 11 communities received funding based on a formula that weighted the resource allocation indicator and the target population in a 60:40 ratio.

The **Highest-Rate Model** dictates allocations based on sub-State entities' rates or percentages of problem occurrence rather than Statewide totals. States that wish to use this approach would begin by generating a ranking of counties by allocation indicator rate or percent. Allocations then could be made to counties with rates at or above the Statewide rate or to those with rates above a specified percentile ranking. For example, a State might review the rankings in the Texas case above and select 10 counties with the highest rates of binge drinking among 12 to 25 year olds for funding. It is worth noting here that rankings based on traffic crash fatality rates often may yield surprising results as nationwide data often reveal that small communities have higher rates of alcohol-related traffic fatalities than larger communities.

Arkansas used the **Highest-Rate Model** for its resource allocation planning after it identified underage drinking and alcohol-related motor vehicle crashes with injuries or fatalities as its two priority problems. Arkansas is primarily a rural State with two areas of population density. Although its two high-density counties contributed more problem cases to the State total, they already were receiving the most resources to address priority problems. After adjusting for population, Arkansas used the highest-rate model to focus staff support and funding resources toward high-need areas that had the potential to develop high capacity but at the time had few resources to do so. The top quartile of counties for each priority indicator (i.e., past month underage drinking, past two-week underage binge drinking, and alcohol-related traffic crashes and fatalities) were given extra points in the competitive scoring process.

To maximize its potential for achieving the change desired, a State may opt to use a **Hybrid Model**—that is, some combination of the highest-contributor and highest-rate approaches. For example, armed with rankings of substance abuse indicators by county, number, and rate, a State would simply need to define the criteria for both the highest-contributor and the highest-rate indicators and the manner in which they would be considered jointly. A State targeting alcohol-related motor vehicle crashes, for instance, may select communities with a minimum number of fatal crashes per year or those communities with fatal crashes above a certain rate.

Several States have used a hybrid highest-need/highest-contributor model to guide their allocation planning and decisions. For example, **New Mexico** chose to focus its SPF SIG efforts on reducing alcohol-related motor vehicle crashes among 15 to 24 year olds. New Mexico's resource-allocation decisions were based on several factors: need, resources, capacity, and readiness. In terms of need, State SPF SIG applicants were assessed highly if they fell within the

top one-third of counties with the highest death rates from alcohol-related motor vehicle crashes or within the top one-third of counties with the highest number of such deaths.

Kansas used a hybrid resource-allocation planning model to identify underage drinking (binge drinking and 30-day use) as its prevention priority. Its funding formula was based on a county-by-county ranking of highest need and highest contribution in these two indicator areas.

Should a State decide to use a **stratified** resource-allocation planning model, it must first identify the dimension on which it is committed to allocating funds before considering the other variables at the core of resource allocation (e.g., need). Stratification can be based on numerous variables. In the preceding example, it was noted that States may stratify their models regionally based on entities such as counties, which typically have been the unit of choice for substance abuse prevention administration and implementation. Alternatively, States may stratify their models at the community level, beginning with a community characteristic such as population density (e.g., rural, urban, frontier) or key affected or underserved population groups (e.g., percentage of population that is Native American or Hispanic) to ensure that all subgroups along the entire dimension of interest receive some level of funding. After selecting a stratification dimension, the State can apply core resource-allocation planning variables (e.g., highest contributor, highest rate). Thus, the stratified planning models can ensure that resources are distributed by need within other dimensions of importance.

Colorado used a stratified model to ensure that SPF SIG funds were dispersed to its urban, rural, and frontier communities to address underage drinking. After stratifying communities based on population density, the State sought to fund the highest-need areas within each type of region based on their problem rates.

Illinois used a Highest-Need Model stratified by capacity for dispersing SPF SIG funds to address its three problem priorities: alcohol-related motor vehicle crash deaths, episodic binge drinking, and underage drinking. The State conducted a Resource and Capacity Assessment to assess the capacity of its existing community-level infrastructure to support the SPF process and the substance-use Statewide priorities identified by the Statewide Advisory Council. Communities were stratified according to the capacity of their prevention systems (high, medium, and low), then the criterion of highest need was applied to communities in the three capacity categories.

Allocation Mechanisms

After selecting a priority problem and determining the best resource-allocation planning model and indicator(s) on which to base allocations, a State must determine the appropriate allocation mechanism to use. In light of the SPF's emphasis on data-driven planning, the ideal allocation mechanism would be simply to fund those communities where need has been clearly demonstrated by proper indicators. Such allocations can be made by invitation or mandate, based solely on the State's analysis; or they could be accompanied by a competitive proposal or application process, whereby communities would have to formally indicate their desire for funding and detail their plans for use of funds allocated.

Some States are required by law to conduct an open RFP process for all funding or funding above a certain dollar amount. Working within such rules, these States may encounter challenges as they strive to maintain the integrity of the data-driven assessment and planning activities. By following certain guidelines, however, States can adhere to statutory requirements for open bidding and remain true to the spirit of the SPF model. For instance, if the RFP process must be completely open to all interested parties, a State may not violate applicable rules to limit the RFP process to a subset of applicants based on selected criteria. When reviewing applications, however, the State may weight need more by assigning extra points to applications from areas where need is greatest.

New Mexico is an example of a State in which the competitive funding process is open to all communities. By applying a weighted scoring process, State officials were able to award additional points for some criteria to ensure that its resource-allocation planning model dispersed resources to critical-need geographic areas (10 points) and critical-need population groups (10 points). To emphasize the importance of matching resources to need in New Mexico, the State also awarded an additional 5 points to those counties whose resources were lower per capita than their critical need suggested were appropriate.

In cases where multiple funding criteria are used (e.g., hybrid planning models, models based on need plus other variables such as readiness and capacity), a hybrid funding formula may facilitate decision making. For example, **Kansas** used a hybrid planning model that considered high-need and high-contributor criteria to address underage drinking. The model generated a combined formula to determine where need was highest based on county ranking of high need (x3) and county contribution to overall Statewide youth drinking and 30-day alcohol use..

Texas used a Highest-Contributor Model stratified by population to disperse SPF SIG funds targeting its priority concern: binge drinking among 12- to 25-year-olds. After identifying the seven counties where this problem was most frequent (i.e., highest contributors to the Statewide problem), Texas officials used a funding formula that weighted the resource-allocation indicator and the population variable in a 60:40 ratio to select 11 communities for funding.

The matrix in the **Appendix** provides more information on different States' approaches to resource-allocation planning. That matrix summarizes each State's problem priorities, the models adopted to guide State resource-allocation planning and decision making, the resource-allocation indicator(s) used, the application processes used, the number of grantees funded, and the outcome expectations from the sub-recipient funding process. Persons interested in more detailed or State-specific information are advised to visit the web sites of State SPF SIG initiatives.

Summary

Data-guided resource-allocation planning is a critical step that stems from SPF SIG assessment and prioritization efforts and outputs. Once a State has established its priorities, it should then allocate resources based on the data available about those priorities. This data-guided approach can help States achieve, or continue to achieve, their SPF SIG goals of reducing substance use and related consequences. No one allocation approach is best, however. The appropriateness of any approach for a particular State depends upon a number of contextual factors including the

size of the State, the characteristics of its existing prevention infrastructure, the identified prevention priorities, the quality and quantity of resources available, and other variables.

Despite such variations, a common set of considerations applies to all States in the process of using data to make decisions about substance abuse prevention resource allocation. First, discussions about data-guided resource allocations should be informed by previous assessment and prioritization processes and products; States should apply all they have learned from these earlier activities as they begin to think about using data to inform and guide their allocations. Second, States should avoid selecting multiple priorities. Not only are SPF SIG resources limited, in amount and duration, but time and resources for examining multiple indicators are limited as well. Although this work is not impossible, it is certainly more complex. Consideration of a number of indicators, even for one priority problem, can also complicate the resource-allocation process, forcing States to decide whether to use multiple indicators in a stepwise decision-making process or to combine indicators into an index despite the potential drawbacks of that approach.

The availability of sub-State level data is also a major concern in the resource-allocation planning process. Under ideal circumstances, States have access to accurate, reliable sub-State estimates for the indicator(s) they have chosen. When that is not the case, alternative approaches are available. Several of those alternatives have been described in this document (e.g., using proxy data, merging multiyear data, and generating synthetic estimates).

Mindful of these myriad realities and challenges, States are strongly encouraged to use a data-driven approach to inform their substance abuse prevention resource allocations. This is a critical first step toward facilitating outcomes-based prevention and effecting change in substance use and related consequences. Many States have already begun the process of using data to understand their substance abuse problems. By so doing, they have made solid, targeted, data-guided decisions to address those problems, monitor their prevention performance, document change, save lives, and improve the overall health of their citizens.

Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
AR	<ul style="list-style-type: none"> • Underage drinking • ARMVI and ARMVF 	Highest-Need	Indicators of high need for priorities (underage drinking, ARMVI , and ARMVF)	High capacity Low resources	RFP	12-15 (\$100-150K)	Reduction in targeted priority in funded communities
AZ	<ul style="list-style-type: none"> • Problematic drinking among pop. aged 12-25 (binge drinking, alcohol use among pop. aged 12-18, ARMVC and binge drinking among pop. aged 18-25) • Illicit drug use among pop. aged 12-18 	Hybrid Highest-Need/ Highest-Contributor	Indicators of high need for priorities (problematic drinking among pop. aged 12-15; illicit drug use among pop. aged 12-18)	NA	RFP	10-15 (\$100-350K)	Reduction in targeted priority in funded communities
CO	<ul style="list-style-type: none"> • Underage drinking 	Highest-Need stratified by region (rural, urban, and frontier)	Indicators of high need on index of substances	Readiness History of collaboration	RFP (eligible communities requested to apply)	14 (\$50K for assessment, planning; amount TBD)	Reduction in underage drinking in funded communities and Statewide
CT	<ul style="list-style-type: none"> • Alcohol consumption 	NA (all communities eligible to apply)	NA	Existence of community coalition	RFP (communities identify priorities in their application)	15-25 (\$50-100K)	Reduction in State and community level alcohol use and related consequences

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Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
Cherokee Nation	NA (Communities will select their own priorities. Overall high need areas identified as underage drinking, marijuana use, meth use, adult alcohol use, cocaine use, and prescription drug use)	Stratified Equity (Equity for funding all 10 hub communities; further selection based on other factors)	NA	Readiness Capacity Resources (For selection of satellite communities)	Noncompetitive awards to 10 hub communities	10 (\$ 2 million to be distributed among 10 hub communities based on population. Funds to be distributed to satellite communities from Year 3 onwards)	Reduction in targeted priority in funded communities
FL	<ul style="list-style-type: none"> • ARMVC • Adult binge drinking • Underage drinking • Underage inhalant use 	Highest-Need	Indicators of high need for any priorities	High capacity Presence of county-wide coalition	RFP	21 initial 2-year grants (\$125K); 10 potential contract extensions for implementation	Reduction in targeted priority at county level
GLITC (WI)	<ul style="list-style-type: none"> • Binge drinking (all ages) • Underage drinking 	Equity	NA Note: 85% of funds already released for capacity building	NA	Funds will be awarded to 10 WI tribes after signing MOU	10 WI tribes (funds distributed equally; amounts not specified)	Tribal and cross-Tribal changes in underage and binge drinking (and certain consequences TBD)
GU	<ul style="list-style-type: none"> • Tobacco use: youths • Tobacco use: adults • Alcohol use: youths • Alcohol use: adults 	Equity (25% of overall funds for addressing each priority)	NA	NA	RFP	10-15 (amounts not specified)	Reductions in priority problem at jurisdiction level
IL	<ul style="list-style-type: none"> • ARMVC deaths • Episodic binge • Underage drinking 	Highest-Need stratified by capacity (high, medium, and low)	Indicators of high need for any priority	Capacity	RFP	18 (\$70K-100K)	Reduction in targeted priority at community level

Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
IN	<ul style="list-style-type: none"> • Underage and binge drinking among pop. aged 18-25 • Cocaine use among pop. aged 18-25 • Methamphetamine use among pop. aged 18-44 	Highest-Need/ Highest-Contributor	Indicators of high need for one priority	Capacity	RFP	15 (up to \$132K)	Reduction in State priorities at community and possibly State-level (for alcohol-related indicators only)
KS	<ul style="list-style-type: none"> • Underage drinking (binge and 30-day use) 	Highest-Need/ Highest-Contributor	Combined formula based on county-by-county rankings of high need (x3) and contribution to youth binge drinking and 30-day use	Readiness, capacity to implement SPF	RFP (extra points if in top quartile)	6-10 (amounts not specified)	Reduction in underage drinking at community and State level
KY	<ul style="list-style-type: none"> • Underage drinking • Methamphetamine • Inhalants • Prescription drugs 	Highest-Need	Indicators of high need for one priority	Capacity Resources	Epi Workgroup to choose grantee communities through in-depth review process	8 (2 per substance at ~\$250K per community)	Reductions in targeted priority in funded communities
LA	<ul style="list-style-type: none"> • ARMVI • Alcohol-related crime 	Highest-Need	Indicators of high need for one priority	Readiness	Invitation to targeted communities	10 (\$50K base amt)	Reduction in targeted priorities in funded communities
MA	<ul style="list-style-type: none"> • Unintentional fatal and nonfatal opioid-related overdoses 	Highest-Contributor	Eligible to apply if have an average of 30+ cases of unintentional fatal and nonfatal opioid-related overdoses from 2003 to 2005	Current resources available, capacity	RFP	8-12 (<50K pop. = up to \$100K; 51K-89K pop. = up to \$125K; over 90K pop. = up to \$200K)	Reduction in unintentional overdose cases in selected communities with possible impact on State rate

Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
ME	<p>Among pop. from 9th-grade to age 25:</p> <ul style="list-style-type: none"> High-risk (binge) drinking Marijuana use Prescription drug use 	Equity	N/A	N/A	RFP	16 (\$30-50K)	Reduction of binge drinking Statewide and additional targeted priority at county level
MI	<ul style="list-style-type: none"> ARMVC Communities can select additional local priorities 	Highest-Need/Highest-Contributor, stratified by region	Indicators of priority (ARMVF rate and number, binge, underage drinking)	Capacity	RFP	TBD	Reduction in binge drinking, drinking/driving, driving while intoxicated, riding with impaired drivers, underage, and childhood drinking at State and community levels
MO	<ul style="list-style-type: none"> Risky drinking behavior (binge or underage) among pop. aged 12-25 	Highest-Need/Highest-Contributor, stratified by region	Indicators of priority (ARMVF, alcohol-related ER visits, juvenile referrals)	Coalition history	RFP	5-25 (Six-month planning contracts (\$45K), 6-month GTO pilots (\$80K), f/u annual \$124K)	Reduction in risky drinking among 12-25 in funded communities
MS	<ul style="list-style-type: none"> Underage drinking and related consequences (ARMVC, binge and drinking and driving) among pop. aged 11-21 	Highest-Need	Indicators of priority (ARMVC, binge drinking, drinking and driving) used for allotting 25% preference points	Capacity/Readiness RFP proposal strength (coalition capacity, readiness, proposed approach)	RFP	15-25 (amounts TBD)	Reduction of underage drinking and related consequences at program, community and State levels
MT	<ul style="list-style-type: none"> Binge drinking (youth emphasis) Drinking and driving (youth emphasis) 	Highest-Need, stratified by capacity (high and low)	7 indicators of binge drinking and drinking and driving (total county or reservation ranking score)	Capacity	RFP (award extra points based on ranking score)	7-15 (base of \$100K)	Reduction in targeted priorities at community level

Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
NAHC	<ul style="list-style-type: none"> Prevention of chronic alcohol use among adults aged 18+ 	Equity (Allocating money to all 4 catchment areas in the state)	NA	NA	Noncompetitive contracts with 5 community organizations active in 4 catchment areas	5 (funds TBD)	Reduction in targeted priorities in all 4 catchment areas
NC	<ul style="list-style-type: none"> ARMVC 	Highest-Need by region	Index of ARMVC data	Capacity to implement SPF	RFP	12 (funds TBD)	Reduction in ARMVC in funded communities
NE	<ul style="list-style-type: none"> Alcohol use among youth under 17 Binge drinking among pop. aged 18-25 Alcohol impaired driving, all ages 	Highest-Contributor, stratified by region	NA (NE mentions having need widespread across all State regions and data comparison across counties was not feasible due to limitations)	Capacity Resources	RFP	12-18 (at least one per region; \$40-\$60K for planning, followed by \$100-\$150K for implementation)	Reduction of all State priorities at both community and State levels
NH	<ul style="list-style-type: none"> Alcohol use among pop. aged 18-34 Underage drinking 	Equity	NA	NA	RFP	TBD	Reduction in State- and community-level alcohol use and underage drinking

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Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
NJ	<ul style="list-style-type: none"> Harmful consequences of alcohol use among pop. aged 18-25 Juvenile drug related arrests (among pop. under 18) Drug-related arrests among pop. aged 18-25 	Highest-Need High/medium capacity	Not clearly defined (Plan mentions selecting high-need communities based on targeted problems)	Capacity	RFP	8 (up to \$ 300K)	Reduction of all priorities in funded communities
NM	<ul style="list-style-type: none"> ARMVF among pop. aged 15-24 	Highest-Need/Highest-Contributor	Indicator of priority (ARMVF-rate and number)	NA	RFP	13 [8 implementation grants of \$150K; 5 one-year capacity grants of \$30K]	Reduction in ARMVC in funded community and State
NV	<ul style="list-style-type: none"> Alcohol-related motor vehicle crashes, among pop. aged 16-24 	Equity	N/A	NA	RFA	13 (amounts not specified)	Reduction in ARMVC in funded community and State
PA	<ul style="list-style-type: none"> Underage drinking and related problems among pop. aged 11-21 (early initiation, drinking and driving among pop. aged 16-21, illegal use/misuse among pop. aged 18-21) 	Highest-Need High/low capacity	Index of indicators for each priority (indicators of priority and arrest rates)	Capacity	Funding Initiative Application	21 [7 planning grants of \$50K; 14 implementation grants of \$108K]	Reduction of targeted priority at community level

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Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
PW	<ul style="list-style-type: none"> Alcohol use among pop. aged 12-20 	Equity	NA	Community readiness	RFP	TBD	Reductions in binge drinking and youth 30-day alcohol use at State level
RI	<ul style="list-style-type: none"> Alcohol abuse/dependence Underage drinking Drug abuse/dependence Marijuana and illicit drug use among youth 	Highest-Need	Index of 10 indicators (binge and illicit drug use-rates and trends, demographics)		RFP (for 15 communities eligible to apply based in index)	12 (amounts not specified)	Reductions in priorities funded at the community level
TN	<p>Among pop. aged 12-24:</p> <ul style="list-style-type: none"> Alcohol use Marijuana use Cocaine use Methamphetamine use 	Highest-Need	Index of multiple indicators	Capacity Readiness	Letter of invitation to eligible communities	30 (15 implementers at \$160K- 236K; plus 15 controls at \$92K-174K implementing in final year of grant)	Reduction in associated consequence and consumption indicators at funded community level
TX	<ul style="list-style-type: none"> Binge drinking and related motor vehicle fatalities among pop. aged 12-25 Intoxicated drivers in motor vehicle fatalities among pop. aged 12-25 	Highest-Contributor	Indicator of priority (ARMVF among pop. aged 12-25 as proxy for binge drinking)	NA	RFP (eligible if 50+ ARMVF per year in county among pop. aged 12-25)	11 coalitions (\$100-200K) in 7 priority counties	Reduction in binge drinking and drinking and driving in funded communities

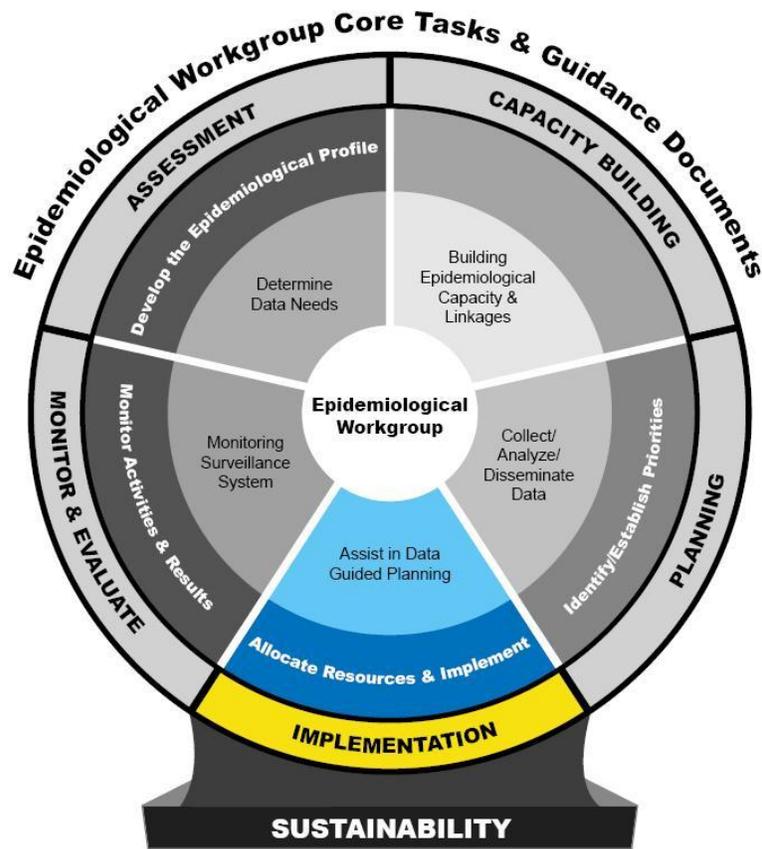
Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
UT	<ul style="list-style-type: none"> • ARMVC • Non-illicit (prescription) drug-related morbidity/mortality 	Hybrid Equity (Funding all 13 LSAs)	Indicator of need (To identify highest-need LSAs for higher amounts)	NA	Noncompetitive allocation to all 13 LSAs	13 LSAs (6 high-priority LSAs, with funding variable based on contributor and population), 7 nonprioritized LSAs at \$100K for Year 1, followed by \$75K for subsequent years)	Reduction of ARMVC and non-illicit drug morbidity and mortality at both community and State levels
VT	<ul style="list-style-type: none"> • Underage drinking • High-risk drinking among pop. under 25 • Marijuana use among pop. under 25 • Prevention infrastructure at State and local levels 	Highest-Need, Highest-Capacity Partial Equity for low-capacity communities (1 site per district)	NA (extreme variability in data availability and stability; may award extra points for epidemiological data related to pop. aged 18-25; attention to college-educated and incarcerated women)	Capacity to implement SPF (demonstration of need for capacity-building grants unclear)	RFP	Up to 10 implementation grants at \$125K Up to 12 capacity-building grants at \$50K	Reduction in targeted priorities at community level
WA	<ul style="list-style-type: none"> • Underage drinking 	Highest-Need at sub-county level	Indicator of priority: 8 th grader use (sub-county); cut-off percentage	NA	Letters of interest Random assignment of intervention and comparison groups	12 (\$100-150K)	Reduction in underage drinking in the intervention communities as compared to comparison communities
WV	<ul style="list-style-type: none"> • Substance abuse 	Highest-Need	Index of multiple indicators (Substance Abuse Well-Being index)	Sufficient capacity	Invitation letters to identified communities	15 (amounts not yet specified)	Reduction in targeted priorities at community level

Appendix: Data-Guided Planning Components for SPF SIG States

Site	State Priority(ies)	State Planning Model	Resource-Allocation Indicator: Need	Resource-Allocation Indicator: Other	Application Process	Grantees	Outcome Expectations
WY	<ul style="list-style-type: none"> Misuse of alcohol (underage drinking, adult binge drinking, ARMVF; alcohol-related crime, abuse, and dependence) 	Equity	NA	NA	Noncompetitive (require letter of intent from the Governor to all counties)	24 (\$72K- \$121K)	Reductions in misuse of alcohol at State and funded community levels

ARMVF = Alcohol-Related Motor Vehicle Fatalities
 ARMVC = Alcohol-Related Motor Vehicle Crashes (fatal and non-fatal)
 ARMVI = Alcohol-Related Motor Vehicle Injuries (non-fatal)
 LSAA = Local Substance Abuse Authority
 MOU = Memorandum of Understanding



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Resource-Allocation Planning/Review: Group Assessment

Description

This Tool addresses how Epi Workgroups arrive at their recommendations for data-driven, resource-allocation planning models and processes. It identifies, in checklist format, five general task dimensions drawn from the Foundational Documents. The checklist presented in this Tool may be useful in helping Epi Workgroups plan and review their resource-allocation planning activities. Designed for use in group settings, this Tool supports and documents group assessments, but it can also serve as a relatively low-risk entry point for groups that need to identify and explore performance problems, estimate future efforts, and resolve additional challenges.

The Guidance Document, *Allocating Resources to Address State-level Substance Abuse Prevention Priorities*, is the primary source for this Tool, which mirrors that document's organization and sequence. Consult the Guidance Document if further content detail is required.

Possible Use(s)

Depending on the group and the problem being addressed, facilitators may wish first to distribute the above-noted Guidance Document for review prior to presenting this Tool. With that document as a comprehensive reference, this Tool can be provided to group members to support a facilitated discussion of the resource-allocation planning task dimensions and of the Workgroup's collective

performance in that regard. Discussion facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any action items.

Adaptation Notes

This Tool may be presented with its companion Tool, *Resource Allocation Planning/Review: Individual Member Self-Assessment*, which focuses on individual Epi Workgroup members' ability to communicate effectively about their group's resource-allocation planning process and methodology. Facilitators may also wish to provide the above-noted Guidance Document to Epi Workgroup members.

Resource-Allocation Planning

Updated: _____

To develop recommendations for data-driven resource allocation that addresses substance abuse prevention priorities, my Epi Workgroup:

- examined alternate planning models to help guide its resource allocation, including the Equity, Highest-Contributor, Highest-Rate models as well as hybrid and stratified models.

Notes/Comments/Actions

- has considered the likely implications for sub-State jurisdictions of using various planning models for resource allocations.

Notes/Comments/Actions

- has considered the likely implications for problem reduction (or change in outcome data indicators) of its chosen planning model.

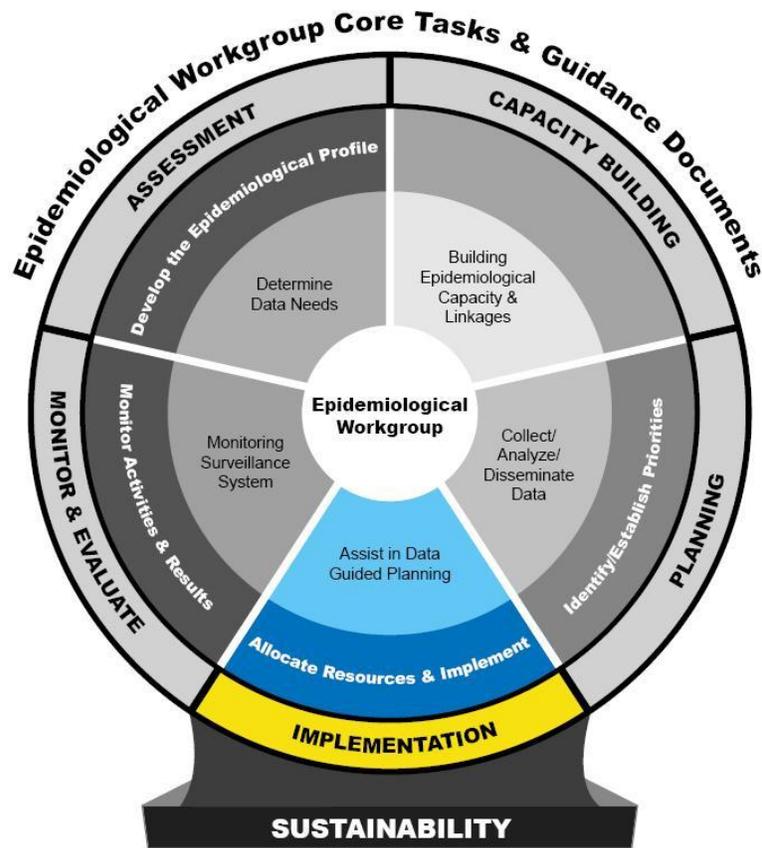
Notes/Comments/Actions

- has considered additional variables such as capacity and system readiness at the sub-State level, along with demographic distribution of the problems.

Notes/Comments/Actions

- has considered how State-level priorities relate to available indicator data corresponding to priorities at the community-level.

Notes/Comments/Actions



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Resource Allocation: Individual Member Self-Assessment

Description

This Tool addresses the preparation of individual Epi Workgroup members to communicate effectively about their group's resource-allocation planning process and methodology. Although not every member will be involved in every step of the resource-allocation planning process, every member must be able to communicate about it in ways that make sense to various decision makers and stakeholders. Thus, this Tool identifies, in checklist format, elements of knowledge or applied skill that should be evidenced by all Epi Workgroup members. It was designed to assist individual Workgroup members in self-assessing their knowledge and skill and to help them identify elements for which they need assistance or support.

The Guidance Document, *Allocating Resources to Address State-level Substance Abuse Prevention Priorities*, is the primary source for this Tool, which mirrors that document's organization and sequence. Consult the Guidance Document if further content detail is required.

Possible Use(s)

This Tool may be useful for new Workgroup members who not only wish to assess their readiness to participate but also identify any areas for which they need assistance or support. When working with new Workgroup members, facilitators may wish first to distribute the above-noted Guidance Document for review prior to presenting this Tool.

This Tool also may be useful in group settings (e.g., with an entire Epi Workgroup) to support a facilitated discussion of group members' knowledge and skill expectations. Additionally, it may be useful for Workgroups that are making progress toward sustainability. Discussion facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions, along with any action items.

Adaptation Notes

This Tool may be presented along with its companion tool, *Resource Allocation: Group Assessment*, which focuses on Workgroups' assessment of their resource-allocation planning process and methodology. Facilitators may wish to distribute both the above-noted Guidance Document and companion tool to new Workgroup members.

Resource–Allocation Planning: Self-Assessment

Epi Workgroup members bring different skills and expertise to bear in their Workgroup involvement. All members, however, must be able to communicate effectively to others about their Workgroup’s resource-allocation planning process and methodology. The following checklist reflects Workgroup consensus about what every member should know and be able to do.

I can explain:

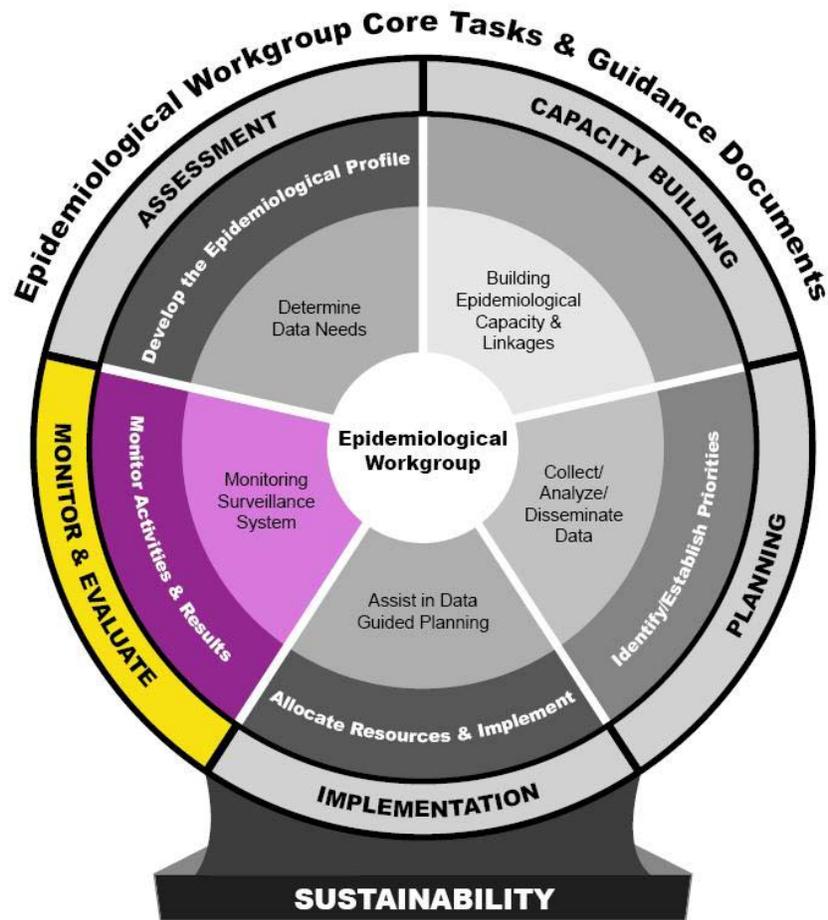
- the goals of data-driven resource-allocation planning;
- the planning model my State employed to guide its resource-allocation planning;
- why the State chose this planning model;
- the implications for sub-State entities of the chosen planning model;
- the implications for problem reduction (or change in outcome data indicators) of the chosen planning model; and
- whether additional variables such as capacity and system readiness at the sub-State level and demographic distribution of the problems were considered in the resource-allocation planning process.



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

MONITOR ACTIVITIES & RESULTS

1. *State Epidemiological Workgroups: Developing a Substance Abuse Monitoring System*
2. **Monitoring System: Group Assessment**



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Developing a State Substance Abuse Monitoring System: Guidance for States

Description

This document focuses on how States can begin to institutionalize the outcomes-based approach to prevention initiated through the work of the Epi Workgroups. It offers a definition of a monitoring system for substance abuse prevention, discusses the core components of such systems, and provides a rationale for developing these systems throughout the States. It also describes the role of the Epi Workgroup within State substance abuse prevention monitoring systems. It concludes with examples of how States have worked toward establishing monitoring systems in several areas, including collecting and analyzing sub-State data, improving sampling and data collection, developing and disseminating data products, strengthening data use capacities (training), and expanding cross-agency and other relationships.

Possible Use(s)

This document may be useful for State-level administrators as they begin considerations relating to Core Task F: *Develop a system for ongoing monitoring of substance abuse-related data to track progress on addressing prevention priorities and to detect trends.*

Developing a State Substance Abuse Monitoring System:

Guidance for States

Foreword

All States, the District of Columbia, and Federally recognized Tribal and U.S. territories (hereinafter referred to collectively as “States”) have received Federal funding from the Substance Abuse and Mental Health Services Administration, (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish State Epidemiological Workgroups (hereafter, Epi Workgroups). These Epi Workgroups are a network of people and organizations that bring analytical and other data competencies to substance abuse prevention. 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. Their deliberate focus is on using data to inform and enhance prevention practice.

In some cases, the Epi Workgroup is part of a broader Strategic Prevention Framework State Incentive Grant (SPF SIG) funded by CSAP. CSAP has also made funds available to support an Epi Workgroup in all other States and Jurisdictions not receiving SPF SIG funds. In both cases, the Epi Workgroup promotes data-driven decision making in the State substance abuse prevention system by bringing systematic, data-driven thinking to guide effective and efficient use of prevention resources.

Such data-driven decision making necessitates the development of a State monitoring system for substance abuse. Such a system can help inform assessment (“*What do substance use and 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 substance abuse prevention.

Within the Epi Workgroup effort, CSAP has defined a series of data driven activities to assist States further develop their State monitoring systems by:

- Developing a key set of indicators to describe the magnitude and distribution of substance-related consequences and consumption patterns across the State (i.e., an Epidemiological Profile [hereafter, Epi Profile] of the State);
- Collecting, analyzing, interpreting, and communicating these data through the development of Epi Profiles;
- Establishing prevention priorities for State resources based on data analyzed and interpreted through the profiling process;
- Allocating resources to populations based on established priorities; and
- Developing a systematic, ongoing monitoring system of State substance-related consumption patterns consequences and tracking State progress in addressing prevention priorities, detecting trends, and using such information to redirect resources as needed.

Thus, the State Epi Profile can become a “living document” rooted in the State’s substance abuse prevention monitoring system.

To assist States in these tasks, CSAP has developed several resources. The State Epidemiological Data System (SEDS) presents a preliminary set of constructs and indicators identified as relevant, important, and available for substance use prevention planning. Information on SEDS can be found online at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/). Five Guidance Documents also serve to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Developing a State Substance Abuse Monitoring System: Guidance for States

State Epidemiological Outcome Workgroups: Lessons Learned

TABLE OF CONTENTS

Foreword	i
Introduction	2
Outcomes-Based Prevention	2
Substance Abuse Monitoring Systems Defined	3
Rationale for the Epi Workgroup Monitoring Function	4
The Role of Epi Workgroups	5
State Efforts Toward Building and Maintaining Monitoring Systems	5
Collecting and Analyzing Sub-State Data	7
Improving Sampling and Data Collection	7
Developing and Disseminating Data Products	8
Strengthening Data-Use Capacities	9
Expanding Cross-Agency and Other Relationships	9
Summary and Conclusion	10

Introduction

The State Epidemiological Workgroups (hereafter, Epi Workgroups) funded by Substance Abuse and Mental Health Services (SAMHSA) Center for Substance Abuse Prevention (CSAP) have accomplished much to foster an outcomes-based approach to substance abuse prevention planning. Through their work, States are developing capacities to use State-specific epidemiological data from a variety of sources to understand the nature of substance use and related problems within their jurisdictions. These data have been used within States to guide the process of prioritizing those problems that are most in need of attention and allocating resources toward addressing them.

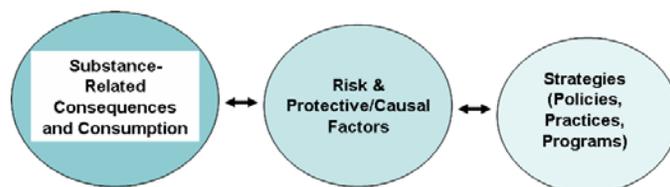
Only recently are States beginning to consider what the continuing responsibilities might be for their Epi Workgroups, even when those groups exist outside of the SPF SIG context. Clarifying the Workgroup's ongoing role provides an opportunity to review their functions, develop plans and goals for future Workgroup activities, and restructure or retool Workgroups as needed.

This document focuses on how States can begin to institutionalize the outcomes-based approach to prevention initiated through the work of the Epi Workgroups into a monitoring system for substance abuse prevention. It begins with a brief description of the theory behind outcomes-based prevention. It next offers a definition of a monitoring system for substance abuse prevention as well as a rationale explaining the value of those systems to States. This is followed by a brief discussion of the role of Epi Workgroups within State monitoring systems and examples of how States have worked toward establishing their systems. The document concludes with a discussion of considerations for the future of the Epi Workgroup project.

Outcome-Based Prevention

The work of the Epidemiological Outcomes Workgroups is framed by an outcomes-based prevention model (**Figure 1**) that grounds prevention in a solid understanding of alcohol, tobacco, and drug use and related consequences.

Figure 1: Outcomes-based Prevention Model



The State Epidemiological Profiles developed by the Workgroups summarize the nature, magnitude, and distribution of substance use and related consequences in the State. Understanding the nature and extent of the array of substance use and related consequences in the State is critical—a critical as a first step for determining prevention priorities. Following the

outcomes-based prevention model, once priorities are established, prevention planners then identify the factors influencing the prioritized use patterns and consequences to align relevant and effective strategies to address them.

SAMHSA/CSAP recommends that State Epidemiological Profiles and related prioritization processes focus predominantly on substance-related consumption and consequences as they implement an outcomes-based approach to prevention.

CONSUMPTION:

Consumption is defined as the use and high-risk use of alcohol, tobacco, and/or drugs. Consumption includes patterns of use of alcohol, tobacco, and drugs, including initiation of use, regular or typical use, and high-risk use.

CONSEQUENCES:

Substance-related consequences are defined as adverse social, health, and safety consequences associated with alcohol, tobacco, and/or drug use. Consequences include mortality, and morbidity, and other undesired events for which alcohol, tobacco, and/or clearly and consistently are involved. Although a specific substance may not be the single cause of the consequence, scientific evidence must support a link to alcohol, tobacco, and/or drugs as a contributing factor to the consequence.

Focusing on consumption and consequences in the prioritization process does not undermine, by any means, the importance of measuring and understanding causal factors that lead to substance abuse and substance abuse-related consequences. Understanding the factors that contribute to substance use and related problems (also referred as “risk and protective factors” or “causal factors”) is the logical next step after the State has developed a full understanding of the substance-use patterns and consequences it seeks to address and for which it has established priorities.

Substance Abuse Monitoring Systems Defined

A State monitoring system for substance abuse prevention is a surveillance system designed to track the nature of substance use and related trends and problems within a State over time. These systems rely on the systematic and ongoing collection, analysis, and interpretation of epidemiological data to answer three basic but important questions on a periodic basis:

- *What do substance use and related consequences look like in the State??*
- *What should be the current prevention priorities in the State?*
- *How effective are State prevention efforts in addressing prevention priorities?*

Unfortunately, comprehensive and coordinated surveillance systems for substance-related problems, as well as most other public health burdens, have not been widely developed or implemented. When available, surveillance of substance abuse-related issues has focused on use patterns and consequences. Such surveillance serves as a starting point to assess and prioritize substance abuse prevention needs and monitor the impacts of prevention activities directed at

reducing the adverse impacts of substance use. Developing this capacity was a primary goal of the SPF SIG Epi Workgroups, culminating in the creation of a State Strategic Plan based on analysis of available epidemiologic data.

The ideal State substance abuse prevention monitoring system would provide a State and its sub-State entities with accurate estimates of Statewide substance use and consequences based on core indicators that research has shown to be important, reliable, and relevant. Additionally, the ideal system would incorporate multiple data sources, constructs, and indicators and utilize all available relevant data, including survey and archival data. By providing timely data about trends and patterns of use along with intervening factors that predict outcome, this system would guide priority setting and decision making. It would also focus effort on targeted outcomes and selected programs, policies, and practices to address identified priorities by virtue of its having generated quality data-based products that can be easily understood and readily used by policymakers and other key decision makers. Finally, the ideal monitoring system would include processes that encourage widespread participation by planners and practitioners in the design, use, and maintenance of the system.

Rationale for the Epi Workgroup Monitoring Function

Given the profound impact of substance use and its consequences on individuals and communities, ongoing assessment and monitoring is a critical function of public health. This core function typically is referred to as *surveillance*, which can be generically defined as the systematic and ongoing collection, collation, analysis, and timely dissemination of data to those who need it so they can take action. To illuminate priorities and help ascertain prevention effectiveness, it is essential that the burden and impacts of substance use are measured and monitored periodically.

Surveillance of substance use and its consequences can serve to track the burden of substance abuse on communities and inform activities designed to prevent the occurrence of such problems. Regular review of surveillance findings sheds light on the magnitude, patterns, determinants, and consequences of substance use. By monitoring the findings from such surveillance, States can track the outcome of their interventions effectively and better identify emerging issues or trends.

Ideally, effective surveillance of alcohol, tobacco, and drug-related issues should include the conduct of ongoing population surveys and the review of systematically collected archival data that can provide at least Statewide, and preferably local, data on substance-related consequences (i.e., health, social, economic, and legal issues) and consumption (i.e., prevalence, use patterns, and trends) for the entire resident population and, whenever possible, for specific subpopulations as defined by age, gender, and race/ethnicity.

Well-substantiated causal factors that have been linked to substance-use patterns and consequences may also be appropriately included in a State alcohol, tobacco, and drug surveillance system. These causal factors include population-level determinants of substance use and related consequences (e.g., promotion, availability, perceived risk, policies, laws, enforcement, and other environmental conditions).

Monitoring substance-related outcomes provides critical information for data-driven decision making, ongoing assessment and evaluation, resource allocation, and program planning and implementation. By reviewing and preparing periodic epidemiology summaries of relevant substance-related surveillance findings, State Epi Workgroups can update key indicators and refresh data sources as available. The insights to be gained from the Workgroups' monitoring functions can provide data-driven guidance for program leaders, fiscal managers, and policy makers at the State and community levels.

The Role of the Epi Workgroups

All State Epi Workgroups are charged to address the first key question associated with the establishment of a State monitoring system during the first year of their existence—namely, “*What does substance use and its related consequences look like in the State?*” SPF SIG Epi Workgroups are charged to guide State policy makers in answering the second key question in addition to the first: “*What should current prevention priorities be?*” Given that these questions continue to be asked by those working on the development of monitoring systems, several tasks are more appropriately assigned to State Workgroups. These include the following monitoring tasks:

- updating indicators,
- reviewing/analyzing indicators,
- organizing and presenting data and findings,
- improving or identifying additional data sources and indicators, and/or
- tracking indicators to assess progress over time and identify new or emerging issues.

Collectively, these monitoring tasks are viewed as an essential and ongoing component of the SPF SIG. The function of the monitoring component is twofold: 1) to continually assess State prevention needs over time and enhance the State's needs-assessment process; and 2) to help assess State (and sub-State) progress in reducing substance abuse and related consequences. Monitoring may also include the exploration of additional criteria that could be used in assessing and prioritizing outcomes, and identifying ways to apply those criteria to available data.

In the future, Epi Workgroups may also become more involved in assisting SPF SIG-funded communities in assessing their needs and planning their prevention strategies, as based on local conditions (or causal factors) that are linked to targeted substance abuse outcomes. This type of activity goes beyond the current Epi Workgroup monitoring function, but it may be a logical next step for some States, either within the timeframe of their SPF SIG grant or in subsequent years. In this regard, State Workgroups might be in a position to carry out or coordinate some of the assessment and evaluation activities conducted by State SPF SIG evaluators.

State Efforts Toward Building and Maintaining Monitoring Systems

To address their future monitoring tasks, Epi Workgroups must continue to engage in the work that resulted in their initial State Epi Profiles. The Foundational Document developed to assist States in creating and updating their Epi Profiles is titled, *Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Outcome Workgroups*. Building a monitoring system will require ongoing data management, improved

capacity to process and respond to data, and clear communication and feedback, as explained below:

Data Management – Effective data management will enable the regular production of data-guided reports. Toward this end, State monitoring systems must be linked to all State data-collection entities (or reporting units) and set up to receive data according to an established schedule. The flow of data from several reporting units to a central entity will necessitate solid data management expertise. Two basic tasks associated with data management in State monitoring systems are consistent recordkeeping and the orderly consolidation of data into a format suitable for analysis. Both require attention to data storage and various aspects of data security.

Capacity Building – Enhancing data-processing capacity also involves building the skills of those individuals working within the prevention system who are expected to use data to guide their work. At the State level, a minimum of three types of professionals should be involved in the collection of data and their conversion into useful information for policy makers and key decision makers:

- **Data Manager** – The data manager is responsible for receiving and checking data for completeness, consolidating those data for the epidemiologist, and generating reports based on epidemiological analyses. The data manager must be extremely detail-oriented in his or her approach to the tasks assigned.
- **Epidemiologist** –The epidemiologist is responsible for determining the appropriate approaches to be used for data analyses, for conducting those analyses, and for interpreting the results of data analyses. The epidemiologist must also determine how best to present their Workgroup’s data analyses using “report-out” form templates that allow them to track and compare the results of their analyses from year to year.
- **Program Manager** – The program manager is responsible for negotiating all agreements relating to data storage and security, and for conveying data-based information to various constituencies in formats that are well-suited to their needs. The program manager must communicate the Workgroup’s data needs clearly to its data manager and the epidemiologist.

Workforce Development – It is imperative that the public health professionals working within the substance abuse monitoring system be given training to strengthen their ability to understand epidemiological data. Providing such training enables better communication between data collectors, analysts, and users. It also reduces the anxiety of professionals who are not epidemiologists and may facilitate their becoming strong champions of epidemiological data once they understand and appreciate how those data can assist them in their work.

Communication and Feedback – The primary purpose of any substance abuse monitoring system is to provide States with a dynamic picture of substance abuse trends and newly emerging problems within their jurisdictions. This information can give substance abuse

policy makers and professionals the information they need to improve substance abuse prevention efforts, provide appropriate addiction services, and respond to previously unrecognized substance abuse problems. For these goals and objectives to be realized, however, clear communication and feedback regarding data needs and the utility of data-guided reports is critical. Such communication and feedback should involve key policy makers, decision makers, and prevention professionals working in all areas of the prevention system. Communication with data providers is also necessary to ensure that data is received according to schedule and to resolve issues relating to incomplete, damaged, or inaccessible data. Beyond these tasks, communication with data providers would also involve the epidemiologist investigating how adaptations to data collection instruments might be achieved in order to better meet the information needs of policymakers, key decision makers, and perhaps others in State prevention system.

Several Epi Workgroups have turned their attention to addressing the data-related challenges they encountered when developing their initial State Epi Profiles. They have focused their activities on collecting and analyzing data at the sub-State level, improving their data sampling and collection methods, and developing and disseminating data products. States have also worked to strengthen the capacities of individuals to use these data and to expand cross-agency and other relationships. State activity in all these areas is detailed below.

Collecting and Analyzing Sub-State Data

In noting a variety of unmet data needs, which were revisited following the initial prioritization process, Michigan's State Epi Workgroup developed a web-based data repository to collect missing indicator data and provide an infrastructure for housing and compiling data. State administrators have confirmed that the benefits of this centralized data repository include its cost-effectiveness, its ability to bring together in one central location data from many sources, and its role in facilitating comparison and standardization among county- and State-level data. The repository also supports a systematic process for engaging State and community agencies in dialogue about data trends and gaps as well as program implementation.

For sparsely populated (e.g., rural or frontier) States, obtaining sub-State data in sufficient quantities can be a challenge. In such cases, it may be useful to think beyond the county level to include other relevant sub-State entities for which data may already exist or could easily be collected in one's analyses. For example, South Dakota's Epi Workgroup early used a regional approach based on its Unified Judicial System model, which divides the State into seven regions. Each region is a collection of counties that are geographically and socially similar, and each includes similar prevention and treatment provider catchment/service areas. This regional approach may be useful in other States to avoid the problem of small sample sizes at the county-level and of having to combine data across years, which can make trends over time more difficult to assess.

Collaboration with other agencies and data sources can be essential to enhancing State monitoring systems. Working with a data infrastructure that was already in place, the South Dakota Epi Workgroup reached out to improve the types of data generated from national and State data sources. It collaborated with the SAMHSA Office of Applied Statistics to have data from the National Survey on Drug Use and Health (NSDUH) made available longitudinally by

modified regions that were relevant to the South Dakota context and thereby useful for its monitoring and planning activities. South Dakota State administrators responsible for the Behavioral Risk Factor Surveillance System also were approached to make data available at the regional level in ways that did not raise confidentiality issues.

Improving Sampling and Data Collection

Using pre-existing infrastructure and collaborating with data collectors can help States address other data limitations besides the lack of sub-State data. For example, the Arkansas Epi Workgroup used similar strategies to overcome its need for more detailed age breakdowns for indicators that were of greatest interest to the State and larger sample sizes. Workgroup members consulted with SAMHSA staffers to obtain these data. They also explored ways to increase the number of university and college students participating in the Core Institute's Alcohol and Drug Survey and the possibility of expanding the Arkansas Prevention Needs Assessment Survey beyond public schools to private schools to ensure wider coverage among schoolchildren.

After completing its first Epi Profile, the Illinois Epi Workgroup concluded that its subsequent highest-priority focus would be to improve its existing data systems. Workgroup members reasoned that this ultimately would benefit other Workgroup efforts such as supporting local use of and access to substance-use data. They further determined that three actions were necessary before other data system improvements could be achieved: 1) review of the data supporting key substance abuse issues; 2) establishment of relationships with other Statewide "Epi-Workgroup-like" groups; and 3) conduct of a Statewide prevention-resource assessment. To achieve these three objectives, workgroups were formed related to each objective, and each workgroup developed two-year actions plans.

After completing its Epi Profile, the District of Columbia Epi Workgroup examined various plans for filling the data gaps it had encountered. After identifying the top-priority data gap, expansion of data collection on youth substance abuse, Workgroup members considered different approaches for gathering such data. Ultimately, the Epi Workgroup and the District of Columbia Public Schools (DCPS) chose to focus on high school students by adding additional questions to their epidemiological survey. The revised survey addressed new topics and expanded the sampling framework for ward-level data collection of high school surveys. The Workgroup currently is working with DCPS not only to develop new questions and plan for the timing of survey changes but also to obtain funding for the additional sampling required.

Developing and Disseminating Data Products

As stated previously, one of the key purposes of a monitoring system is to provide useful data for tracking trends in substance-related problems and for assessing States' and communities' progress in addressing prevention priorities. Such tracking and assessment information serves as the basis for updating planning and resource-allocation decisions to help ensure the most efficient and effective use of prevention funds. The translation of raw data into useful information is critical to this process, as data that cannot be shared cannot inform monitoring and assessment. To develop useful products for a monitoring system, Epi Workgroups should focus on how the data will be used and by whom as well as how the data can be presented and disseminated in a way that is most effective.

In developing its data products, Puerto Rico's Epi Workgroup identified its primary audience as policy makers, planners, and program directors. As these decision makers may have limited analytical and epidemiological training and experience, special attention was given to organizing the data and designing products in a way that would clearly and simply communicate substance abuse trends and patterns. With similar issues in mind, the Arkansas Workgroup created its monthly *Epi-Grams*—brief, graphic-laden, one-page fact sheets that examine emerging substance use trends in that State.

The Maryland Epi Workgroup considered several strategies to ensure that its data products were comprehensible and useful to data users including presentations, focus groups, monitoring of data requests, consultation with experts, summer school, and user surveys. It conducted focus groups with county coordinators to provide overviews of the data and determine the needs and formats most useful for county-level profiles. These groups revealed that more data were needed to support each key function of the county addiction and prevention coordinators: 1) access data for grants, reports, and presentations; 2) plan and monitor programs; 3) educate the general public, and 4) educate State and local policymakers. As a result, summer school/release of county profiles will be used in the future to review reports and train local coordinators to use the data to conduct local needs assessment, identify potential strategies/programs, and prepare grant applications.

Strengthening Data Use Capacities

The Minnesota Epi Workgroup has focused its attentions on building the capacities of its data users. It does this by providing trainings designed to (1) provide a basic understanding of epidemiology; (2) increase the communication between data collectors, data analysts, and data users; (3) reduce end-users' anxiety about working with data; (5) encourage data users to become data champions; and (6) build a community groundswell for using data to identify prevention problems. The Workgroup also conducted numerous forums across the State that focused on the Epi Profile; the SPF; data on substance abuse magnitude, severity, and time trends; and the prioritization matrix. Participant feedback was used to plan subsequent training events. These efforts to enhance the data capacities of individuals confirm the utility of hands-on profile activities (i.e., learning by doing) and using trainers who are not epidemiologists.

In its effort to help counties build their capacity for collecting and analyzing data, the South Carolina Epi Workgroup decided to have each county in the State complete community profiles. This process fostered a greater appreciation among local officials for the types and amount of data available and how those data can be used to improve local substance abuse planning, programs, and policies. The Workgroup encouraged each county to form a data team and undergo a prioritization process to identify two to three county substance-abuse priorities. It also conducted workshops and provided one-on-one technical assistance and feedback on first drafts of the county profiles. This approach promoted the development of data skills among local officials, skills that those officials continue to use and share with others in their communities. A recent evaluation of this effort confirms widespread integration of the findings from the county profile into FY09 county plans for treatment, intervention, and prevention services.

Expanding Cross-Agency and Other Relationships

South Carolina's approach to local planning reveals that such entities may help strengthen the collaborative relationships between local alcohol, tobacco, and drug authorities and other organizations and coalitions. Notwithstanding, the creation of data teams was a challenge in some cases, and these challenges point to the need to spend time on the front end of the process to discuss and support the building of such collaborative teams.

For example, Missouri's Epi Workgroup discovered that the personal factor can be critical in efforts to establish cross-agency relationships and collaboration on data collection and analysis tasks. Workgroup members found that it is often harder to solicit "organizational" cooperation than it is to identify and approach individuals in key partnering organizations who have: a) knowledge of relevant datasets; b) access to datasets; c) willingness to collaborate, and d) passion about the data. In developing these individual relationships, the initial emphasis may be on the exchange of data. Once an ongoing relationship for data sharing had been established, however, the Missouri Epi Workgroup members realized that opportunities for expanding collaboration arose through other means such as discussing future possibilities; learning about the vision, mission, and culture of other organizations; and developing a strategy for collaboration at an organizational level. In this way, the Missouri example shows, personal relationships may pave the way for organizational change.

Alaska's SPF SIG Epi Workgroup fostered collaborative relationships among its grant partners for continued data sharing and monitoring to fill vital data gaps and improve the health and well-being of Alaska Native youth. One Workgroup partner, the Municipality of Anchorage, had only sparse data available for monitoring underage drinking among this population. Another partner, the Southcentral Foundation, owns research and medical data for Alaska Native people in the Anchorage area. Through interagency partnership, the Workgroup was able to gain access to the variety of data sources that were necessary to meet the challenge of monitoring change in a small-population area.

Summary and Conclusion

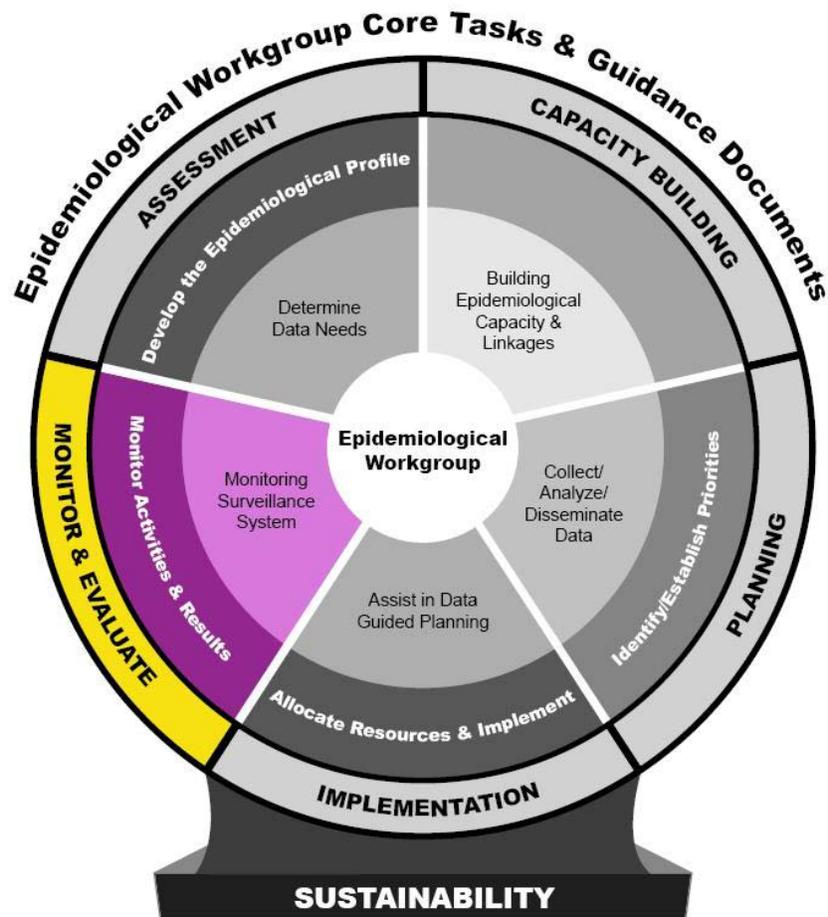
The key purposes of a substance abuse monitoring system is to provide useful data for tracking trends in substance-related problems and assessing States' and communities' progress in addressing their prevention priorities. Monitoring the progress of interventions to address substance-related problems in particular requires the collection of data over time. Therefore, in building a State monitoring system, careful consideration should be given to data collection methodologies (e.g., same questions, same indicators) that will yield consistent data from one year to the next. The goal is build a data system that can stand the test of time.

Tracking and assessing information are essential for updating substance abuse prevention planning and making resource-allocation decisions that can help ensure the most efficient and effective use of prevention funds. As with other phases of outcomes-based prevention, data translation is critical. Data that are not shared cannot inform monitoring and assessment, and the process of developing monitoring system data products should include consideration of how data will be used and by whom.

State Epi Workgroups are charged to develop systems for the ongoing monitoring of substance abuse by creating both a monitoring plan and a schedule for ongoing data reports. Two

deliverables, the State Epi Profile and the State Data Gap Plan, form the basis of these monitoring systems. The processes that spur the updating of these two products are likewise critical.

As States move toward developing their monitoring plans and systems, they should clearly engage their Epi Workgroups to determine how frequently they will need to update their Epi Profiles to develop strategies for resolving data-related challenges associated with those profiles. States should also secure appropriate staffing to support their substance abuse monitoring functions and address their technical assistance needs to improve the capacity of those personnel to work with data. Lastly, States should establish schedules for regular communication between the entity charged with developing its substance abuse data products and the persons who will use those products, and also between the entity that develops these data products and the entities that collect the epidemiological data used to define the nature of State substance use and related consequences.



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Monitoring System: Group Assessment

Description

This Tool, designed for use in group settings, focuses on 5 substance abuse monitoring system domains and on the 17 elements that support the establishment and maintenance of viable monitoring systems. Given that few Epi Workgroups to date have actually completed their monitoring system tasks, this Tool provides a speculative checklist to help Epi Workgroups think through their short- and long-term systemic, data, reporting, stakeholder communications, and staffing resource requirements. It supports and documents the comments, questions, and actions of Epi Workgroup members.

The Guidance Document, *Developing a Substance Abuse Monitoring System*, is the primary source for this Tool, which mirrors that document's organization and sequence. Consult the Guidance Document if further content detail is required.

Possible Use(s)

Depending on the group and the problem being addressed, facilitators may wish to distribute the above-noted Guidance Document in advance of the Workgroup discussion. With that document as a reference, this Tool can help support a facilitated discussion of monitoring system requirements and plans.

Adaptation Notes

No companion Tool focusing on individual member knowledge about monitoring systems is available at this time.

Assessment of Support/Activity for Monitoring System Development
Updated: _____

The System Overall:

- Interest in or activity involving the following is evident:
 - updating indicators and improving or identifying additional data sources;
 - using indicator data to update priorities;
 - tracking indicators to assess progress over time.

Comments....Questions....Actions....

Data-Related Tasks and Functions:

- Systematic collection of indicator data and acquisition of data according to an established schedule has begun, and these efforts take into consideration :
 - when data were received, and
 - when data were processed and cleaned.
- Provisions for data storage have been made and these provisions take into consideration:
 - when data were determined ready for filing, and
 - file- and dataset-naming conventions.
- Provisions for data security have been made and these provisions take into consideration:
 - data back-up,
 - antiviral software runs, and
 - robust password protection review.

Comments....Questions....Actions....

Capacity

- Staffing includes a:
 - Program Manager who:
 - supports the Epi Workgroup,
 - arranges the acquisition and storage of data,
 - communicates with policy makers and decision makers,
 - establishes any required agreements among data-contributing and data-using parties,
 - develops communications that illuminate data findings for general audiences, and
 - coordinates his/her activities with those of the Data Manager and Epidemiologist.
 - Data Manager who:
 - serves as the principal contact with data providers;
 - receives, checks, and consolidates data;
 - resolves incomplete, damaged, or inaccessible data; and
 - produces reports.
 - Epidemiologist who:
 - identifies appropriate data sources,
 - investigates data-collection instrument adaptations,
 - recommends and performs data analyses, and
 - provides interpretations and drafts descriptions of results.
- Opportunities exist for workforce development with regard to working with, understanding, and using data.

Comments....Questions....Actions....

Reports and Dissemination:

- follow a consistent format,
- are distributed to an established review group,
- are disseminated to an established list of stakeholders and others,
- are disseminated electronically and available online,
- include tailored reports illustrating regional trends and patterns when requested, and
- are briefed to policy makers and decision makers for feedback and questions.

Comments....Questions....Actions....

Assessment of Support/Activity for Monitoring System Development
Updated: _____

Communication and Improvement:

- Feedback is solicited from data product users,
- Communication takes place with data providers based on the Workgroup's data needs, if indicated,
- Communication takes place with the Data Manager to improve reporting and product accessibility, and
- Communication takes place with the Epidemiologist to adapt analyses, if indicated.

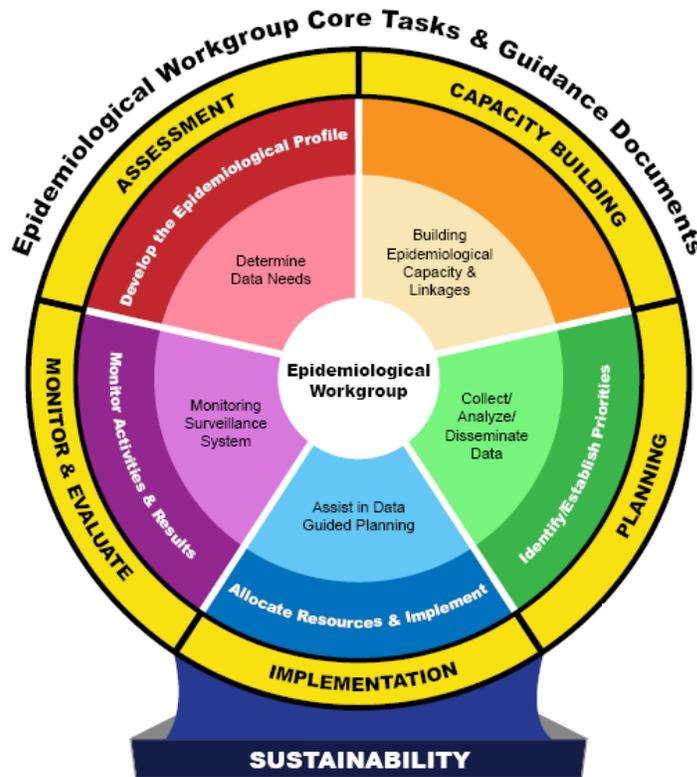
Comments....Questions....Actions....



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

SUSTAINABILITY

1. Sustainability Planning Discussion Guide: 2008 Conference Highlights
2. Sustainability: Group Assessment



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Sustainability Planning Discussion Guide: 2008 Conference Highlights

Description

This Tool captures major presentation and discussion points in the nine areas of sustainability planning addressed by participants at a June 2008 conference for Epi Workgroup leaders and members (“Sustaining Epidemiological Workgroups’ Structure, Function, and Contribution to Strengthen Substance Abuse Prevention Systems”). It was designed to assist other Epi Workgroups as they engage in planning for sustainability and in documenting Workgroup members’ observations about their actions (to date and planned) and about the relevance of those actions.

Uses

This Tool may be of use as a preliminary or in-session handout in a workshop setting to enlighten Epi Workgroup members about the experiences and insights of their counterparts in other States. Workshop facilitators may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions.

Adaptation Notes

It is important to note that this Tool is based upon and reflective of experiences and insights shared by Epi Workgroup members at the 2008 conference. Facilitators may wish to first present the nine areas of sustainability planning to a group for general discussion, and then introduce the specific comments and recommendations of the 2008 conference participants to reinforce those concepts.

Sustainability Planning Guide – 2008 Conference Highlights

During June 2008, Epi Workgroup leaders and members gathered in Rockville, Maryland, for a national conference. At that conference, titled “Sustaining Epidemiological Workgroups’ Structure, Function, and Contribution to Strengthen Substance Abuse Prevention Systems,” they offered experiences, insights, and recommendations in the following nine areas:

1. Reach consensus on how to do business and with whom.

Several conference participants and presenters emphasized the importance of obtaining explicit agreements on the Workgroup’s mission, administrative organization, operating policies and procedures, and, critically, linkages to stakeholders and decision makers. They further recommended the following actions and activities, among others:

- Secure cooperative and collaborative interagency memoranda of understanding, executive directives, and/or other support documents from the top State executive whenever possible.
- Link Epi Workgroup membership to the SPF SIG Advisory Board, either through dual membership or by making the Workgroup a subcommittee of the Advisory Board.
- Constitute and structure the Epi Workgroup by function in a matrix-based team format.
- Reach out to and include members from outside the State’s substance abuse agency as Epi Workgroup members; also include individuals from entities outside of government such as university-based, nonprofit, and even citizens’ group members. Such heterogeneous membership enables Workgroups to acquire data from related sources (e.g., education, justice) more easily as well as to obtain the skills necessary to perform required data analyses.

2. Recognize all Epi Workgroup members, partners, and leaders.

The conference participants generally agreed that regularly recognizing Workgroup members for their accomplishments was very important to the groups’ sustainability. This included providing recognition for members’ roles in recruiting and orienting new members and providing for members’ ongoing professional development. One member noted that his State likened the work of its Epi Workgroups to a “marriage” between prevention and data. As in all successful marriages, he noted, adjustments must be made to appreciate the differences, acknowledge the contributions, and communicate the expectations of each partner.

Additionally, the Workgroup representatives identified the need to:

- maintain members’ interests and identify a role for all participants,
- recognize that many priorities are competing for their members’ attention,
- secure value-added (unpaid) staff from other agencies, universities, and nonprofits,

- allow new members to refine their prevention visions and goals so that they can feel a sense of ownership,
- build and strengthen interagency support and collaboration,
- define action items or products that have value for their membership,
- create a data inventory that supports other division grants, and
- remember that “cultural awareness” is more than just a buzzword.

3. Establish partnerships with stakeholders that ensure mutual benefits.

The conference participants agreed that when identifying potential partners, it is important to look for those that have shared or similar goals or similar needs with regard to data. They further noted that this may involve educating potential partners about the overlap between the work of the two entities despite differences in orientation or unfamiliarity with outcomes-based prevention planning. Equally important to most Epi Workgroup members when reaching out to stakeholders was their need to identify partners’ knowledge of and access to relevant datasets, willingness to collaborate, and passion about the data. They noted that it often was easier to identify and approach individuals directly rather than forge organizational cooperation.

When working with new partners and key stakeholders who are unfamiliar with prevention frameworks, Epi Workgroup members suggested searching for ways to share and leverage resources. They also recommended that Workgroup members strive to “translate” prevention language into “business-speak” or other “languages” that might be understood more easily by non-prevention-oriented partners. For example, to engage business leaders, Workgroups might make their prevention plans sound more like business strategies. They further stressed the importance of reaching out to the staffs of State and local politicians—that is, the people who keep politicians informed and in the loop—noting that communicating with these staffs is not only wise, it is critical. They also encouraged Workgroups to develop relationships with local media representatives and to use the media as a vehicle through which to communicate the Workgroups’ prevention messages to key audiences.

4. Establish and maintain interagency connections for cooperation and collaboration.

The conference attendees believed interagency collaboration was one of the most important ingredients for ensuring Epi Workgroup sustainability. One participant indicated that, as a third-year task focusing on sustainability, her Workgroup planned to continue its ongoing evaluation of the usefulness of the State’s data-sharing system and infrastructure to convince others working at the regional and State levels to join in the Workgroup’s work. Another participant described a Statewide drug- and alcohol-use tracking “alliance” that engaged a diverse range of agency-based members. He noted that his Epi Workgroup finds ways to make data valuable to these parties (numbering about 60), who have become vocal supporters of the Epi Workgroup initiative.

The participants also discussed the formal way to maintain interagency connections for cooperation and collaboration—namely, that of establishing memoranda of understanding or memoranda of agreement that specify exactly how Workgroups and stakeholders will collaborate. Some States have done this almost from the inception of the Epi Workgroup

initiative, while others came to establish such agreements later. Either way, the participants confirmed that these agreements serve to protect working relationships from unanticipated changes in status that result from staffing and/or other transitions such as the arrival or departure of senior personnel.

5. Recognize the importance of community needs in Epi Workgroup deliberations.

Several conference attendees noted the importance of confirming whether local communities generally understand or have familiarity with epidemiological data. If this is not the case, then they recommended that Epi Workgroups include needs-assessment language in their contract requirements to encourage communities that may be hesitant about working with data to embrace this important aspect of outcomes-based prevention. They further recommended that Workgroups anticipate the need to help local communities become more comfortable working with epidemiological data and provide training and TA for individuals at the local level.

6. Continually improve your data infrastructure and data-analysis capabilities.

Conference participants described the development of their State data gap plans as a useful point to begin thinking about how to improve the prevention data infrastructure. They explained that these plans identify additional data sources that may be needed. Based on this information (and often without it), they noted, they have provided the following advice:

- Contact national and State data sources to assess whether and when data needs can be met.
- Involve outside experts who can help overcome many of the analytic and political challenges associated with working across State agencies involved in a specific policy area.
- Coordinate Epi Workgroup activities with those of the many State agencies involved in substance abuse prevention.
- Establish an organizational structure that can be responsive to short-term data requests.
- Work systematically to identify new data sources.
- Analyze data as they become available to monitor emerging trends.
- Identify data gaps and needs, and work diligently to pursue solutions to fill them.

7. Transform data into useful information and communicate those data to key groups using targeted messages.

One conference attendee, a Workgroup administrator, reported being guided by the belief that the ultimate goal of the outcomes-based prevention planning is to build a data system that can withstand the test of time. The administrator quoted as especially relevant in this regard the words of Carly Fiorina, former CEO and president of Hewlett-Packard, who stated: *“The goal is to transform data into information, and information into insight.”*

Much of the formal and informal discussion at the June 2008 conference focused on how to transform epidemiological data into useful and compelling information for a variety of audiences, many of whom are not familiar with these data but are nonetheless responsible for

making decisions about or buying into decisions about prevention priorities and resource-allocation planning. Some suggestions for presenting data to “non-data-literate” audiences included the following:

- Use a “datagram”-type format that focuses on one or two key messages in no more than one or two pages. Some call this a “McEpi” version of data since it can be targeted to audiences that have little time to read long messages.
- Use simple, straightforward language with short sentences and paragraphs.
- Avoid statistical and theoretical terms and jargon.
- Write data reports in an active rather than passive voice to keep the text lively.

8. Institutionalize the Epi Workgroup.

Several participants reported having taken steps to institutionalize the work of their Epi Workgroups in a number of States. These steps include the following:

- Make the Epi Workgroup a formal subcommittee of the State Advisory Council
- Include Epi Workgroup products in reports to the most senior State leadership (e.g., Governors, legislators, etc.).
- Expand Epi Workgroup areas of focus beyond substance abuse to include the utilization of data. This expansion can serve to support additional State priorities as well as support the original function of the Workgroups.

As one Epi Workgroup member asserted:

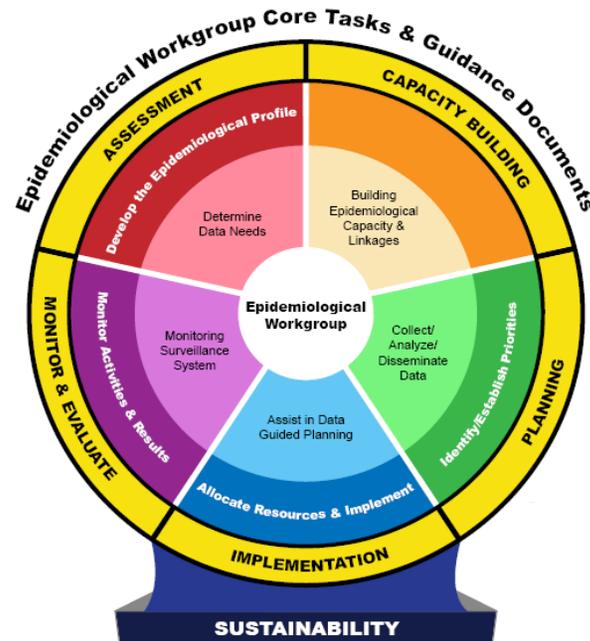
“Sustainability doesn’t always mean maintaining intact programs after funding is over. It is a transformational process that results in the integration of specific components, products, and processes into other areas. It begins by identifying what long-term, value-added components we want to sustain to improve what we have and address what we need; and it is about thinking about the long-term possibilities (structural, programmatic and financial) within the always changing and evolving contingencies. Think of sustainability as part of the program development and implementation, anchoring the program in strengths in order to sustain the value-added component (epidemiological data system and infrastructure).”

9. Secure adequate and sustained funding for the Epi Workgroup.

Securing financial support for Epi Workgroup activity is often the result of having demonstrated the utility of the Workgroup. As one conference attendee advised: “Get your clients addicted to the data and analysis you provide in a positive way. Make yourself (the data) useful to other agencies, groups, and decision makers.” Others noted that once senior decision makers and other agency heads see the value of data analyses to guide prevention planning and respond to prevention questions, they often become fierce advocates for and highly protective of their State Epi Workgroup.

The attendees agreed that beyond making the Epi Workgroup an essential resource for others, States should also identify new grants and new grant mechanisms, identify overlaps in Block Grant program goals, and seek funding for narrowly defined issues that are contained within the Epi Workgroup's scope of work (e.g., prescription drug use).

Additional reflections and recommendations from State presentations and discussions at the June 2008 conference are available at .state-epi.org (password = epi).



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Sustainability: Group Assessment

Description

This Tool covers seven theoretical and practical insights about sustainability in an action plan format.

Possible Use(s)

This Tool was designed for use in group settings. Group facilitators may use it to direct collective discussion about sustainability planning elements and to document action plan elements and assignments. They may wish to present this Tool as a PowerPoint™ slide or transparency to better capture group discussion points and actions. The companion tool *Sustainability Planning Discussion Guide: 2008 Conference Highlights* may also be useful to stimulate group thinking or to compare and contrast group discussion points.

Adaptation Notes

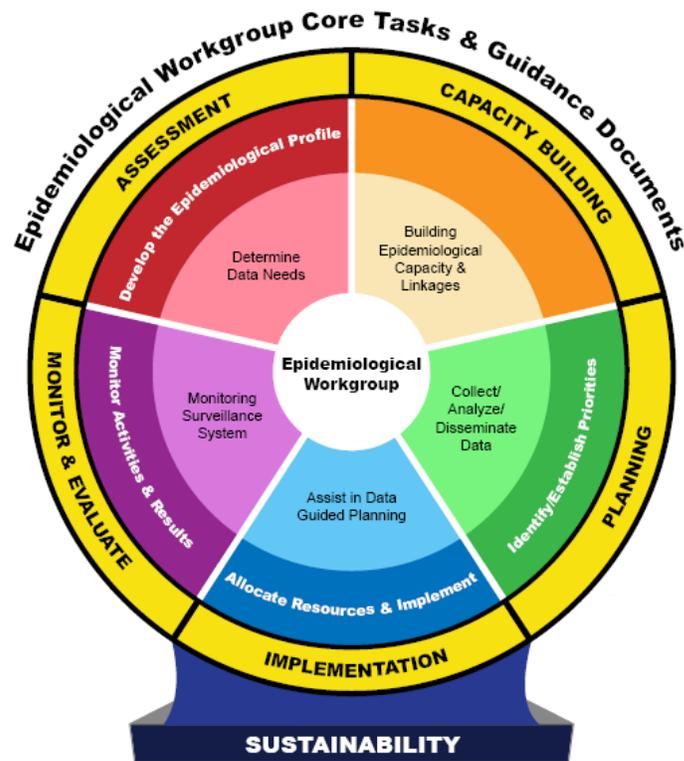
A companion Tool focusing on the enhancement of individual Epi Workgroup member knowledge about sustainability planning is not available at this time.

Sustaining State Epidemiological Workgroup Efforts

Criteria/Best Practices	Lessons Learned	Action Plan Elements
<p>1. Establish Administrative Structures and Formal Linkages</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide necessary administrative oversight and support. <input type="checkbox"/> Achieve general consensus on how to conduct Workgroup business <input type="checkbox"/> Create linkages that facilitate cooperation and collaboration. <input type="checkbox"/> Provide for periodic evaluation, reassessment, and plan modifications. 		
<p>2. Champion Leadership Roles and Actions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Commit to use epidemiological data for decision making. <input type="checkbox"/> Engage others in: <ul style="list-style-type: none"> ___ Building organizational capacity to spread innovations; and ___ Overcoming barriers that inhibit the institutionalization of Epi Workgroups. <input type="checkbox"/> Identify formal and informal leaders across organizations. <input type="checkbox"/> Educate and influence policy makers outside of the immediate prevention system about the importance of sustaining the Epi Workgroup initiative. 		

Criteria/Best Practices	Lessons Learned	Action Plan Elements
<p>3. Identify and Obtain the Resources Needed to Sustain the Epi Workgroup:</p> <p><i>Funding</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Diverse funding/resource plans. <input type="checkbox"/> Support of key leaders. <p><i>Human</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Personnel with the specific knowledge and skills that sustain Epi Workgroups: <ul style="list-style-type: none"> ___ Substance abuse prevention ___ Data-driven decision making ___ Epidemiological processes, data collection, and data interpretation ___ Human relations acumen ___ Teamwork orientation ___ Ability to communicate in a variety of media ___ Process and outcome evaluation ___ Leadership ___ Administration and management proficiency <p><i>Physical</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Offices and other physical spaces <input type="checkbox"/> Office equipment <p><i>Technological and Informational</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Relevant technology and data resources 		

Criteria/Best Practices	Lessons Learned	Action Plan Elements
<p>4. Implement Administrative Policies and Procedures</p> <ul style="list-style-type: none"> <input type="checkbox"/> Put into place documented and approved policies and procedures. <input type="checkbox"/> Routineize review and revision schedules. 		
<p>5. Ensure Alignment Between Epi Workgroups and Stakeholder Needs</p> <ul style="list-style-type: none"> <input type="checkbox"/> Regularly assess and incorporate stakeholder needs and perceptions of benefit. <input type="checkbox"/> Plug stakeholders into the Epi Workgroup communication network. <input type="checkbox"/> Promote positive relationships; identify and resolve problems. 		
<p>6. Ensure the Implementation Quality and Integrity of the Epi Workgroup</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish an evaluation process and use the results to ensure Epi Workgroup development process quality (fidelity, strength, reach) and integrity. 		
<p>7. Engage in Sustainability Actions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assess infrastructure capacity to support Epi Workgroup activity. <input type="checkbox"/> Develop a sustainability plan. 		



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

State Epidemiological Workgroups: Preliminary Lessons Learned

Description

This document describes the goals, structure, functions, and products of the Epi Workgroups. Organized according to the six core tasks, it also details States' experiences in operationalizing their Epi Workgroups, paying particular detail to the emergent issues, including barriers and facilitators, related to Workgroup creation and implementation as well as the perceived benefits and results of the Workgroups. The content of this document was drawn from a number of sources, including SPF SIG project reports, SPF SIG State Plans, and feedback from State stakeholders.

Originally written as a stand-alone document, this document is a Guidance Document from which some of the other tools in this Toolkit were derived. Consequently, readers may note some repetition of themes and content.

Possible Use(s)

This document may be useful for policy makers, administrators, and others working with the Epi Workgroup initiative. It is intended to enable these audiences to learn from the experiences of States over the past four years.

State Epidemiological Workgroups: Preliminary Lessons Learned



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
www.samhsa.gov

FOREWORD

All States, the District of Columbia, and Federally recognized Tribal and U.S. territories (hereafter referred to collectively as “States”) have received Federal funding from the Substance Abuse and Mental Health Services Administration, (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish State Epidemiological Workgroups (hereafter, Epi Workgroups). These Epi Workgroups are a network of people and organizations that bring analytical and other data competencies to substance abuse prevention. 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. Their deliberate focus is on using data to inform and enhance prevention practice.

In some cases, the Epi Workgroup is part of a broader Strategic Prevention Framework State Incentive Grant (SPF SIG) funded by CSAP. CSAP has also made funds available to support an Epi Workgroup in all other States and Jurisdictions not receiving SPF SIG funds. In both cases, the Epi Workgroup promotes data-driven decision making in the State substance abuse prevention system by bringing systematic, data-driven thinking to guide effective and efficient use of prevention resources.

Such data-driven decision making necessitates the development of a State monitoring system for substance abuse. Such a system can help inform assessment (“*What do substance use and 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 substance abuse prevention.

Within the Epi Workgroup effort, CSAP has defined a series of data driven activities to assist States further develop their State monitoring systems by:

- Developing a key set of indicators to describe the magnitude and distribution of substance-related consequences and consumption patterns across the State (i.e., an Epidemiological Profile [hereafter, Epi Profile] of the State);
- Collecting, analyzing, interpreting, and communicating these data through the development of Epi Profiles;
- Establishing prevention priorities for State resources based on data analyzed and interpreted through the profiling process;
- Allocating resources to populations based on established priorities; and
- Developing a systematic, ongoing monitoring system of State substance-related consumption patterns consequences and tracking State progress in addressing prevention priorities, detecting trends, and using such information to redirect resources as needed.

Thus, the State Epi Profile can become a “living document” rooted in the State’s substance abuse prevention monitoring system.

To assist States in these tasks, CSAP has developed several resources. The State Epidemiological Data System (SEDS) presents a preliminary set of constructs and indicators identified as relevant, important, and available for substance use prevention planning. Information on SEDS can be found online at [://www.epidcc.samhsa.gov/](http://www.epidcc.samhsa.gov/). Five Guidance Documents also serve to assist States in their efforts to implement data-driven substance abuse prevention planning. These documents are:

Developing a State Epidemiological Profile for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Setting Priorities for Substance Abuse Prevention: Guidance for State Epidemiological Workgroups

Allocating Resources to Address State-level Substance Abuse Prevention Priorities: Guidance for States

Developing a State Substance Abuse Monitoring System: Guidance for States

State Epidemiological Workgroups: Lessons Learned

Table of Contents

Foreword	i
Introduction	1
Responsibilities of the State Epi Workgroups	3
States' Experiences Implementing State Epi Workgroups	3
State "Voices" Regarding the Value-Added Benefits of Epi Workgroups	11
New and/or Improved Collaboration for Data-Related Activities	12
New and/or Improved Access to Data	14
Enhanced Capacity to Use Data in Substance Abuse Prevention Planning	16
Increased Appreciation or Support from State Leadership	17
Summary	19
Appendices:	
Appendix A: Map of State Epidemiological Workgroups, 2009	21
Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance	22

Introduction

The abuse of alcohol, tobacco, and drugs contributes to myriad health and social problems. Through careful analysis of the problems related to these substances, their causal factors, and current efforts to address these factors, States can improve the efficiency and effectiveness of their substance abuse prevention systems and ultimately decrease the burden of substance use at the State and community levels. Epidemiology, the study of the distribution and determinants of health-related events in populations, can be a valuable tool for data-driven prevention planning. Traditionally, States substance abuse agencies and their constituent communities have lacked the capacity to use epidemiological and other data to inform and monitor their substance abuse prevention efforts. However, strategic efforts to facilitate data-driven planning for substance abuse prevention can enhance substance abuse prevention practice at the State level.

Since 2004, States, Jurisdictions, and several Tribal Entities (hereafter referred to as States) have received Federal funding from SAMHSA/CSAP to establish State Epidemiological Outcome Workgroups (Epi Workgroups). Epi Workgroups are comprised of individuals and organizational representatives with data analysis skills and other assets such as knowledge about the substance abuse prevention systems and experience in strategic planning. The mission of the Epi Workgroups is to integrate data about the nature and distribution of substance use and related consequences into ongoing assessment, planning, and monitoring decisions at the State and community levels, with a deliberate focus on using data to inform and enhance prevention practice.

In some cases, the Epi Workgroup is part of a broader Strategic Prevention Framework State Incentive Grant (SPF SIG) program funded by SAMHSA/CSAP (i.e., Cohort I in 2004, Cohort II in 2005, and Cohort III in 2006). SAMHSA/CSAP also makes funds available to support Epi Workgroups in States that are not receiving SPF SIG funds (see **Appendix A**). In either case, the Epi Workgroups promote 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.

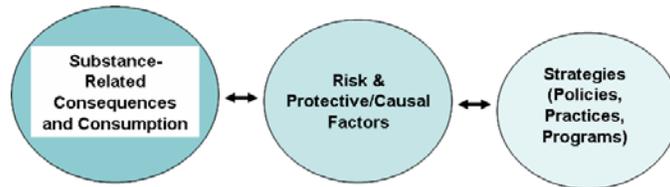
This retrospective document describes Epi Workgroup goals, structure, functions, and products. It also details State experiences in operationalizing Epi Workgroups, with particular attention to the emergent issues, including barriers and facilitators, that affect Workgroup establishment and progress as well as the perceived benefits and results of the Workgroups within States and collectively. The document is organized according to the six Epi Workgroup core tasks (expectations) and for each task by States' progress. It concludes with a section that highlights the perspectives of State stakeholders regarding the beneficial outcomes of Epi Workgroups in their States.

The themes noted in this document were gleaned from a number of sources, including SPF SIG project reports, SPF SIG State Plans, and feedback from the States. Much of the latter was gathered during technical assistance workshops and from emailed responses to specific questions put to Workgroup members and leaders about their Workgroup and State prevention planning experiences.

Outcome-Based Prevention

The work of the Epidemiological Outcomes Workgroups is framed by an outcomes-based prevention model (**Figure 1**) that grounds prevention in a solid understanding of alcohol, tobacco, and drug use and related consequences.

Figure 1: Outcomes-based Prevention Model



The State Epidemiological Profiles developed by the Workgroups summarize the nature, magnitude, and distribution of substance use and related consequences in the State. Understanding the nature and extent of the array of substance use and related consequences in the State is critical—a critical as a first step for determining prevention priorities. Following the outcomes-based prevention model, once priorities are established, prevention planners then identify the factors influencing the prioritized use patterns and consequences to align relevant and effective strategies to address them.

SAMHSA/CSAP recommends that State Epidemiological Profiles and related prioritization processes focus predominantly on substance-related consumption and consequences as they implement an outcomes-based approach to prevention.

CONSUMPTION:

Consumption is defined as the use and high-risk use of alcohol, tobacco, and/or drugs. Consumption includes patterns of use of alcohol, tobacco, and drugs, including initiation of use, regular or typical use, and high-risk use.

CONSEQUENCES:

Substance-related consequences are defined as adverse social, health, and safety consequences associated with alcohol, tobacco, and/or drug use. Consequences include mortality, and morbidity, and other undesired events for which alcohol, tobacco, and/or clearly and consistently are involved. Although a specific substance may not be the single cause of the consequence, scientific evidence must support a link to alcohol, tobacco, and/or drugs as a contributing factor to the consequence.

Focusing on consumption and consequences in the prioritization process does not undermine, by any means, the importance of measuring and understanding causal factors that lead to substance abuse and substance abuse-related consequences. Understanding the factors that contribute to substance use and related problems (also referred as “risk and protective factors” or “causal factors”) is the logical next step after the State has developed a full understanding of the substance-use patterns and consequences it seeks to address and for which it has established priorities.

Responsibilities of the State Epi Workgroups

SAMHSA/CSAP has identified six core tasks for the effective establishment and functioning of State Epi Workgroups. Specifically, it instructs States to:

- A. Develop a State-level structure that focuses on using data for decision making related to substance abuse prevention.
- B. Determine the data States need to describe the magnitude and distribution of their State-level substance use and related consequences across the lifespan.
- C. Collect and analyze data on substance use and related consequences.
- D. Assist in determining substance abuse prevention priorities based on epidemiological data, and outline how those data inform State substance abuse prevention planning and resource allocations.
- E. Assist in identifying, collecting, and analyzing community-level data and in guiding their use in community prevention planning and resource allocation.
- F. Develop a system for ongoing monitoring of substance abuse-related data to track State progress in addressing prevention priorities and detecting substance use trends.

To ensure cross-agency collaboration, States were advised to identify Epi Workgroup members from among key State agencies and organizations, including but not limited to the sectors of: public health, social services, criminal justice, education, behavioral health, and research and statistics. States were also encouraged to work with existing State and local epidemiological workgroups when possible and to seek members with the ability to: 1) access critical State data on substance-related problems and prevention strategies; 2) collect and analyze State data from multiple sources; 3) interpret data in light of the State context; 4) facilitate knowledge transfer to promote use of data by decision makers; and 5) engage in prevention planning and needs assessment activities.

States' Experiences Implementing Epi Workgroup Tasks

As noted previously, SAMHSA/CSAP outlined a number of tasks deemed necessary for the effective establishment and functioning of Epi Workgroups. For each task, the following section details the Workgroups' progress achieved, challenges encountered, and strategies for overcoming challenges. This information is provided in a tabular form in **Appendix B**.

Task A: Develop a State-level structure that focuses on using data for decision making related to substance abuse prevention.

Establishing an Epi Workgroup requires attention to three elements: the Workgroup itself (its members and membership agencies), Workgroup staffing, and Workgroup procedures for meeting and accomplishing its objectives. Each of these elements is described in more detail below.

- **Establish Epi Workgroups** – In a few cases, States reinvigorated existing groups that had served similar functions previously; however, in most States, Epi Workgroups were formed in response to an SPF SIG project requirement or as part of a contractual agreement with SAMHSA/CSAP. Although all SPF SIG grantees and States have established Epi Workgroups, considerable variability exists among them. Some are based within the grantee agency and include among their membership the Single State Agency administrator and others from within State administrative departments and agencies. Other Workgroups are contracted out to universities and other organizations with expertise in epidemiology. Still other Workgroups are comprised of individuals from both within and outside of State government. Regardless of whether a Workgroup is formally chartered or not (a requirement for Epi Workgroup-contract States and Cohort III SPF SIG grantees), having clearly defined goals and roles for the Epi Workgroup and its members has been deemed advantageous. Clear articulation of the role of the Epi Workgroup within the larger State substance abuse prevention system has been identified as a particularly important facilitating factor.

Epi Workgroups vary widely in size and organization, with memberships ranging from 8 to over 40. Although a few States have advocated for a “less-is-more” approach to staffing their Workgroups, other States have employed a flexible approach to Workgroup size and structure, claiming that a variety of both can work. Workgroups that have or have had large membership rosters typically organize those members into subcommittees, recognizing that some members cannot be as active as others can.

It therefore is important to recognize one size does not fit all when considering the structure of the Epi Workgroup within a particular State. It is important also to recognize that “diversity matters” as well. The participation of particular types of members has been noted as especially beneficial for Epi Workgroups—namely, data managers or data “gatekeepers” from key prevention agencies, members with expertise in and access to 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 Epi Workgroups thus are comprised of members from over 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.

- **Secure staff with epidemiological expertise and time to devote to Workgroup tasks** – It is essential that States engage personnel who possess the epidemiological expertise and time to attend to Workgroup tasks in the Workgroup effort. Initially, many States did not appreciate the importance of having dedicated staff to support the work of their Workgroups. Those States learned the hard way that absent such staff, Workgroup progress moves slowly. Drawing attention to contract requirements helped many States recognize the value of investing resources in securing dedicated staff. One frequently noted barrier to the Workgroup hiring process was the difficulty in locating and retaining people with relevant technical and data skills (e.g., epidemiologists, data managers, GIS

experts, etc.). Several States have reported success in recruiting members from and as a result of high-quality collaboration with other agencies. Currently, all Workgroups have individuals with epidemiological data skills among their members.

- **Establish structures and procedures that foster effective working relationships** – States are expected to establish structures and procedures that would foster working relationships and facilitate communication between their Epi Workgroups and key State decision makers and stakeholders. In the early years of the Epi Workgroup effort, however, several barriers to achieving this task were noted by Epi Workgroup members, staff, and State stakeholders. These barriers often were rooted in transitions in State leadership (substance abuse-related and otherwise) and other changes in State structures, decision making, and staffing. Additionally, early reliance on outside contractors to do the requisite data work, perhaps due to early difficulties in hiring and retaining State-level staff with data skills, presented substantial challenges that did not lend themselves to the institutionalization of data integration into State system decision making. Finally, Workgroup members' ability or willingness to attend meetings during the early stages often was hampered due either to members' busy schedules and/or academic calendars or to the travel restrictions and limitations imposed upon State employees.

Since then, a number of operational and organizational changes have facilitated successful collaboration within and among Epi Workgroups and between these groups and their colleagues within State prevention systems. Establishing mechanisms for easy and speedy communication between and among these parties (e.g., listservs, web sites, email, etc.) was viewed as critical in this regard. Subsequently, most Epi Workgroups have instituted electronic communications mechanisms and outreach processes. Additionally, Epi Workgroups are now required to specify timelines for their deliverables and for the achievement of milestones. They also typically meet less frequently but for a longer periods of time, with quarterly Epi Workgroup meetings of two to three hours in duration being the current norm as opposed to the early and challenging demands of monthly meetings.

Task B. Determine the data States need to describe the magnitude and distribution of State-level substance use and related consequences across the lifespan.

Epi Workgroups began their assessment efforts by outlining substance use and related consequence data that might be important for understanding State prevention needs. Today, all Epi Workgroups have identified a set of core constructs (e.g., mortality, morbidity) and related epidemiological data indicators (e.g., alcohol-related motor vehicle crash deaths, drug-related arrests). The State Epidemiological Data System (SEDS) ([.epidcc.samhsa.gov](http://epidcc.samhsa.gov)) was the primary and, in some cases, the sole source for these baseline efforts to identify core data sets for understanding substance use and related impacts. The technical assistance guide, *Developing a State Epidemiological Profile for Substance Abuse Prevention*, provides additional information on determining data need to address the magnitude and distribution of substance use and related consequences.

The most frequently cited barrier to determining these data needs, as reported by Epi Workgroup members and State stakeholders, involved the limitations of existing data at the State level and, most acutely, the community level. These parties typically noted that the quality and quantity of consequence data available varied widely by substance type, giving rise to concerns that the substance abuse priorities eventually selected might be an artifact of the availability of data rather than the magnitude of a particular problem. This was of particular concern for newly emerging substances (e.g., methamphetamine and prescription drugs), the abuse of which States feared lacked sufficient data to support or reject what often were perceived to be real problems. The lack of a consistent school-based survey of substance abuse (in some, but not all States), and the lack of comparability between available substance-use indicators and SAMHSA's National Outcomes Measures (NOMS) were other data-related obstacles. Specifically, in States that lacked school-based surveys, obtaining NOMS data was especially difficult. In the absence of such surveys, some Epi Workgroups used consequence data or other available contextual data as proxies, but those data proved a poor match for the NOMS indicators. Other useful data sources required inordinate amounts of lead time to obtain and manipulate, even if they were available.

Early Epi Workgroup members and State stakeholders reported that primary data collection was costly, time-consuming, and otherwise problematic, especially at the local level. In many States, Epi Workgroups were faulted for their lack of full-time data-collection staffs, a shortcoming that also raised questions about the sustainability of the Workgroup effort. Another common detrimental outcome related to data availability and access was the tendency noted among some Epi Workgroups to "stall out" in response to certain data limitations. A number of strategies have been offered subsequently to avoid these delays, including: considering all possible data sets and indicators that might inform decisions on substance abuse prevention planning and resource allocation, even if they are not from the "usual" sources; limiting the amount of data that are initially utilized and focusing on data that are available and accessible; focusing first on SEDS data and then using available State data to supplement SEDS data; concentrating on using data that are uniform, easily available, and that align with data collected and used nationally; and clarifying both data limitations and value. Some Epi Workgroups documented their challenges relating to data limitations in their needs and resource assessments while others included improving data systems among their capacity-building goals in their State plans.

Although Epi Workgroups initially were advised to address this task area by first considering all possible data sets and indicators that might inform decisions on substance abuse prevention planning (even if they were not from the "usual" sources), Workgroups later were steered toward using SEDS data first and then to use State data to supplement SEDS data. This adjustment subsequently enhanced Workgroup productivity in this task area. Epi Workgroup members soon reported that narrowing the field of potential indicators based on explicit criteria (e.g., data availability; reliability; how often data are collected; and relevance to substance use) saved valuable time.

Workgroup members also reported beneficial outcomes from considering the extent (depth and breadth) of State-level data available and creating decision rules (e.g., rating metrics) for data inclusion before beginning the collection process. Upon selecting appropriate indicators from among the SEDS datasets, Workgroups members noted 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 were also cited as facilitating improvement.

Task C. Collect and analyze data on substance use and related consequences.

Once the Epi Workgroups developed a common understanding of the specific data constructs they were to employ (e.g., tobacco morbidity, alcohol mortality) and identified all of the data indicators they needed to consult, they were expected to gather and analyze their data into State Epi Profiles and/or other data products. For the SPF-SIG Workgroup grantees, these Epi Profiles were expected to set the stage for the Workgroups' participation in the SPF's data-guided prioritization and planning. Presently, all SPF SIG Epi Workgroups have developed Epi Profiles that examine substance use and related consequences in States across the lifespan. Some have updated their earlier profiles; and some have produced other data products such as documents describing data limitations, plans to address data gap plans, and fact sheets. For a sample of SPF SIG Workgroups' Epi Profiles, see [://www.state-epi.org/stateepiprofiles.htm](http://www.state-epi.org/stateepiprofiles.htm).

Early Epi Workgroups reported encountering obstacles in developing their Epi Profiles, noting, among other challenges, that limitations in time and technical data skills sometimes affected the quality and utility of their initial data products. One Workgroup member, for instance, remarked that Epi Profiles were not always produced by people well connected to State prevention systems, potentially limiting the applicability of the Profiles to decision making. On the other hand, some practical suggestions for facilitating the development of useful data products also emerged. These include: recruiting Workgroup members who have access to data to help obtain data 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 Workgroup members who have the skills needed to perform analysis; displaying data in a variety of formats (e.g., charts, narratives, etc.); dividing consequence indicators into domains such as mortality, morbidity, criminal justice, and education; and using GIS to map data at the county level and reveal regional patterns of consumption and consequences that may be helpful in targeting prevention activities.

Task D. Assist in determining substance abuse prevention priorities based on epidemiological data, and outline how they inform State substance abuse prevention planning and resource allocations.

Upon describing the extent of substance use and related consequences in their Epi Profiles, SPF SIG Epi Workgroups were charged with assisting States in prioritizing their substance abuse problems based on epidemiological data. The Guidance Document, *Setting Priorities for Substance Abuse Prevention*, provides in-depth guidance on the prioritization process.

SPF SIG Epi Workgroups are expected to make recommendations regarding the following: substance use-related prevention prioritization criteria; the appropriateness of various prioritization process options; and the application of the results of the prioritization process. As an entity with data expertise, Epi Workgroups are also expected to make recommendations regarding substance abuse prevention priorities for the SPF SIG Prevention Plan. All SPF SIG

States have established prevention priorities and developed State Prevention Plans to address these priorities.

Prioritizing substance abuse prevention activities is perhaps the most delicate task faced by the Epi Workgroups, as it has implications for financial and other types of resource allocation. Not surprisingly, early Epi Workgroup members and leaders reported a number of challenges in this area. It is important to note, however, that in most cases the State Advisory Council (SAC) or some other State-level body had the final decision-making authority regarding substance abuse prevention priorities. Moreover, in some States, Epi Workgroup members are not considered to be appropriate “priority setters” because they often are selected for their epidemiologic data expertise rather than their policy-making acumen. In others, the State-level decision-making body jumped into the task of identifying priorities (and sometimes resource allocation) with only limited consideration of the epidemiological data and the implications of those data, as presented in their State Epi Profiles. Additionally, not all SPF SIG-related staff followed CSAP’s SPF SIG Plan Guidance to frame and keep the Epi Workgroup project on track (e.g., to use data to inform resource allocations). Subsequently, the ways in which epidemiological data shaped State prioritization efforts and the development of State prevention plans and systems were not always transparent. The present requirement that Epi Workgroups present a clear, concise statement to the State-level decision-making body about data-indicated priorities has facilitated enhanced involvement of Epi Workgroups in State prioritization processes.

Despite these barriers, the seeming objectivity and transparency of a data-driven prioritization process has proven to have an equalizing effect on the process—an effect that has attracted 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 with regard to securing State acceptance of Epi Workgroup prioritization recommendations, regardless of whether individual preferences were reflected in those decisions. In the early stages, Workgroup members were urged to make sure that their final prioritization decision-making processes were as transparent as possible to all participants in those processes as well as to other stakeholders. Overall, State stakeholders have indicated that there was often general consensus regarding the priorities selected, with most reporting no major areas of disagreement among Workgroup members and State stakeholders. In States where members of these two sectors held distinctly different perspectives regarding the final priorities, those who dissented from the prevailing view often contended that a different or additional priority or priorities should have been selected. However, most dissenters noted that they could “live with” the decisions, due largely to the implementation of clearly defined prioritization criteria and processes.

Early Epi Workgroup members noted that breaking consequence and consumption data into categories facilitated their prioritization process. Subsequently, Workgroups today generally classify their data into three categories: 1) consumption, 2) direct consequences (caused by a specific substance, e.g., alcohol-related cirrhosis), and 3) indirect consequences (caused by substance use generally, e.g., school dropout). Another facilitating strategy noted was organizing the Epi Profile by key dimensions (e.g., magnitude, trends) to facilitate the use of data in prioritization. Epi Workgroups were cautioned, however, to anticipate the confounding impact of

contextual factors (e.g., political will) that often elevate the importance of one problem over another above and beyond more quantifiable dimensions.

Finally but importantly, Epi Workgroup members were advised, then and now, to keep their individual data judgments confidential, especially when presenting their recommendations for State priorities, and to offer clear and concise statements to State decision-making bodies. Workgroup members cited the following approaches as facilitating their involvement in the prioritization process:

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

Tasks E: Assist in identifying, collecting, and analyzing community-level data and in guiding their use in community prevention planning and resource allocation.

All States with Epi Workgroup contracts (that is, Epi Workgroups in non-SPF SIG States) are required to produce community-level data profiles. Consequently, the Epi Workgroups 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. Additionally, a number of SPF SIG State Epi Workgroups have assisted in or are assisting 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).

As noted earlier, a major barrier to data-driven planning and decision making at the community level has been the lack of sub-State epidemiological data. Furthermore, State resources and technical assistance in support of community-level planning were and are often inadequate. Some States lack the capacity to provide technical assistance to communities once the SPF SIG activities proceed to the community level because they do not have support systems in place to assist data-guided community prevention planning and decision making. Despite these barriers, a number of strategies have been identified to facilitate data-driven planning and decision making at the community level. 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, 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.

Task F: Develop 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 Epi Workgroup active within a State, the Workgroup's role in data-guided decision making applies broadly across all realms of substance abuse prevention—that is, the work of the Epi Workgroup is relevant to substance abuse planning beyond that of addressing State priorities in any given year. Since the advent of the Epi Workgroup effort, it has become increasingly clear that the data assessment and planning tasks associated with preparing State 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. Thus far, few States have formal data-monitoring plans that address overseeing their data systems, making the best use of human resources and other capacities relating to the management of data, or establishing ongoing working relationships with relevant organizations regarding the collection, analysis, or use of data. Some States, however, are working on data products/project deliverables related to building such monitoring systems (e.g., identifying data limitations, developing data gap plans, updating Epi Profiles). The slow rate at which States recognized the importance of developing State monitoring systems is understandable, given that the early focus of the Epi Workgroup effort was on assessment, capacity-building, and planning. The concern, earlier and presently, that many Epi Workgroups and State stakeholders are unfamiliar with objectives and components of a data-monitoring system merits attention, particularly in States where Epi Workgroup functions are contracted out to private entities (e.g., universities) that generally operate outside of State substance abuse prevention systems.

The above-noted concerns often stem from a more systemic issue—namely, the fact that Epi Workgroup tasks and milestones beyond those associated with Tasks A through Task E are not clearly defined. In the future, Epi Workgroups will likely undergo a period of regrouping as they embark on the next phases of implementation, which will include 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 Epi

Workgroup-recommended activities aimed at sustaining a data-driven approach to substance abuse planning and decision making. Some of these States' Epi Workgroups 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 Workgroup 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 thus 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 of 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 data 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.

As States progress toward fulfilling their Epi Workgroup contract requirements and completing their SPF SIG-mandated tasks, they must devote more attention to sustaining and strengthening the structures and activities that Epi Workgroups have implemented thus far. Institutionalization of the foundational Epi Workgroup concept of data-driven substance abuse planning would be well served by developing milestones and tasks specifically related to monitoring and sustainability.

State "Voices" Regarding the Value-Added Benefits of Epi Workgroups

Epi Workgroup members and stakeholders from both SPF SIG and non-SPF SIG States (hereafter, "respondents") 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. These respondents have provided much in the way of feedback on the benefits resulting from the establishment and implementation of their Epi Workgroups. Most of the value-added features they have described fall within four broad categories:

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

New and/or improved collaboration for data-related activities

Respondents have noted a variety of benefits emanating from the new partnerships forged as part of the Epi Workgroup effort. Respondents from virtually every State agree that the Epi Workgroup brought new partners to the prevention-planning table. For example:

- “The [Epi Workgroup] has also allowed data people (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 [Epi Workgroup].”
- “...relationships have been forged by individuals examining different facets of substance abuse prevention. Members from the fields of criminal justice, academia, treatment, etc., have benefited by developing relationships made possible by membership in the [EPI Workgroup].”
- “Without having the SPF SIG funding, we would not have been able to put designated staff time to this effort. This is the first time we have had even a part-time epidemiologist specific to substance abuse in the Division of Behavioral Health. We would not have had the same ongoing partnership with the [University’s] Consortium for Substance Abuse Research and Evaluation, started with the SIG, to look at State and county data and produce usable products such as the State and Community profiles.”

Respondents have also voiced overwhelming acclaim for Epi Workgroups’ impact on stimulating collaboration between and among other State-level organizations, often for the first time. For example:

- “The [Epi Workgroup] significantly increased the number of agencies involved as well as greatly improving collaboration between agencies. The agencies/entities involved are represented, in some cases, by program staff and in other cases by data staff. The blend of members has and will continue to provide an improved understanding of the importance of their involvement.”
- “Another positive of the [Epi Workgroup] is the collaboration among State agencies. Once we identified critical issues (priorities) for the State, we were informed of what other State agencies were doing to deal with the same issues. The data that they were using was...being shared with and used by agencies other than the collecting agency.”
- “[Our State] has seen substantial enhancements to previously existing partnerships with State agencies, through the utilization of data that cross multiple agencies’ scopes. These agencies include those responsible for the Enforcing Underage Drinking Laws, traffic safety programs, and DWI programs.”
- “Our Tribal epidemiology workgroup set an unprecedented collaboration in our community by bringing together Tribal, community, and local government organizations to focus on data-driven decisions.”

- “One simple, yet dramatic, effect of the [Epi Workgroup] is the increased conversation across State agencies and State geographic regions. The group has a high level of participation, which indicates both feelings of personal value to the group and personal gain from the group discussion. [Now in its third] year, the [Epi Workgroup] continues to add members that can help address the current focus on data system improvement in the state. Agencies have also participated in joint abstract submissions to national conferences.”

Respondents have also attributed benefit to the new and/or increased collaboration brought about by the Epi Workgroups, including that of bringing a diversity of perspectives to the data-driven planning process, increased data sharing through formal and informal agreements, increased collaboration among State agencies on non-Workgroup tasks, and even the production of specific data-related products. For example:

- “The [Epi Workgroup] 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.”
- “Through these collaborations we were able to share different data sets as well as look at ways to collect data available through our respective areas. For example, we were able to discover how the schools throughout the State report substance abuse related issues. We then discussed the value of this data and looked at ways of enhancing the data-collecting process so that it is congruent across the State.”
- “Members have been sharing data in a space and place that allows and encourages discussion. The open communication established at the [Epi Workgroup] has carried over to other meetings attended by [Epi Workgroup] members which has enhanced the goals of these non-[Epi Workgroup] interactions.”
- “Interaction on the [Epi Workgroup] has helped overcome the disinclination that has existed for years for public health people to talk with the [State] Department of Transportation, Board of Crime Control, and economists at the Bureau of Business and Economic Research. This was described as ‘a novel experience’.”
- “The Epi Workgroup under [the State’s] SPF-SIG has served as a pioneering effort to integrate substance abuse data collection efforts into one cohesive mechanism. Under the [Epi Workgroup], data gatekeepers in key [State] agencies, both in the private and public sectors, have the opportunity for collaborative efforts to collate, review, analyze and disseminate information on substance abuse patterns and consequences. By providing a venue for periodic engagement, the relationships among these data professionals have been strengthened.”
- “In addition, a partnership is developing with Tribal Epi Workgroups around developing strong tribal data sets and collection strategies, and a new willingness to share these data

has emerged from the process. This alone would be a major outcome of success for [my State].”

- “The nature of the [Epi Workgroup] made it impossible to complete the project/conduct tasks without collaboration from other people and organizations. We invited partners from various State agencies to help us examine data we already collected and identify the data gaps that existed. As a result of the success of the SEOW, when we were required to submit a community profile as a FY08 deliverable, we decided to require completion of an epidemiological profile by each county in the State.”
- “A recent project of the [State] Substance Abuse Epidemiology Work Group has been to collaborate with the [State] Department of Health Services/Division for Behavioral Health Services...and the [State] Department of Economic Security/Division for Children, Youth and Families (DES/DCYF) to conduct an assessment of substance abuse treatment service capacity in [the State]. [The] Governor [signed an] Executive Order [that] prioritizes families involved in the child welfare system for access to substance abuse treatment services. The report submitted to the Governor by the [State] Substance Abuse Epidemiology Work Group...addresses the fourth requirement of [the] Executive Order; it reports on [the State’s] capacity to provide substance abuse treatment services to those in need of such treatment and describes the collaborative efforts undertaken by multiple agencies to determine this information.”
- “Since the inception of the Epidemiological Workgroup, key data leaders and analysts have been engaged in discussing cross-system findings and implications as well as conceptualizing new ways in which data systems could be improved and integrated. Much work in these areas remains and has demanded a reorganization of the [Epi Workgroup] from its originally established form.”

New and/or improved access to data

Respondents have expressed enthusiastic about the access to new data sources and enhanced access to previously used data that results from the Epi Workgroups’ efforts. In some cases, this has led to new types of data being used for prevention planning; in other cases, it has led to more complete utilization of data. Respondents have reported discovering improved mechanisms for data sharing, including formal data sharing agreements. The increased access to data also has allowed them to identify gaps and limitations in their existing data sources and to strategize about bridging those gaps by expanding their data sources. For example:

- “[Sister organizations now] work together on other projects, but the epidemiology workgroup served as a catalyst for one of the first times where population-based data has been shared rather than program evaluation data allowing, improved access to data. This brought together data systems of one organization that provides social services...and a primary care clinic...to provide a comprehensive view of health and substance use.”
- “[Epi Workgroup] members agree they have never before had such access to expertise on different data sets. Specific data sets mentioned were State Vital Statistics data collection

methods [and a] special report on American Indians and the tumor registry.”

- “One positive aspect of the collaboration within the [Epi Workgroup] is an awareness of and access to data sets that are often publicly not available. The [Epi Workgroup] recognized early on a lack of community-level data. Local Epidemiology and Outcomes Workgroups (LEOWs) in [State] SPF SIG-funded communities needed to address this issue and were able to identify and/or create their own county-level data for the local epidemiological profiles. Furthermore, the [Epi Workgroup] initiated a Statewide substance abuse survey which will provide use/abuse prevalence rates at the county-level.”
- “We have developed several data-sharing agreements (e.g., opioid overdose death data integration with HEP C and HIV/AIDS Surveillance, Bureau of Communicable Disease Control, and Department of Corrections release data with opioid overdose death data).”
- “Prior to the establishment of the Epidemiological Workgroup in [my State], many of the State agencies were using data from a single organization to assess the status of various problems that were being addressed by the State. In reality, data across multiple data systems (health, crime, education) yield a fuller understanding of the consequences and effects of limited prevention efforts.”
- “Public health data, especially on consequences, was utilized more completely, some of it for the first time. Further explorations have resulted in discussions regarding access to the [State] Automated Prescription System to explore the use of prescription medications in [my State].”
- “The directors of the five State agencies (Human Services, Health, Education, Transportation, and Public Safety) involved in prevention and early intervention funding of services for youth and children have approved the formation of the [State] Data Sharing and Utilization Group...to oversee work of the Epidemiological Workgroup and other committees devoted to data access, utilization, and policy. [Epi Workgroup] funding and leadership made it possible to develop the [DSUG] concept,...[and] a web-based decision support system tool that has been utilized to centralize and query cross-agency data. [Epi Workgroup] funding has supported enhancements to this system as well as training and TA to funded communities and prevention funders.”
- The [Epi Workgroup] project gives the [Epi Workgroup] staff the opportunity to engage in good working relationships with the other agencies to obtain the data. We have experienced getting the data easily and developed some forms to have better data gathering.”
- “Access to and use of data by State agencies and community groups has been improved through increased awareness of data sources. For example, the [Epi Workgroup] member representing the [State] Department of Transportation...has provided subrecipient communities and agencies with local alcohol-related crash data to assist with their local needs assessments. Through this activity and discussion of the crash data during [Epi

Workgroup] meetings, she has contributed to increased State and local awareness of crash data availability and what mapping/analysis services [the DOT] can provide.”

- “We were able to highlight data access issues that had only been understood by a very small number of individuals. This was important because the SPF SIG promotes cooperation among various stakeholders, yet there was little understanding about the data that various stakeholders could provide, and why it was not easily accessible.”
- “The [Epi Workgroup] has served as the catalyst to explore and identify mechanisms to improve access to data beyond substance abuse indicators and to identify the gaps in data availability and use. For example, preliminary discussions about centralized data warehouses and better individual level data for adolescents and young adults are underway.”
- “We have certainly realized improved access to data; however, more importantly, we discovered data we did not know was available. With the inclusion of this data in our Epidemiological Profile, we are in a much better position to more effectively allocate funding and better equip [the State’s] funded Prevention Coordinators to carry out targeted community prevention initiatives.”

Enhanced capacity to use data in substance abuse prevention planning

In addition to increased access to more and better data, respondents have reported increased capacity to use those data for substance abuse prevention planning. This increased capacity was particularly useful in building capacity at the local level. For example:

- “By having others with experience in working with data and the importance of the data, what it can and cannot tell us has been helpful. It provides evidence of the need and helps support the decisions made to others.”
- Historically, substance abuse research caused many negative consequences to [Native] communities. This is one of the first Native-led efforts to systematically collect data related to substance abuse among [a State] Native community allowing a more effective, culturally appropriate use of the data for prevention.
- “These efforts have resulted in a much wiser utilization of prevention data in all decision making, rather than accepting whatever data may be available and not necessarily knowing what to do with those data, which was often the case in the past. Data are now collected that can help show where to focus efforts, when to alter the plan, how much effort is being applied to a problem, whether the context for the problem behavior is being sufficiently altered, and other data that are more useful to effective prevention.”
- “The strongest contribution of the [Epi Workgroup] in this area was the process of identifying SPF subrecipients. Need (prevalence and consequences) data and capacity data were combined to rank counties along both dimensions and identify counties that were high in need and that had enough capacity to benefit from the SPF decision process. This was a systematic and useful data-based decision process that was consistent with the

county- level data available in [the State] and organized through the needs-assessment process.”

- “The work resulting from the Epi Workgroup, documented in [the State’s] Epi Profile, has been used as a basis for setting policy and program priorities [in the State]. The data contained in the profile [are] now used by various government and community groups in their grant applications and needs assessment activities. In fact, the Epi Profile has been recognized as setting a new standard for [the State], and is 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.”
- “An important advancement currently underway is the active monitoring of prevention data across the State. Monitoring of [State’s] prevention database began March 2008. As monitoring of prevention data increase data entry accuracy, we will be able to make stronger, more impactful data-based decisions for [alcohol, tobacco, and/or drug abuse] programs, services, and policies.”
- “Results of a survey implemented by the [State] Institute of Public Health have shown that a majority of individuals who attended [Epi Workgroup] trainings have used the Epidemiological Profile to prepare presentations, prioritize community needs, and write grant proposals. Feedback from the State’s Regional Prevention Coordinators has primarily been positive. One coordinator noted that coalitions in her region are using the data for assessment of needs and determining how to focus their efforts. She said they look forward to easy access of the information online.”
- “One area that we are looking forward to seeing results is the use of epidemiological data at the community level. We are currently in the process of providing the local areas with community-level Epidemiological Profiles. We anticipate seeing the Strategic Framework Process 5 steps used successfully within each community. In addition, from these Epi Profiles, the local areas will be able to identify what additional data needs to be collected in their area to provide a better understanding of the substance abuse related consequences.”
- “Through [Epi Workgroup] data efforts, the funded communities are learning about and getting comfortable with using data. They are recognizing that data can be used for advancing decision making not just for stimulating emotional responses.”

Increased appreciation or support from the State leadership

Though not as frequent as the previously noted benefits, a number of respondents have reported that, as a result of the formation and implementation of their Epi Workgroups, they have received increased recognition, appreciation, participation, and/or support from State leaders for data-driven decision making. Some have also described their Epi Workgroup as a catalyst for leadership development. For example:

- “We have an interagency council for substance abuse prevention and treatment that is chaired by the lieutenant governor.”

- “Our Substance Abuse Epidemiology Work Group is staffed by me out of the Governor’s Office. Further, the SPF SIG Advisory Council has been formalized into the [State] Substance Abuse Partnership, chaired by the Governor’s Chief of Staff. This has resulted in an elevated status for the Substance Abuse Epidemiology Work Group and has led to new responsibilities and projects.”
- “The [Epi Workgroup]’s annual publication *The Consumption and Consequences of Alcohol, Tobacco, and Drugs in [the State]: A State Epidemiological Profile* has been used by [State] leaders as a policy-making tool for substance abuse prevention. Indeed, both the entire and portions of the report have been drawn on for making policy decisions both within State and local government as well as community agencies.”
- “In 2007, a Legislative Task Force on Prevention was created and is meeting regularly to examine the substance abuse prevention needs in [my State]. The [Epi Workgroup] has been instrumental in providing data they have collected to the Task Force so that data-driven decisions can be made. But at this time it remains to be seen how effective the leadership of the Task Force will be until the members have decided which policy measures need to be pursued.”
- “Stronger organizational leadership will emerge as a new direction and clear objectives are articulated internally and externally. Preliminary efforts to expand the [Epi Workgroup] approach across disabilities (i.e., mental health, developmental disabilities, and substance abuse treatment) serve as an example of organization leadership that recognizes the longer term benefits of such an effort. Significant interagency relationships have developed which will be sustained through this process. The [Epi Workgroup] is developing strategies to strengthen leadership support for building connections with other human service, education and law enforcement agencies to improve collaboration and holistic planning in the future.”
- “The leadership that I saw developed was the locals, who developed an understanding of the role of the consequence data and the utility of looking at longer term outcomes. This will hopefully bring a new and committed group of individuals together at the local level.”

In sum, respondents have noted a number of positive outcomes emanating from their work in establishing and operationalizing their Epi Workgroups—outcomes that many have concluded will ultimately enhance their ability to conduct high-quality data-driven planning. For example:

- “The single most important result of the [Epi Workgroup] support in this State 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, focusing on the identification of a comprehensive set of data to fit the model of change, collection of the right types of data, understanding and interpreting data, prioritizing data collection efforts, and understanding the

differences between data for planning, data for monitoring, data for evaluation, etc.”

Summary

In a time of tremendous needs and limited resources, when the expectations for demonstrating both change and accountability are extraordinarily high, data-guided planning and decision making offers unparalleled, value-added benefit. The use of epidemiological data to enhance prevention practice, capacity building, and ongoing monitoring and evaluation efforts is a critical step toward the development of a comprehensive prevention system that can address substance abuse problems at the national, State, and community levels.

Through the development, implementation, and subsequent assessment and planning efforts of the Epi Workgroup program, SAMHSA/CSAP has fostered, contributed, and catalyzed the following:

New and/or improved collaborative relationships among organizations and individuals in support of and through engagement in data-related activities. The Epi Workgroup effort has brought new partners to the table, increasing collaboration among State-level organizations, often for the first time. It also 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 Workgroup and non-Workgroup tasks, including the production of specific data-related products.

New and/or improved access to data. The advent of the Epi Workgroup has occasioned the use of new types of data for prevention planning. It has also led to more complete utilization of data. States have reported improved mechanisms for data-sharing, including formal data sharing agreements. This increased access to data has allowed States to identify gaps and limitations in their existing data sources and improved their ability to strategize about how to address those gaps.

Enhanced capacity to use data in substance abuse prevention planning, including increased use of data for decision making. Epi Workgroup efforts have increased the capacity of State- and community-level partners to use data for substance abuse prevention planning. This increased capacity has been particularly useful for building capacity at the community level

Increased appreciation or support from State leadership for using data in planning and decision making. Overwhelmingly, Epi Workgroups have been viewed as catalysts in the data-driven prevention planning and decision-making movement.

In the short term, Epi Workgroups, along with the technical assistance (TA) supporting their work, aim to enhance understanding of substance use and related problems, guide identification of priority problems, and assist State decision makers in using data to weigh the implications of targeted substance use prevention efforts and their potential for reducing use and related outcomes. In the long term, Epi Workgroup and Workgroup-related TA aim to guide the

development and use of State data and monitoring systems that enable States to effectively and efficiently (a) measure and monitor substance use and related problems, including the SAMHSA NOMS, and (b) allocate resources to address priority problems.

Depending on their stages of development, Epi Workgroups and Workgroup-related TA focus on continued capacity building around data collection, analysis, and application for ongoing prevention planning and decision making; developing and updating Epi Profiles for assessment of baseline substance use and substance use trends; understanding and applying data in decision making; and developing and using data monitoring systems. Epi Workgroups also focus on integrating their data efforts into comprehensive State and community planning to support strategic implementation activities.

As these efforts unfold and continue, States will continue to experience a number of positive outcomes, including enhanced ability to: apply epidemiological principles and personnel to substance abuse prevention; comprehensively examine substance use; guide prevention programming with a focus on the consequences and the particular contributing factors they seek to change; frame the foundation for development of an ongoing monitoring system; and address related ideas for improving the scope, quality, and relevance of their prevention efforts. Epi Workgroups will continue to be challenged by data gaps, access and quality issues, and variations in analytical capacities within and across States to infuse a data-guided approach into their decision-making structures. Building a comprehensive prevention monitoring system (and the epidemiological capacity to support it) requires the upfront and ongoing involvement of State-level decision makers for substance abuse prevention, even in those States that outsource their epidemiological assessment efforts.

Epi Workgroup members and Workgroup-related TA providers are working with State prevention partners to build data systems and analytical capacities that position States at the forefront of efforts to reduce substance use and related problems in the United States. Building the kind of monitoring system needed to strengthen substance abuse prevention demands that all stakeholders attend closely to the people, information systems, TA, and organizational commitment needed to support a strong infrastructure for data syntheses, interpretation, and application. Current Epi Workgroup efforts are focused on just such a multifaceted approach to improving the nation's prevention data systems.

Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance

Tasks	Progress	Challenges	Guidance
<p>A. Develop a State-level structure that focuses on using data for decision making related to substance abuse prevention.</p> <p>a1. Establish State-wide Epi Workgroup.</p> <p>a2. Secure staff with epidemiological expertise and time for Workgroup tasks.</p> <p>a3. Create structures and procedures that connect and foster working relationships between the Epi Workgroup and the state prevention system.</p>	<ul style="list-style-type: none"> • All SPF SIG grantees and non-SPF SIG States have established Epi Workgroups. • All Epi Workgroups have developed an Epi Workgroup structure (i.e., members, operating and communication procedures, meetings). . All Epi Workgroup-contract sites were required to develop charters. 	<ul style="list-style-type: none"> • Workgroup effectiveness can be reduced by inconsistent availability of technical and human resources capable of completing data work. • Attendance at meetings can be hampered by members’ busy schedules, academic calendars, and/or travel restrictions and reimbursement limits for State agency employees. • Transitions in State leadership and related changes in State structures, decision making, and staffing and other bureaucratic contract delays in States have delayed startups and progress. • Significant use of outside contractors to do data work often challenges integration of data into State system decision making. • Some Epi Workgroups have weak connections to their respective State prevention systems. 	<ul style="list-style-type: none"> • Clearly define the Workgroups’ roles (especially in relation to State prevention systems). • Clearly define the goals of the Epi Workgroup. • Include data managers, or data “gatekeepers,” from key agencies among Epi Workgroup members. • Include members with expertise in and access to GIS technology. • Include members who are epidemiological experts and who are willing and able to explain epidemiological details to non-epidemiological-oriented members. • Include members who can represent high-risk counties or ethnicities. • Include a paid staff member on the Workgroup roster. • Hold quarterly meetings lasting 2 to 3 hours, preferably midday, and provide lunch. • Identify a structure that works best for the State, but a variety of Workgroup structures can be effective. • Structure the Workgroup so that it can exert influence on State decision makers effectively. • Establish mechanisms for easy communication (e.g., listservs, etc.). • Clearly specify Workgroup deliverables and establish timelines for milestones.

NOTE: There are 65 “State” (incl. Jurisdiction, Tribe) Epidemiological Outcome Workgroups: 42 SPF SIG grantees and 23 SEW-contracts in areas without SPF SIGs. SEOW contracts are not required to do D.

Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance

Tasks	Progress	Challenges	Guidance
<p>B. Determine which data the State needs to describe the magnitude and distribution of State-level substance use and related consequences across the lifespan.</p> <p>b1. Establish a core set of substance use and related consequence data indicators</p>	<ul style="list-style-type: none"> • All SPF SIG Epi Workgroup and most Workgroup-contracts have identified a set of epidemiological data indicators (<i>based on SEDS constructs/indicators</i>). 	<ul style="list-style-type: none"> • Epi Workgroups have struggled to establish criteria for data selection; some Workgroups continue to work with large “inventory” lists, which make analysis, interpretation, and data use more complex. • Some useful data sources require lots of lead time to obtain and manipulate their data in ways that facilitate county or zip-code comparisons. • Insufficient data exist to support or reject what are often perceived to be real problems in many States (e.g., methamphetamine and prescription drug abuse). • Few reliable local data sources are available for decision making. • The work of Epi Workgroups facing particular data limitations is often stalled. 	<ul style="list-style-type: none"> • Consider the depth and breadth of the State-level data the Workgroup wants to examine before beginning the data-collection process. • Create decision rules for data inclusion. • Develop a detailed plan for data collection/analysis (e.g., who, what, where, etc.). • Develop rating metrics and other criteria to guide data judgments, and engage the Workgroup in evaluating analyses of these aspects. • Consider all possible data sets and indicators that might inform prevention planning and resource allocation, focusing on SEDS data first and then supplementing those data with State data. • Begin with State-level data and then review other available data to address relevant State issues. • Concentrate on using data that is uniform, easily available, and aligned with national data. • Limit the amount of data to be utilized initially; focus first on available and accessible data. • Narrow the field of data indicators to those based on explicit criteria and Workgroup discussion foci. • Clarify both the limitations and value of the data to be examined and used. • Establish and maintain a simple matrix of available indicators that includes data sources and the schedules for updating these sources. • Find an efficient way to present data analyses.

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Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance

Tasks	Progress	Challenges	Guidance
<p>C. Collect and analyze data on substance use and related consequences</p> <p>c1. Create State Epi Profile and/or other data products</p>	<ul style="list-style-type: none"> • All Epi Workgroups (except 2 Tribes/3 SEOWs) have developed Epi Profiles that examine alcohol, tobacco, and drug abuse across the lifespan. • Some States have updated Epi profiles; some have produced other data products (e.g., data limitations, data gap plans). 	<ul style="list-style-type: none"> • Epi profiling efforts are not always produced by or well connected to State prevention systems, limiting use of data implications in decision making. • Limitations in technical data skills among grantees affect the quality and utility of data products. • Acquiring archival data can be time-consuming. 	<ul style="list-style-type: none"> • Less is more—that is, smaller is better when it comes to forming an analytical group. • Including members who have access to data can help the Epi Workgroup obtain data more quickly. • Create a flow chart of decisions about data collection. • Provide data in a variety of formats (e.g., charts, narratives, etc.). • Aggregating multiple years of data when necessary to enable more precise rate reporting and minimize suppression of rate reporting. • Divide consequence indicators into domains (e.g., mortality, morbidity, criminal justice, education, etc.) when examining data. • Using GIS to map data at the county level reveals regional patterns of consumption and consequences that may be very helpful in targeting prevention activities. • Make the Epi Profile a required deliverable.

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Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance

Tasks	Progress	Challenges	Guidance
<p>D. Assist in determining substance abuse prevention priorities based on epidemiological data, and outline how they inform State planning and resource allocations.</p> <p>d1. Make Epi Workgroup recommendations for prioritization criteria, 2) the process for setting priorities according to the criteria, and 3) how to apply the results of the prioritization process.</p> <p>d2. Make Epi Workgroup recommendations to State prevention plans (for SPF SIG States).</p>	<ul style="list-style-type: none"> • All 26 Cohort I and II SPF SIGs set priorities (and all their plans are approved by CSAP). • Cohort III is in various stages of prioritization/planning. 	<ul style="list-style-type: none"> • Some SPF SIGs jumped to priority setting (and sometimes resource allocation) with limited consideration of data/implications from Epi Profiles. • Not all SPF SIG-related staff used CSAP’s SPF SIG Plan Guidance to frame and keep their projects on track (e.g., data informing resource allocations), so how the data informed these plans is not always clear. • In some States, Epi Workgroup staff members are not considered to be appropriate “priority setters,” since Workgroup members may be selected based on their expertise in handling epidemiologic data rather than making policy. 	<ul style="list-style-type: none"> • Use a well-defined process to select priorities, one with pre-established, clearly defined criteria. • Make sure the final prioritization decision is as transparent as possible to all participants in the process. • In defining priorities, break consequence and consumption data into three categories: 1) consumption, 2) direct consequences (e.g., those caused by a specific substance such as alcohol-related cirrhosis), and 3) indirect consequences (e.g., those caused by substance use in general such as school dropout). • Organizing Epi Profiles by key dimensions (e.g., magnitude, trends) facilitates the use of data in prioritization; otherwise, the data-guided rationale for priorities is less clear. • Anticipate the contextual factors that may elevate the importance of one problem over another. • Keep individual data judgments confidential. • Present clear, concise statements to the State advisory committee (or other decision-making body) to help them make decisions about priorities. • Address what can be addressed well; “keep it simple” by choosing one or two priorities. • Epi Workgroup data can be influential in targeting and focusing available funds from all sources.

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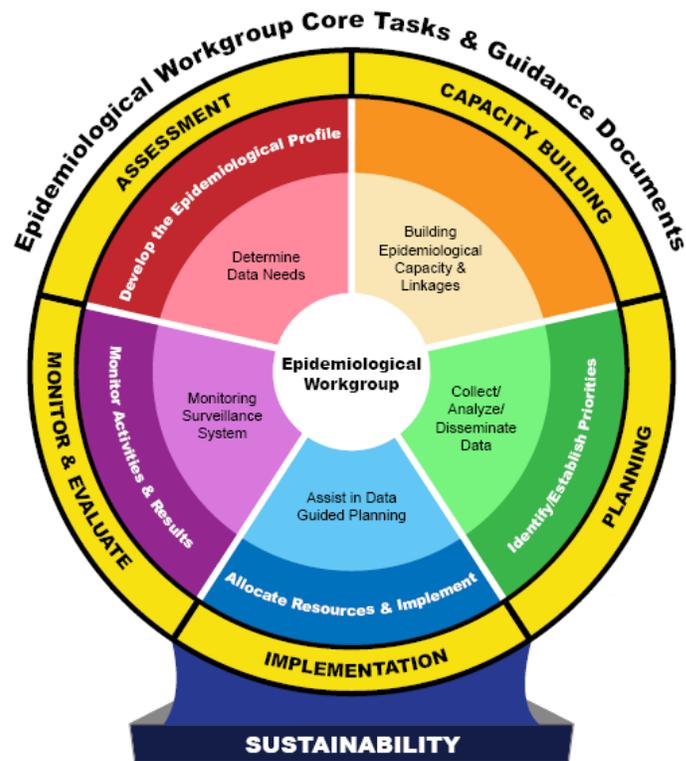
Appendix B: State Epidemiological Workgroup Tasks, Progress, Challenges, and Guidance

Tasks	Progress	Challenges	Guidance
<p>E. Assist in identifying, collecting, and analyzing community-level data and examine their use in community planning.</p> <p>e1. Provide input/guidance into community-specific data analysis and determine the implications of those data for community planning.</p>	<p>One-third of SPF SIG Epi Workgroups have assisted or are assisting with community-level data assessments to help define State/local priority(s) and define causal factors/intervening variables.</p> <p>All Epi Workgroup contracts are required to produce community-level data profiles. Some SPF SIG Workgroups are producing community-level profiles.</p>	<ul style="list-style-type: none"> • Insufficient resources and TA are available for States to engage in outcomes-based, community-level prevention planning.. • TA systems within States are limited. Once SPF SIG activity moves to the community level, many States do not have support systems in place (e.g., TA providers) to steer communities toward data-guided community planning. 	<ul style="list-style-type: none"> • Having clearly defined priorities is necessary to assist communities in focusing. • Workgroups should create county fact sheets (e.g., data tables, GIS maps, and summaries). • If possible and available, Epi Workgroups' proxy indicator reports should drill down to the sub-county level to assist with the needs assessment process in local areas. • Workgroups should provide orientation/training to community-based data users, as appropriate.
<p>F Develop a system for ongoing monitoring of substance abuse-related data to track progress in addressing prevention priorities and detecting trends.</p> <p>f1. Create a State monitoring plan.</p> <p>f2. Create a schedule for providing ongoing data reports.</p>	<p>Few States have formal data monitoring plans that address their data systems, human resources/capacities, and participating organizations. Some are working to develop data products related to building such monitoring systems (e.g., data limitation, data gap plans, updated Epi Profiles/ trend reports)</p>	<ul style="list-style-type: none"> • Many Epi Workgroups/States are unfamiliar with the objectives/components of a monitoring system. • Epi Workgroup tasks/milestones beyond State assessment and planning (and the Workgroups' roles in them) are not clearly defined. • Epi Workgroups not connected to the State prevention system struggle with identifying and taking advantage of the opportunities/position to facilitate the development of monitoring systems. • After data-driven plan tasks are completed, Epi Workgroups often struggle to define their roles in further developing state monitoring systems. 	<ul style="list-style-type: none"> • Workgroups should invest in sound data management that includes establishing a schedule for ongoing data acquisition as well as data consolidation, storage, and security. • Developing human capacity through staffing and workforce development is critical. • It is important to facilitate regular communication between data providers, analysts, and users. • Workgroups should expand their cross-agency relationships as well as relationships with other entities that influence or are affected by the prevention system.

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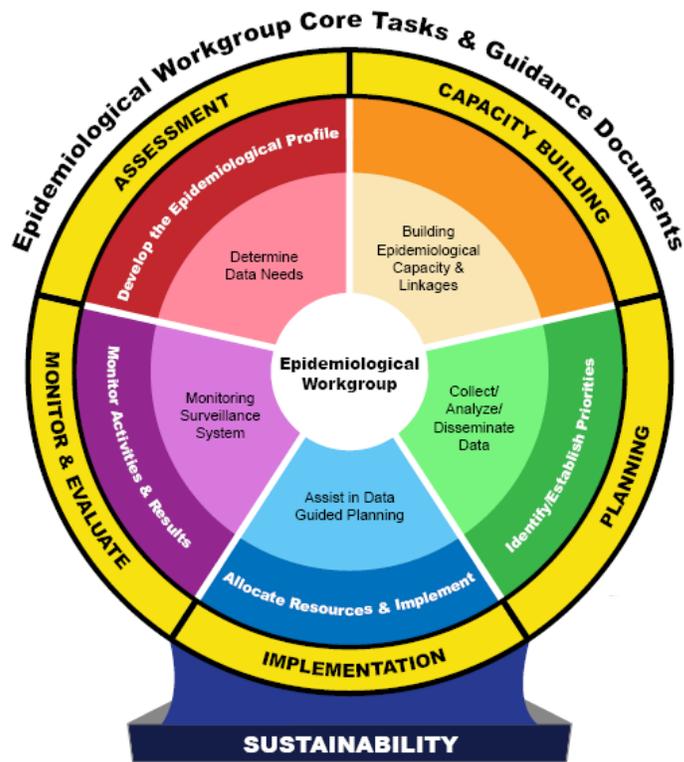
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EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

ADDITIONAL RESOURCES

1. Glossary of Terms Used
2. List of Acronyms Used
3. Epidemiological Workgroup Technical Assistance Session Planning Template
4. Sample Epidemiological Workgroup Technical Assistance Session Feedback and Evaluation Form
5. Adding Tools to the Toolkit
6. Slide Sets:
 - a. Epi Workgroups in Brief
 - b. Epi Profile Development
 - c. Setting Priorities
 - d. Allocating Resources
 - e. Monitoring Systems
 - f. Early Results and Benefits
 - g. Sustainability



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Glossary of Terms Used



Glossary of Terms Used

Attributable Fraction: A measure of the proportion of a consequence or underlying condition that is directly attributable to substance use.

Availability of Data: The existence and availability of data in disaggregated form at the State or lower geographic levels.

Capacity/Resources: The availability of human, institutional, and financial resources (e.g., number of agencies as well as the commitment of resources to those agencies).

Categorical Ratings: Simple scores or rankings (e.g., “high,” “medium,” “low”) assigned to each indicator by epidemiological dimension. The categories used for ratings represent an ordinal scale to which no numbers are assigned but which reflects a hierarchy or continuum (e.g., “high” is greater than “medium”).

Consequences: Adverse social, health, and safety outcomes or conditions associated with alcohol, tobacco, and/or drug use.

Consistency: The relative stability of methods or means of collecting and organizing data over time. When methods do change, sound studies or data should exist that determine and facilitate adjustment for differences resulting from data-collection changes.

Construct: A way of conceptualizing and organizing key types of consumption patterns and consequences; for example, regarding alcohol consumption, constructs related to consumption patterns include current binge drinking and age of initial use, and constructs related to consequences include mortality and crime.

Consumption: The patterns of use of alcohol, tobacco, and/or drugs, including initiation of use, regular or typical use, and high-risk use.

Demographic Characteristics: Aspects of a population that are examined for subpopulation analyses. Frequently used demographic characteristics include:

1. **Age:** Age is a common and readily available characteristic for data analysis. Most of the SEDS datasets provide data by age with adequate population/sample sizes in each age group to draw meaningful conclusions about the distribution of substance use and its related consequences by age.

2. **Gender:** Substance use and its related consequences can vary by gender. SEDS provides data for gender breakdowns for the majority of its indicators.
3. **Race/Ethnicity:** Substance use and its related consequences may vary across racial/ethnic subgroups. In some cases, race/ethnicity breakdowns may be useful for identifying segments of a population that are especially affected by a particular negative consequence. Race/ethnicity subgroup estimates are subject to availability. SEDS provides race/ethnicity breakdowns for some of the indicators.
4. **Region/County:** The distribution of substance use and its related consequences may vary by region/county. Regional/county distribution often is used by States for allocation of prevention resources. For most States, region/county may provide a manageable unit of analysis. Region/county subgroup estimates are subject to availability. SEDS provides county-level breakdowns for all consequence indicators.

Epi: A commonly used abbreviation for *epidemiology* or *epidemiological*.

Epidemiological Dimensions: Aspects of epidemiological data that provide different types of information about substance abuse problems and different ways of assessing their importance. Epidemiological dimensions include:

1. **Size/Magnitude** – This dimension explores the basic question of “how big” the underlying problems are in terms of occurrence.
2. **Trends Over Time** – This dimension focuses on the extent a problem is increasing or decreasing and helps in detecting emerging or growing problems that may warrant increased attention.
3. **Relative Comparison** – This dimension contrasts individual State indicator estimates and trends vis-à-vis those of a standard reference population. Such a comparison may provide additional information to assist in data interpretation. Some commonly used relative comparisons are:
 - a. *Comparison to National Rates.* These comparisons provide a standard reference for comparing indicator values (or trends) for a specific substance-use pattern or consequence relative to the Nation as a whole. Statewide indicator values that are substantially higher or increasing more rapidly than the national rate may identify problems that warrant priority attention.
 - b. *Comparison to Other States’ Rates.* States may choose to compare their estimates to those of an adjacent or similar State to determine their relative ranking. This comparison may be useful for States where the demographic distribution is significantly different compared to that in the Nation as a whole.
 - c. *Comparison to State-Set Standards:* Comparing indicator estimates to an already existing standard (e.g., Healthy People 2010 objectives) may be useful in assessing a State’s progress in addressing a specific substance use or consequence.
4. **Seriousness/Severity** – This dimension describes the impact upon or harm done to individuals and society due to a consumption pattern or consequence. Some consumption patterns or consequences are potentially more severe in nature and have greater impact on individuals and society than do others. For instance, when comparing binge drinking to any other type of alcohol use in a past month, binge drinking places individuals at greater risk of serious consequences. Measures available to quantify and compare consumption severity across different constructs/indicators include:

- a. *Years of Potential Life Lost (YPLL)*: YPLL is a statistic that measures the total number of life years lost owing to premature death in a population from a certain cause. YPLL represents the burden of mortality on younger age groups (who have more years of life to lose) compared to crude mortality rates, which reflect the burden of mortality among older age groups owing to the greater frequency of death.
 - b. *Quality-Adjusted Life Years (QALY) or Disability-Adjusted Life Years (DALY)*: The QALY and DALY are health-gap measures that extend the concept of YPLL to include equivalent years of “healthy” life lost by virtue of being in states of poor health or disability. The DALY combines into one measure both the time lived with disability and the time lost due to premature mortality. The World Health Organization (WHO) offers a toolkit that can be used to estimate DALY loss from alcohol abuse (available at http://www.who.int/choice/toolkit/cost_it/en/index.html).
5. **Economic Cost** – This dimension considers the dollar-value (expense or gain) associated with a consumption pattern or consequence. Substance abuse affects the lives of millions of people each year in the U.S., with billions of dollars in economic costs associated with mortality, morbidity, health costs, and loss of productivity.

Epidemiological Data: Within the substance abuse prevention field, data that describe substance use and its consequences within and across populations and that help to address the following questions: What substances are being used? Who is using them? How are they being used? What are the consequences?

Epidemiological Profile (commonly referred to as *Epi Profile*): A document that summarizes and presents epidemiological data in a way that facilitates use of those data in prevention decision making. A good Epi Profile will balance text with graphical displays to communicate data effectively. Graphical displays of data in an Epi Profile should assist readers in thinking about the data being presented and facilitate interpretation of those data. Some common types of graphics used in presenting Epi Profile data include tables, charts, graphs, and maps.

1. **Tables** can be used for presenting any type of quantitative data. As tables can represent multiple dimensions of data, they can be an effective way to summarize everything from simple to complex data.
2. **Charts** generally are used to show only one dimension of data and are most appropriate for comparing data with discrete categories. The most common types of charts include bar and pie charts.
3. **Graphs** can be used to plot data on x and y coordinates. Graphs can range from simple line graphs to more complex plots of survival curves, and they are especially useful in displaying time trends for one or more indicators.
4. **Maps** may be used to show the geographic distribution of data. Various types of software are available to assist in data mapping.

Epidemiology: The study of the distribution and determinants of health-related events in populations; more specifically, the branch of medical science that addresses the incidence, distribution, and control of disease in a population.

Incident Rate: A measure of new cases of health-related events in a population, often expressed as a ratio (e.g., number of cases per 100,000). In the substance abuse prevention

field, incident rates often are used to describe substance-related consequences such as new cases of HIV infection and babies born with Fetal Alcohol Syndrome.

Indicator: A specific data measure used to assess and quantify prevention-related constructs. Indicator data are collected and maintained by various community and government organizations.

Intervening Variable (also referred to as a Risk or Protective Factor): A factor that contributes to substance use and related problems. For example, high availability of alcohol to youth is a risk factor for alcohol-impaired driving involving underage youth, and restrictions on smoking in public places are a protective factor against smoking among the general population.

National Source: A measure that is available from a centralized, national data source.

Outcomes-Based Prevention: An approach to prevention planning that is rooted in a solid understanding of the outcomes—that is, the problems—that must be addressed. This understanding is derived from examining epidemiological data on the consumption and chief consequences of alcohol, tobacco, and/or drug use. Understanding the nature and extent of substance-related problems is critical for determining prevention priorities and aligning effective strategies to address them.

Periodic Collection Over at Least Three to Five Past Years: Systematic gathering of data every three to five years that is provided more frequently, preferably on an annual or least biennial, basis.

Prevalence Rate: The number of people in a population affected by a health event at a given time, often expressed as percentages. In the substance abuse prevention field, prevalence rates generally are used to describe the degree to which people engage in substance use (e.g., X percent of high school-age youth who have engaged in illicit drug use in the past month).

Preventability/Changeability: The ability to prevent or control a problem or its consequences with known interventions.

Public Health Model: An approach to health improvement that is population-based and focused on preventing health problems and promoting healthy living for whole groups of people (e.g., people who share a common characteristic such as age or residence in a geographic region such as a county). A public health model assumes multiple spheres of influence to explain determinants of substance-related problems. These spheres of influence go beyond looking at individual characteristics to addressing features of alcohol, tobacco, and/or drugs and the physical and social environments in which people live, work, play, and interact.

Readiness/Political Will: A measure of the current levels of awareness, concern, and interest at the public, political, and/or organizational level to support addressing a particular issue and/or the public/political level of acceptability and support associated with addressing an issue.

Resource-Allocation Planning Model: An approach to distributing financial resources (and possibly other nonfinancial resources) that enables States to address priority problems effectively. The goal of a resource-allocation process is to select a planning model that is likely to produce the greatest positive change given existing resources. Three basic resource-allocation planning models for distribution of SPF SIG funds are described below. States may also use a combination of the following three models to form a **hybrid** model for resource-allocation planning.

1. **Equity-Planning Model:** This model dictates equitable distribution of funds across all potential grantees. According to this model, the same amount of money is awarded to each grantee, without applying other criteria.
2. **Highest-Contributor Planning Model:** This model prioritizes areas where data indicate highest incidence occurs—that is, where the absolute number of persons affected by the priority problem is deemed highest and thereby warrants the most attention, even if that number represents a low rate relative to the entire population.
3. **Highest-Rate/Need-Planning Model:** Often referred to as the Highest-Need Model, this model directs funding to the communities or regions that have the highest rate in relation to priority substance-use patterns or substance-related consequences within the overall State population. According to this model, the absolute number of people affected is irrelevant; rather, the relative degree to which the selected priority is in evidence among the population (usually expressed as a percentage of the total population or number of cases per some standard population unit) is deemed most important.

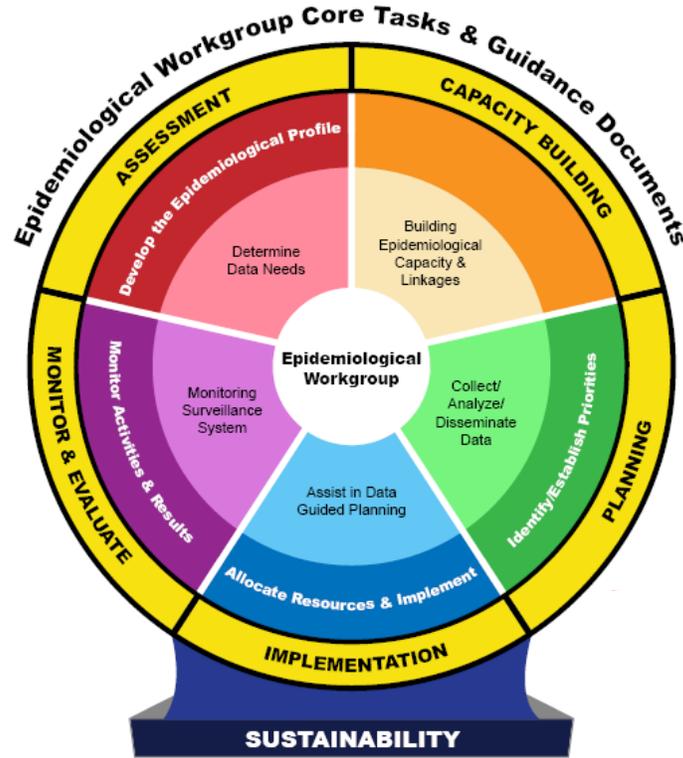
Sensitivity: The ability of a measure/indicator to detect true underlying change over time due to changes in substance abuse patterns of a selected population. For example, if a prevention strategy is intended to affect drinking and driving, measures of driving under the influence/driving while intoxicated (DUI/DWI) will likely be more sensitive to changes in behavior than would alcohol-related crashes because crash rates generally take longer to decrease. In another example, if the prevention strategy chosen involves increased high-visibility enforcement to reduce alcohol-related crashes, the DUI/DWI rates will likely increase initially, which may falsely imply that drinking while driving has increased. In this latter case, a more sensitive measure for detecting change would be alcohol-related crashes rather than DUI/DWI.

Unweighted Scoring: An approach to problem assessment that involves computing simple unweighted scores to create a numerically ranked list of problems. For example, the use of numerical ratings to assign point values to each epidemiological dimension either individually or as a group (e.g., High = 3 points, Medium = 2 points, and Low = 1 point; or 1 = Low to 10 = High).

Validity: The assurance that an indicator accurately measures the specific construct and yields a true snapshot of a phenomenon at the time of assessment. Validity is supported by research-based evidence.

Weighted Scoring: A quantitative method for interpreting epidemiological data for priority setting that involves using weighted scores if some dimensions are believed to be more important than others and thus should have greater influence in determining the total score.

Weighted scoring ensures that certain characteristics have more influence in the final priority ranking.



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

List of Acronyms Used



List of Acronyms Used

- AEDS:** Alcohol Epidemiology Data System
- AF:** Attributable Fraction
- APIDS:** AIDS Public Information Data Set
- ARDI:** Alcohol-Related Disease Impact
- ATOD:** Alcohol, Tobacco, and Other Drug
- BRFSS:** Behavioral Risk Factor Surveillance System
- CDC:** U.S. Centers for Disease Control and Prevention
- CPS:** Child Protective Services
- CSAP:** Center for Substance Abuse Prevention
- CSTE:** Council of State and Territorial Epidemiologists
- DALY:** Disability Adjusted Life Years
- ECS/EC Score:** Economic Cost Score
- FASSnet:** Fetal Alcohol Syndrome Surveillance Network
- FBI:** Federal Bureau of Investigation
- FEMA:** Federal Emergency Management Agency
- GIS:** Geographic Information System
- LEOWs:** Local Epidemiology and Outcomes Workgroups
- NFIRS:** National Fire Incident Reporting System
- NIDA:** National Institute on Drug Abuse
- NOMs:** National Outcome Measures
- NSDUH:** National Survey on Drug Use and Health
- NVSS:** National Vital Statistics System
- ONDCP:** Office of National Drug Control Policy
- PRAMS:** Pregnancy Risk Assessment Monitoring System
- PRS/PR Score:** Prevalence Rate Score
- QALY:** Quality Adjusted Life Years
- RPC:** Regional Prevention Center
- SAC:** State Advisory Council
- SAFs:** Substance-Attributable Fractions
- SAMHSA:** Substance Abuse and Mental Health Services Administration
- SAMMEC:** Smoking-Attributable Mortality, Morbidity, and Economic Costs
- SEDS:** State Epidemiological Data System
- SEOWs:** State Epidemiological Outcome Workgroups
- SEW:** State Epidemiology Workgroup
- SPF SIGs:** Strategic Prevention Framework – State Incentive Grant
- SSA:** Single State Authority for Alcohol and Drug Abuse
- States:** All States, the District of Columbia, Federally recognized Tribes, and U.S. Territories participating in the Epi Workgroup Initiative

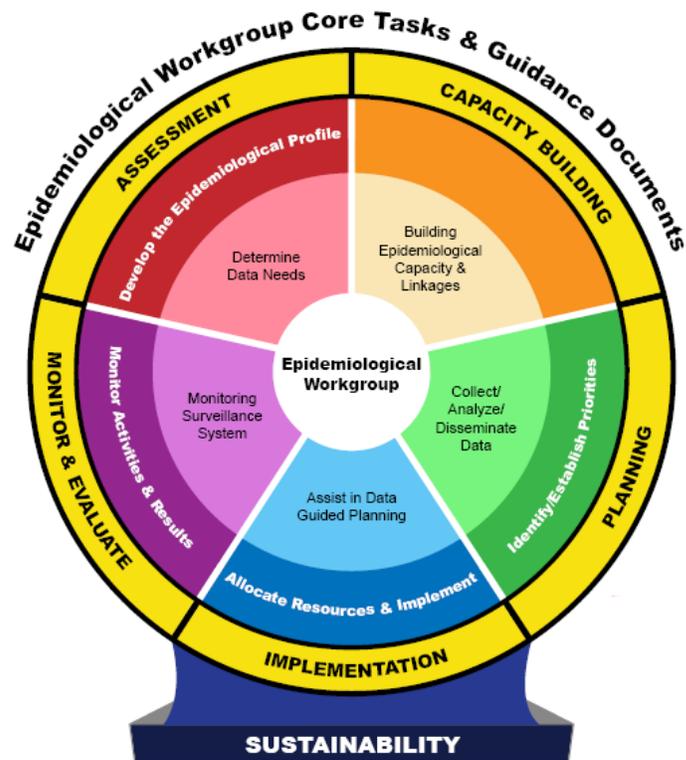
TEDS: Treatment Episode Data Set

UCR: Uniform Crime Reports

WHO: World Health Organization

YPLL: Years of Potential Life Lost

YRBSS: Youth Risk Behavior Surveillance System



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Technical Assistance Session Planning Template

Description

This Tool focuses on the development of technical assistance (TA) sessions designed to meet Epi Workgroup goals, objectives, and learning outcomes. Presented in two parts, the Tool first offers a series of background and session requirement questions about the target audience characteristics, learning outcomes required/desired, delivery method, time/agenda, materials, provider selection, and evaluation. It also provides a session planning template to help Workgroup members document their findings, assumptions, and plans.

Uses

A process may already be in place to determine and document Epi Workgroup TA requests, needs, plans, and agreements. If not, this Tool can help structure an initial telephone interview and email follow-up process and provide the kind of documentation needed for Workgroup members requesting TA as well as those members who must “sign off” on the TA request.

Epidemiological Workgroup Technical Assistance Session Planning Template

Requestor _____

Contact Person _____ Phone _____ Email _____

Agency _____

Role in Epi Workgroup _____

Telephone _____ Email _____

1. Background Questions

- a. Tell me about your Epi Workgroup (Year established? Established “in-house” or based outside of State government? Connected to SPF SIG?)

- b. What type of technical assistance (TA) is needed?

- c. How was this need determined?

- d. How do you envision receiving the TA needed? (via telephone, email, and/or onsite; in single or multiple sessions, etc.)

- e. Who will attend/participate in each session?

- f. Is there a preferred date or date range in which you would prefer TA provided?

Requestor _____

Contact Person _____ Phone _____ Email _____

Agency _____

Role in Epi Workgroup _____

Telephone _____ Email _____

2. Session Design Questions:

- a. Target Audience(s): Who needs to learn what? (A single TA delivery can involve several sessions, but each session must focus on a discrete set of learners and on what they require in order to be effective.)
- b. Learning Outcome(s): What do Workgroup members need to know and do? (Knowing and doing are very different and require different delivery strategies.) Which learning levels must be addressed? What tools and approaches are required to address the levels specified?
- c. Method(s): Who are the learners? How do they prefer to learn (e.g., read-ahead, presentations, discussion, exercises, etc.)?
- d. Time/Agenda: How much time can this audience realistically devote to TA participation? Given that estimate, how should the TA session(s) be organized? What agenda of activity and time should be established?
- e. Materials/Preparation: Are pre-session materials (e.g., opinion surveys, task status assessments, etc.) needed? What in-session materials and tools are needed? What reference materials should be included?
- f. TA Providers: Given all the above, who or what team is best suited to respond to these learning needs for this audience?
- g. Evaluation: In addition to normal feedback, must Workgroup learning be assessed in any way (e.g., post-test, provider observation, group review)? What forms or reports are required to evaluate Workgroup learning?

	<i>Learning Objectives/ Outcomes</i>	<i>Methods</i>	<i>Time/Agenda</i>	<i>Materials</i>	<i>Deliverer/Team</i>	<i>Assessment</i>
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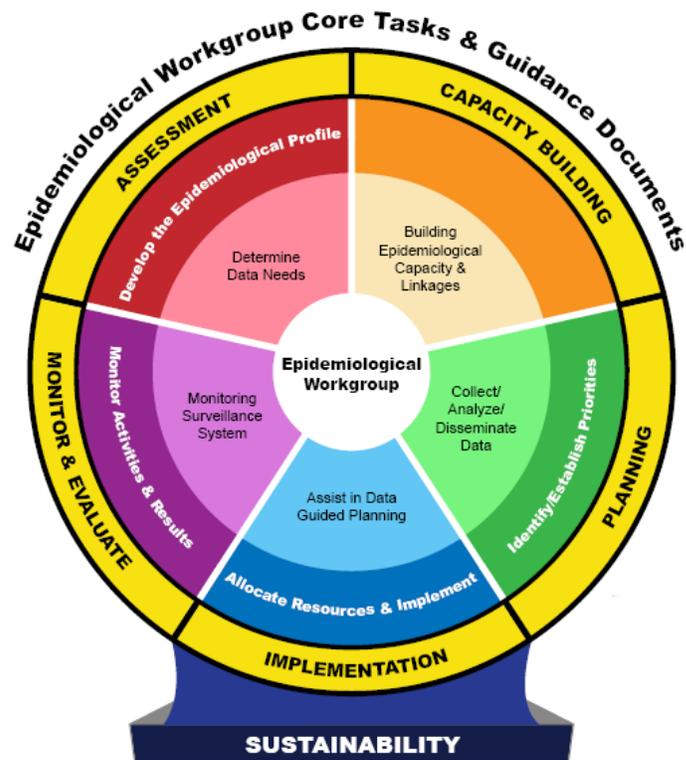
Target Audience

Who is in the room, and why are they there? How do they prefer to learn?

<i>Topic or Issue</i>	What do they need to know and do?	How will they learn best?	What is the optimal use of the learners' time?	What materials and resources are needed?	Presenter/Facilitator	How will the Presenter/Facilitator know that the learning outcome(s) has been met?

Requestor Approval _____ Date _____

Delivery Approval _____ Date _____



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Sample Epidemiological Workgroup Technical Assistance Session Feedback and Evaluation Form

Description

This Tool presents a format for collecting written feedback and evaluation comments from TA participants.

Uses

A standard evaluation format may already be available to collect participant reactions and recommendations after a TA session; if not, this Tool may be used for that purpose.

Epidemiological Workgroup Technical Assistance Session Feedback and Evaluation Form

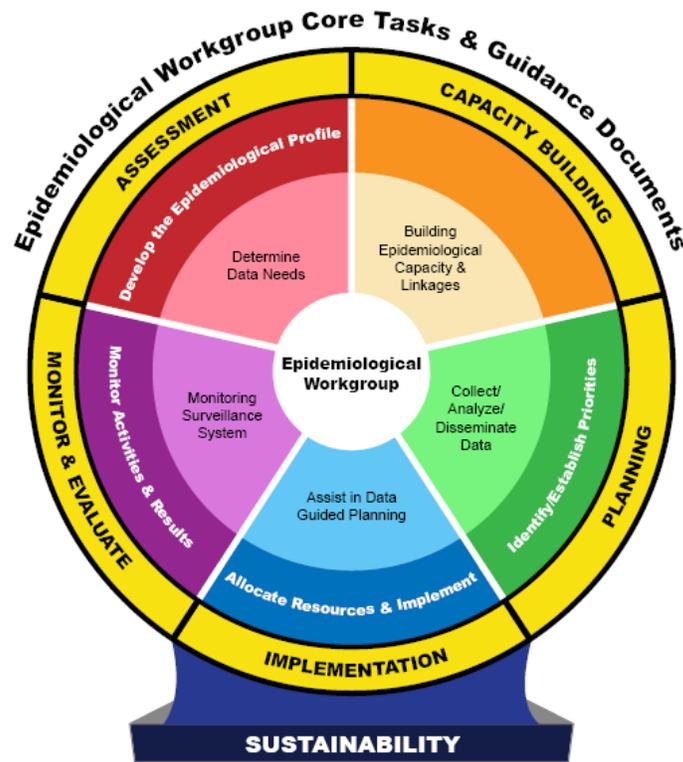
Your feedback and evaluation comments are very important in tracking the quality and effectiveness of TA provided. Your opinions and suggestions are welcomed on the elements below as well as any other issue you consider pertinent to the TA session.

1. The TA objectives were clearly defined.	Yes___	No___
2. I shared the objectives of the TA session.	Yes___	No___

Comment:

	Excellent	Good	Adequate	Poor	N/A	Comment
I. Session						
A. How well did the TA session support the stated objectives?						
B. How well were your own objectives met?						
C. How well was time used?						
D. How would you rate the session materials?						
E. How would you rate the TA session overall?						
II. Deliverer/Delivery Team						
A. Demonstrated knowledge of subject matter						
B. Adequately communicated concepts, approaches, and methods						
C. Encouraged participation						

	Excellent	Good	Adequate	Poor	N/A	Comment
D. Quality of TA provider's responses to participant questions						
E. Sensitivity to participants' needs and requirements						
F. How would you rate the deliverer/delivery team overall?						
III. Planning and Facility						
A. Quality of pre-session communications/materials						
B. Facility comfort, access, acoustics, etc.						
3. Did this session suggest the need for additional TA? If so, what type and how should it be provided?						Yes___ No___
4. Is there anything you would have preferred done differently in this TA session? If so, why?						
5. Any other comments or recommendations?						



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Adding Tools to the Toolkit

Description

This Tool provides a form for documenting tool adaptations and new tool creation to share with TA providers and teams.

Uses

This Tool may be used by TA facilitators to describe new or modified tools or to document why new tools or modifications of existing tools are needed, or to explain the utility of and experiences with using new or modified tools.

Epidemiological Workgroup Technical Assistance Facilitators' Toolkit Additions

This Toolkit was designed to be expanded as TA deliverers and teams responded to Epi Workgroup requests and needs by modifying the existing tools or creating new ones. Please provide answers to the questions below and attach a copy of the modified/new tool.

Modified Tool _____
(Number and title)

New Tool _____
(Number and title)

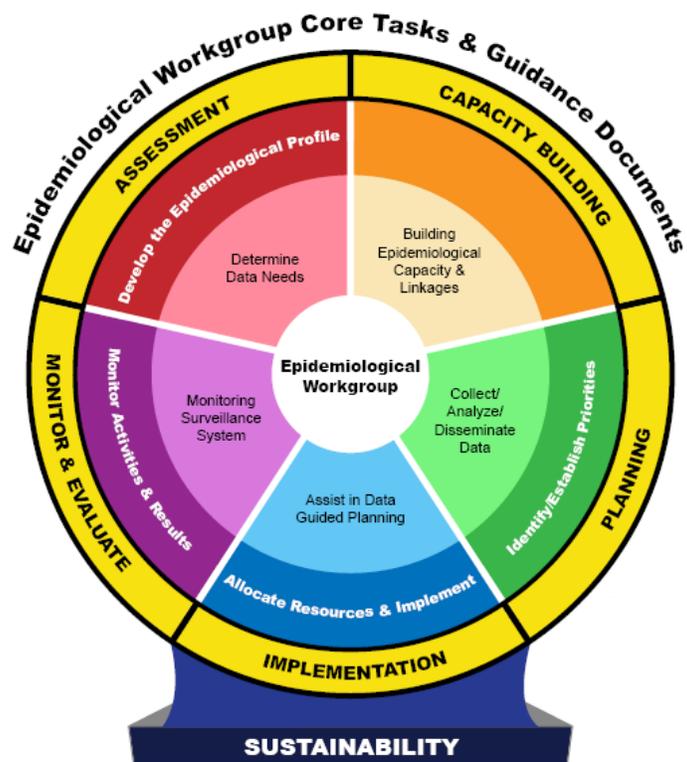
1. Please complete:

- **Description**
- **Uses**
- **Adaptation Notes**

2. What need led you to modify or create this new Tool?

3. What were the TA session participants' reactions to the new Tool?

4. Do you have any recommendations or caveats about the use of this new Tool for other TA deliverers and teams?



EPIDEMIOLOGICAL WORKGROUP Technical Assistance Toolkit

Slide Sets

- a. Epidemiological Workgroups in Brief
- b. Epidemiological Profile Development
- c. Setting Prevention Priorities
- d. Allocating Resources
- e. Monitoring Systems
- f. Sustainability
- g. Epidemiological Workgroups: Challenges, Guidance, and Benefits

Description:

This Tool consists of seven slide set presentations. This first presentation provides an overview of the background and purpose of Epi Workgroups. The next five presentations introduce the key components of five important Epi Workgroup concerns. The final presentation details the early results and benefits from Epi Workgroup experiences in States.

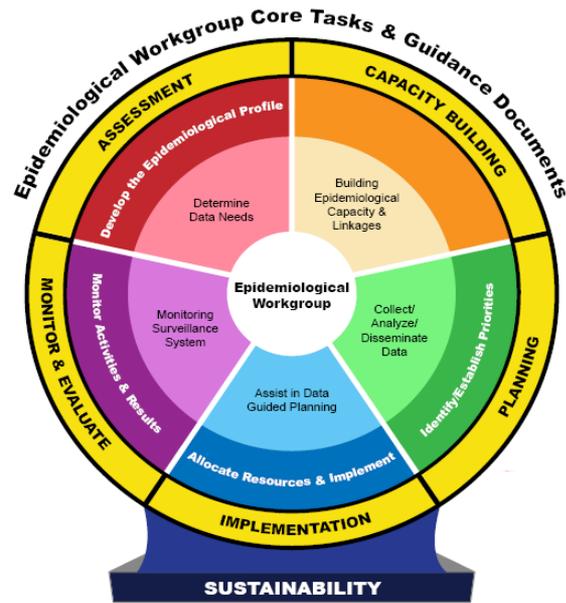
The documents—*State Epidemiological Workgroups: A Brief Overview*, *Developing a State epidemiological Profile for Substance Abuse Prevention*, *Setting Priorities for Substance Abuse Prevention*, *Allocating Resources to Address State-Level Substance Abuse Prevention Priorities*, *Developing a Substance Abuse Monitoring System*, and *State Epidemiological Workgroups: Preliminary Lessons Learned*—are the primary sources for the presentations in this Tool which mirror the documents' organization and sequence. Consult these sources document if further content detail is needed.

Possible Uses:

The presentations in this Tool may be used with three types of audiences: key decision-makers, Epi Workgroup Members, and others in the prevention field with limited knowledge about the purpose and experiences of the Epi Workgroups. The presentations providing a general overview and summary of early results and benefits may be of interest to all audiences and could be presented by anyone familiar with the Epi Workgroup experience (e.g., the State Prevention Director, Epi Workgroup members). The presentations detailing important aspects of five important Workgroup concerns are more appropriately directed to Epi Workgroup members. TA providers using these presentations should have a firm understanding of the topics discussed so that any questions asked by audience members may be answered definitely. Presenters may also wish to provide above-noted source documents to audience members.

Adaptation Notes:

The presentations in this Tool are located online at <://captus.samhsa.gov/home.cfm>.



Epidemiological Workgroups In Brief



Briefing Topics

- Policy
- Principles
- Data Sets
- Epi Workgroups Nationally
- Our Epi Workgroup
- Challenges and Next Steps



Policy Framework

- Alcohol, tobacco, and drug use contributes to myriad health and social problems
- Resources can be allocated more effectively and efficiently with careful analyses of:
 - the magnitude of the problem(s),
 - patterns of use, and
 - related consequences.



The SAMHSA/CSAP Epidemiological Workgroup Initiative

Funding to assist States in:

- Creating Epi Workgroups to collect and analyze data on:
 - Alcohol, tobacco, and drug consumption patterns
 - Related population-level consequences
- Using data to guide and enhance prevention planning and practice



Epidemiological Workgroup Principles

- Outcomes-based prevention
 - Begin by understanding use and consequences
 - Consider risk, protective, and causal factors
 - Employ evidence-based prevention strategies
 - Policies, programs, and practices
- Public health approach
 - Population level versus individual level
- Foundation for planning and decision making
 - Interdisciplinary, interagency, inclusive of all stakeholders



Epidemiological Data Sets

- State Epidemiological Data System (SEDS)
 - National source for most relevant and important substance abuse planning data
 - SEDS Data Sets
 - Type (alcohol, tobacco, and/or drugs)
 - Consequences (drug deaths, violent crime, etc.)
 - Use (daily cigarette smoking, driving while intoxicated)



Epidemiological Workgroups Nationally

- Functional networks with critically needed expertise
- Products
 - State-level Epi Profiles
 - Community-level Epi Profiles
 - Data reports for decision makers
- Interdisciplinary and interagency peer networks



Epidemiological Workgroup Scope

- Develop Epi Profiles
- Analyze and support priority setting in States
- Support State prevention resource allocation
- Develop State monitoring systems
- Facilitate data-driven decision making



Our Epidemiological Workgroup (to be completed by presenter)

- Mission
- Members
- Operating Rules
- Accomplishments

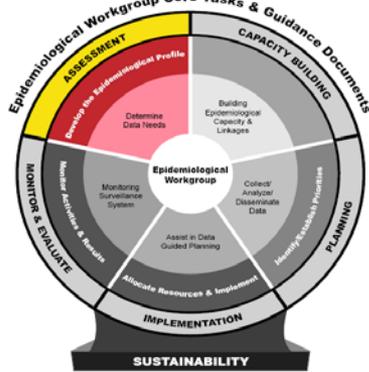


Epidemiological Workgroup Challenges

- Nationally
 - Funding
 - Skills and expertise
 - Sustaining achievements
 - Institutionalization of Epi Workgroup processes and products
- Our Epi Workgroup
(to be completed by presenter)



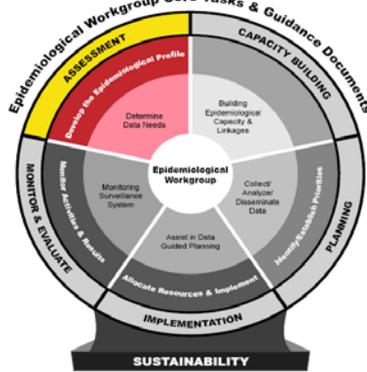
Next Steps (to be completed by presenter)



Epidemiological Profile Development

- Profile Focus
- Constructs and Indicators
- Profile Development Steps
- Technical Issues
- Presenting Epi Data in the Epi Profile

Epidemiological Profile Focus

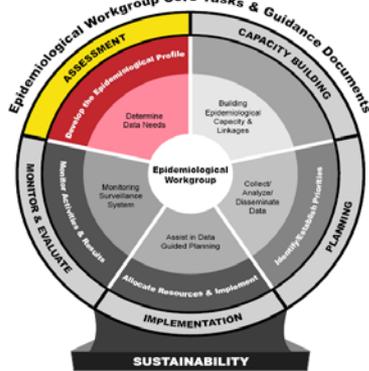


- Consumption – Use and high-risk use of alcohol, tobacco, and/or drugs
- Consequences – Adverse social, health, and safety consequences associated with alcohol, tobacco, and drug use



SEDS Constructs

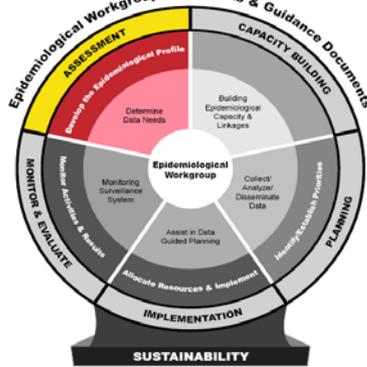
<i>Substance</i>	<i>Consumption</i>	<i>Consequences</i>
Alcohol	Current use Current binge drinking Heavy drinking Age of initial use Drinking and driving During pregnancy Per-capita sales	Alcohol-related mortality Motor vehicle crashes Alcohol-related crime Dependence or abuse
Tobacco	Current use Daily use Age of initial use During pregnancy Per-capita sales	Tobacco-related mortality
Drugs	Current Use Lifetime Use Age of first use	Drug-related mortality Drug-related crime Dependence or abuse



Data Inclusion Criteria

- Availability
- Validity
- Consistency
- Periodic collection over at least 3-5 years
- Sensitivity

Epidemiological Profile Development Steps

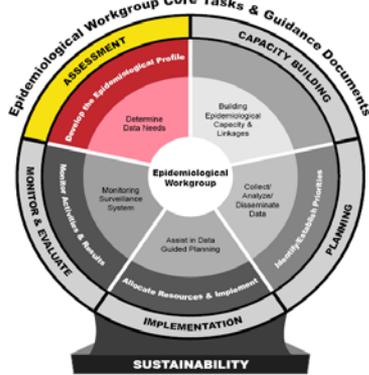


- Start with State-level estimates
- Understand relationship between consumption and consequences
 - First look at consequence data
 - Then look at consumption data
- Focus on lifespan
 - When possible, disaggregate data by broad age groups



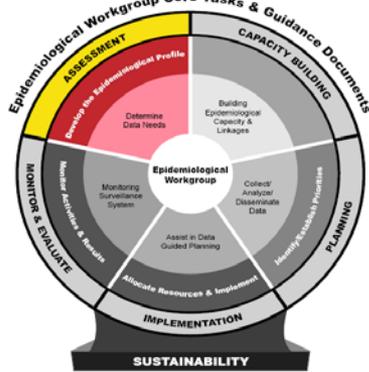
Epidemiological Profile Development Steps (cont.)

- Apply Epidemiological Dimensions
 - Size/Magnitude
 - Trends Over time
 - Relative Comparisons
 - Seriousness/Severity
 - Economic Cost
- Analyze Subgroups
 - Age
 - Gender
 - Race/ethnicity
 - Region/county



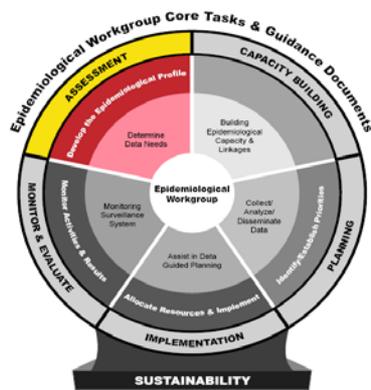
Technical Issues

- Using rates versus absolute numbers
- Working with small numbers
- Identifying meaningful differences
- Adjusting for differences in age structures across populations



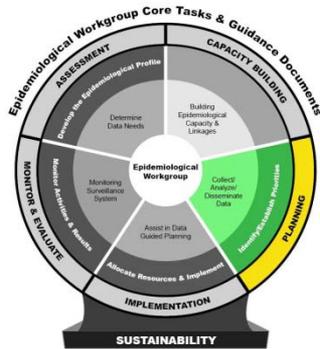
Technical Issues (cont.)

- Complex data systems/creating indices
- Adjusting for differences in attributable factors
- Using response indicators for assessment
- Weighing short- versus long-term consequences
- Data limitations



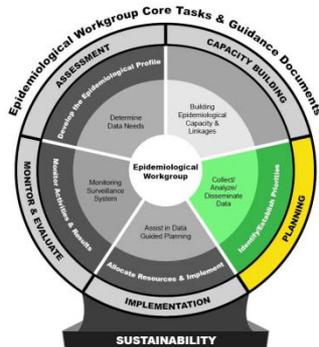
Presenting Epidemiological Data (Epidemiological Profile Outline)

- Table of Contents
- Executive Summary
- Introduction
- Data Selection Processes
- Data Dimensions
- Body of Report (findings)
- Limitations and Data Gaps
- Conclusions
- Appendices



Setting Prevention Priorities

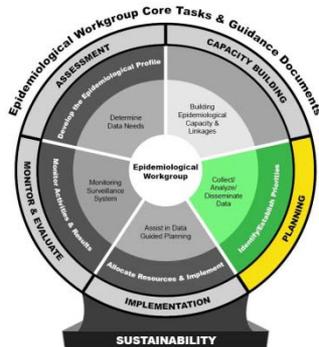
- Laying the groundwork
- Establishing prioritization steps
- Acknowledging other factors/influences
- Considering lessons learned



Laying the Groundwork

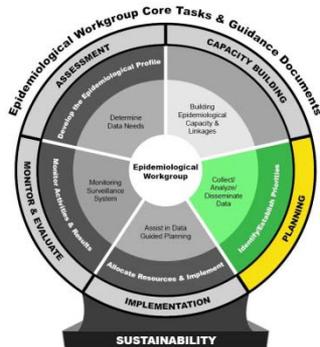
Three Key Questions:

- What criteria will be used to compare/contrast problems?
- What processes will be used to synthesize the data and define priorities?
- Who will be involved in the prioritization process, and what are their roles?



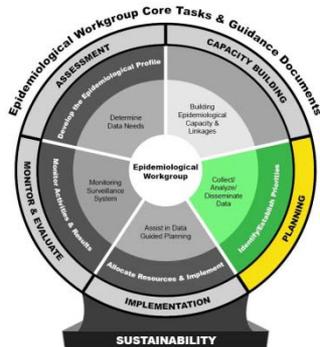
Prioritization Steps

- Determine epidemiological dimensions for prioritization
 - Size/magnitude
 - Time trends
 - Other relative comparisons
 - Seriousness/severity
 - Economic cost/social impact
- Choose process and method
 - Categorical rating
 - Unweighted scoring
 - Weighted scoring
- Organize data to facilitate comparisons



Prioritization Steps (cont.)

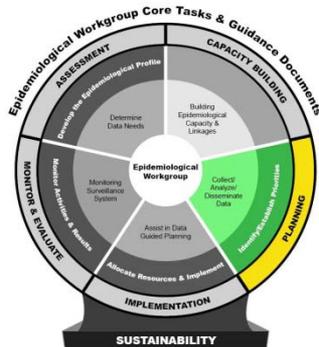
- Apply the priority-setting process to the data
- Interpret and refine results
- Determine priorities based on epidemiological criteria



Other Factors/Influences

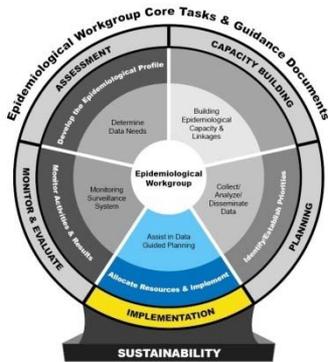
- Capacity/resources
- Preventability/changeability
- Readiness/political will

Remember: Priority setting is perhaps the most delicate of Epi Workgroup functions.



Some Early Lessons Learned

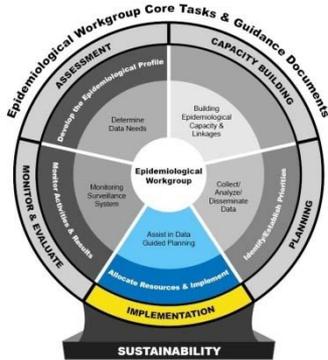
- Establish rules about criteria and processes first
- Be transparent about rules and processes
- Keep things simple
- Acknowledge both the strengths and weaknesses of your data
- Organize data to match prioritization process
- Conduct the process in phases
- Keep the “data people” informed
- Remember that context matters



Allocating Resources

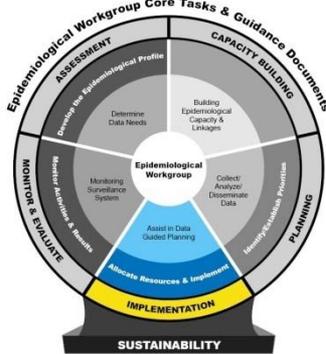
- Planning Models
- Data-Driven Resource Allocation
- Additional Considerations

Planning Models



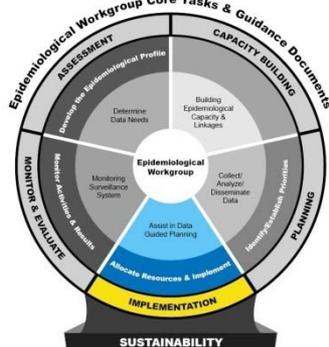
- **Equity**
 - If resources permit all funded at adequate level
 - If consumption or consequence is evenly distributed
- **Highest-Contributor (absolute numbers)**
- **Highest-Rate (highest-need)**
- **Hybrid**
- **Stratified (regional, community)**

Data-Driven Resource Allocation



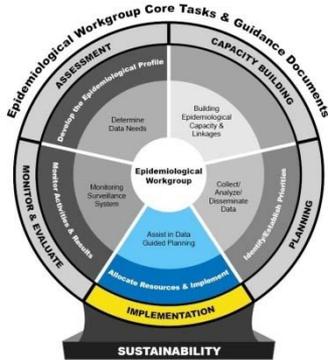
- Select indicator that reflects priority(ies)
 - Unless more than one priority, one indicator often best
- Use caution when developing an index to reconcile two or more indicators

Data-Driven Resource Allocation



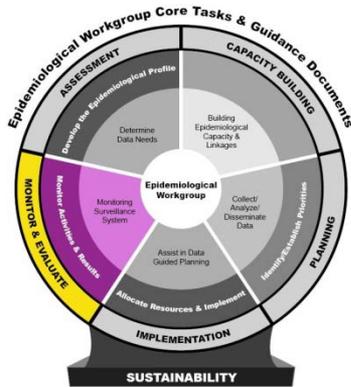
- Absence of indicator data?
 - Proxy indicator
 - Sub-State estimates of State-level indicator data
 - Aggregating data over several years
 - Synthetic indicators

Additional Considerations

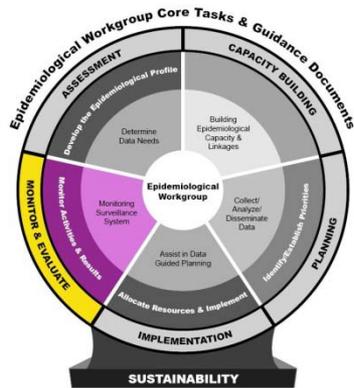


- Capacity
- Resources
- Readiness
- Demographic disproportions

Monitoring Systems

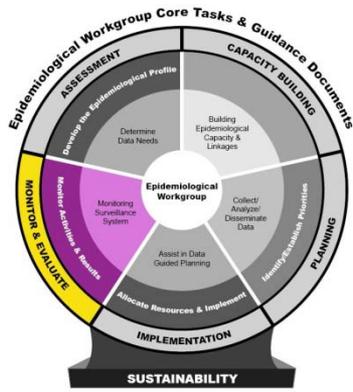


- Purpose
- Building on Epi Workgroups
- Data Management
- Human Capacity
- Communication and Feedback



Monitoring System Purpose

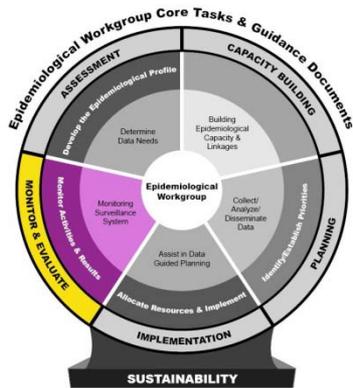
- Track substance use and related consequences over time (i.e., track trends)
- Systematic and ongoing collection, analysis and interpretation of epidemiological data:
 - *What do substance use and related consequences look like in the State?”*
 - *What should current prevention priorities be determined?*
 - *How effective are State prevention efforts in addressing prevention priorities?*



Building on Epidemiological Workgroups

Workgroups took the first step – identifying sentinel data indicators

- Monitoring systems require:
 - Updating indicators
 - Regularly reviewing/analyzing indicators
 - Organizing and presenting data and findings
 - Improving or identifying additional data sources and indicators
 - Tracking indicators to assess progress over time and identify new or emerging issues



Data Management

- Consistent data recordkeeping
 - Receipt
 - Processing
 - Filing
- Orderly consolidation
 - Nomenclature
 - Storage
 - Security
- Regular analysis and reporting
 - Standard formats
 - Quality control
 - Dissemination plans

Human Capacity



Program Manager

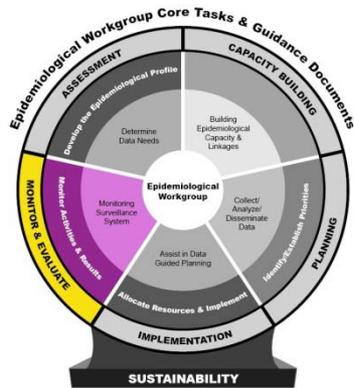
- Negotiates agreements to acquire data
- Secures what is needed to store and secure data
- Conveys reports and information

- **Data Manager**

- Receives, checks, stores, and consolidates data
- Prepares reports

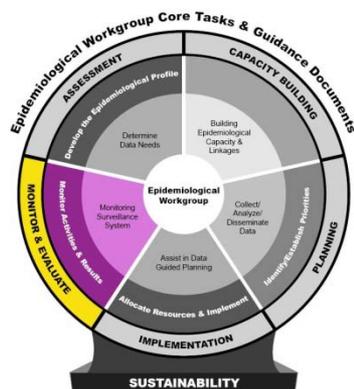
- **Epidemiologist**

- Identifies appropriate data sources
- Determines analysis approaches and interprets results
- Designs reports



Human Capacity (cont.)

- Workforce development
 - Provides training to strengthen non-epidemiological professionals' ability to understand and use epidemiological data
 - Enables better communication between data collectors, analysts, and users
- Other skills
 - Message design and communications specialist
 - Interagency and interdisciplinary convener



Communication and Feedback

- Are data products informative, useful, and accessibly written?
 - Policy makers, key decision makers, prevention professionals, and other data users
- Can data be improved?
 - Epidemiologists and data providers
- Is data provided according to a schedule, and is it complete and “readable”?
 - Data managers and data providers



Sustainability

- Organizational institutionalization
- Programmatic institutionalization
- Financial sustainability

Organizational Institutionalization



- Expansion of Epi Workgroup role to strengthen position within substance abuse prevention “infrastructure”
- Realignment of Epi Workgroup to better position it within State system, including beyond substance abuse prevention system
- Restructuring to ensure capacity and relevance

Programmatic Institutionalization



- Clarifying, promoting, and integrating the “value-added” benefit of data products into the work of the individuals and organizations that use them
- Securing champions of the Epi Workgroup from among data users, particularly senior State leaders



Financial Sustainability

- Capitalize on the Epi Workgroup’s “value-added” assets
- Market the “value-added” aspect to attract and leverage additional resources
- Consider and pursue data-related funding opportunities outside of substance abuse field but related to substance abuse (consequences)



Epidemiological Workgroups: Challenges, Guidance, and Benefits

- Challenges and Guidance by Task
- Value and Benefits



Task A: Develop a structure for data-driven decision making

Challenges

- In-house capacity for data tasks
- Integrating contractor work
- Connections with prevention system

Guidance

- Staff the Workgroup with at least one FTE with data expertise (management or epidemiology)
- Secure data experts through partnerships
- Use Epi experts to teach/train
- Link Workgroup members to decision makers and outside contractors through membership or formal associations/agreements
- Include representatives from high-risk counties and groups as Workgroup members



Task A: Develop a structure for data-driven decision making (cont.)

- Workgroup meeting attendance in light of schedules and budget restrictions
- Leadership and structural transitions
- Hold quarterly meetings
- Make use of technology to optimize communication (e.g., listservs, teleconferencing)
- Clearly define goals, member roles, and deliverables



Task B: Determine Data Needs

Challenges

- Establishing criteria for data selection
- Having sufficient lead time to obtain useful data
- Not having sufficient data for what are perceived to be serious problems
- Few reliable local data sources
- Stalling out over data limitations

Guidance

- Consider all possible data sets and indicators before collection
- Create decision rules for data inclusion
- Develop rating metrics
- Concentrate on uniform, available data
- Develop collection and analysis plans
- Clarify data limitations and values
- Create matrices of indicators and update schedules
- Make efficient data analyses presentations



Task C: Collect and Analyze Data

Challenges

- Time required to acquire archival data
- Data volume
- Data limitations
- Data skill limitations
- Epi Profiles unconnected to prevention systems

Guidance

- Include Epi Workgroup members with data access and data skills
- Aggregate multiple years of data where necessary to enable more precise rate reporting
- Divide consequence indicators into domains
- Create flow charts of data-collection decisions
- Present data in a variety of formats to make accessible



Task D: Assist with Priority Setting*

*Not applicable to all Epi Workgroups

Challenges

- Limited consideration of data before priority selection
- Lack of plan and process clarity
- Epi Workgroups seen as having insufficient policy expertise

Guidance

- Clearly define criteria for priority selection
- Ensure transparency about criteria used and their application
- Break down data into categories:
 - Consumption
 - Direct consequences
 - Indirect consequences
- Organize Epi Profile by dimensions
- Anticipate contextual factors
- Present clear, concise statements to support decision making
- Choose one or two priorities



Task E: Assist With Community Data

Challenges

- Resources and TA incomplete
- Limited TA systems within States
- Limited/absent State guidance

Guidance

- Clearly define priorities
- Create county fact sheets
- Prepare proxy indicator reports to support needs assessment
- Provide orientation and training



Task F: Develop Monitoring System

Challenges

- Lack of agreement on Epi Workgroup's role
- Lack of familiarity with components and requirements
- Lack of definition of tasks and milestones

Guidance

- Demonstrate and communicate Epi Workgroup performance and value-added benefits
- Invest in sound data-management practices, workforce development, and staffing
- Facilitate regular communication among data providers, analysts, and users.
- Focus on updates of past deliverables and on addressing data gaps.



Value and Benefits

- New and/or improved collaboration on data-related activities
- New and/or improved access to data
- Enhanced capacity to use data in prevention planning
- Increased use of data in decision making
- Increased appreciation or support from State leadership

APPENDIX A

Online Resources

This Toolkit can be accessed online at [://captus.samhsa.gov/home.cfm](https://captus.samhsa.gov/home.cfm).

Several additional documents related to the Epi Workgroup tasks and deliverables discussed in this toolkit can also be accessed on this site. These additional documents include:

- Epi Workgroup State-by-State Report,
- Sample State Epi Profile,
- Sample Community Epi Profile,
- Sample State Epi Data Gap Plan, and
- Sample State Epi Data Dissemination Plan

APPENDIX B

Contributions

Significant contributions were made to this document by the following individuals:

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