I. PURPOSE OF THE LEOW

In an effort to encourage states to pursue more data-driven decision making with regard to substance abuse prevention funding, the Center for Substance Abuse Prevention (CSAP) required states launched the State Prevention Framework State Incentive Grant (SPF SIG) Program. As part of the SPF-SIG initiative, states are required to establish a State Epidemiology and Outcomes Workgroup (SEOW) to gather and analyze data on the substance abuse prevention needs and to share their findings with the Governor’s Advisory Council (GAC) so they can target SPF SIG funding to communities with the highest needs. As the SEOW continues to monitor what is happening within the State with regard to substance abuse, we will continue to share our findings with State agencies to help inform substance prevention policy.

Because of the dynamic nature of alcohol and drug abuse and because state and nationally available data are limited, Indiana SPF SIG grantee communities are expected to establish and support a Local Epidemiology and Outcomes Workgroup (LEOW). The primary purpose of the LEOW is to thoroughly examine epidemiological and other types of data to understand the patterns of consumption and consequences associated with the targeted substance as well as the risk and protective driving the local patterns observed. As members of your community, you are the real experts on what is happening, and it is simply not possible for the SEOW or any state agency to fully appreciate the situation your local community faces without your help. In requesting that communities create LEOWs as part of the SPF SIG process, CSAP and the State are asking communities to create a data-driven process to better understand and monitor what is happening in their local community with regard to the high priority substance. The LOEW will share its findings on a regular basis with the Local Advisory Council (LAC), and the LAC will use these data as the basis for formulating the local community’s comprehensive strategic plan. While the initial focus should be on the priority substance for which your community was funded, we expect that individual communities will see how data can improve decision-making and planning and expand the scope of the LEOWs’ work to include the full range of substance abuse related-problems. The long-term goal for the State is to develop a network of LEOWs that work collaboratively with the SEOW to facilitate better decision-making at both the local and state-levels with regard to substance abuse prevention.

II. ORGANIZING THE LEOW

Because the SPF-SIG is intended to be a community and data-driven process, it is anticipated that the LOEWs from the funded communities will vary both in terms of membership and how they operate. Nevertheless, given the primary purpose, we believe there are some general expectations and guidelines that the communities should consider in establishing and implementing the LEOW.

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LEOW Chair. Each community is required to appoint an LEOW Chair. This person should have scientific training and experience in analyzing epidemiological and/or other types of quantitative data. In many communities, this person will be an unpaid, SPF SIG staff member. This person will work closely with the local SPF SIG staff and shoulder important responsibilities, including chairing the LEOW meetings and monitoring the quality of the SPF SIG staff’s data analysis work. The LEOW chair may also be asked to periodically act as a liaison to the SEOW in Indianapolis. If you are having difficulty identifying an LEOW Chair, you might contact local colleges and universities (including faculty and graduate students), county or city health departments, evaluation research companies, or health care provider organizations. These types of organizations often employ individuals who have training in data analysis.

LEOW Members. There are no general requirements with regard to the size or composition of the LEOW; however, it has been the experience of the SEOW that members should be drawn from local agencies and organizations involved in substance abuse prevention that have data that can be used to understand what is happening locally. In most counties, there are a number of natural repositories for information about the patterns of use and negative consequences of alcohol/drug abuse including (but not limited to): law enforcement agencies, hospitals and health care facilities, public health agencies, local coordinating councils (LCCs), community consultants, school districts, and, of course, substance abuse prevention programs. Ideally, the LEOW should include representatives from all of the local agencies where data about the use or negative consequences of the targeted substance are maintained. Each community will also have a Youth and Young Adult Council, which will be involved in researching the local situation, so local communities may wish to identify youth and/or young adults to also serve on the LEOW. Finally, LEOWs also may wish to access other sources of local and state data through the SEOW and/or the Indiana Prevention Resource Center (IPRC). Conceptually, LEOW members will serve as liaisons to the SPF SIG process and facilitate the sharing of data, so that the LEOW can develop the most comprehensive, shared understanding possible of what is going on in a community.

LEOW Support Staff. For most funded communities, the LEOW support staff will be the primary paid SPF SIG staff supported by the grant. Consequently, these individuals will bear the primary responsibility for collecting and analyzing data for the LEOW and preparing the LEOW’s formal written report for the LAC and State, as required by the SPF SIG program. This will be helpful for the SPF SIG staff, as the conclusions regarding needs and the most important prevention target areas/populations that will be included in the Local Strategic Plan (LSP) must be clearly grounded in the LEOW’s analysis.

III. LEOW WORK PLAN

Each LEOW should begin by developing a work plan that identifies the sources of data to be analyzed and outlines a general framework to guide the analysis and interpretation of those data. Because the primary purpose of the LEOW is to develop a thorough, data-based understanding of what is happening within the local community with regard to the substance priority that they were funded to address, there can be no single set of recommendations that applies to all LEOWs. It is up to each community to develop a plan that works for them. The process the LEOWs will go through, however, will likely be similar to what the SEOW went through in identifying the high need communities. The primary difference is that the LEOWs will need to examine in greater depth the risk and protective factors that are driving the high rates of use and negative consequences associated with the priority for which they were funded. Below, I outline a general framework that LEOWs may wish to consider as they develop their work plan.
The steps draw on those the SEOW went through and includes some specific strategies that the LEOWs might wish to build into their individual work plan.

**Step 1: Identify potential data sources.** Because many groups are involved in addressing substance abuse, there are many potential sources of data that LEOWs that might be used, including existing sources as well as ideas for collecting new data. Consequently, the first challenge that LEOWs will need to confront is trying to select most appropriate sources of data. The SEOW began by making a list of all the possible data sources available from the federal government and state agencies, and I would recommend that LEOW's begin their investigation by constructing such a list (copies of the SEOW's list of data sources are available in the State Epidemiological Profile, upon request, and online at [www.healthpolicy.iupui.edu/SEOW](http://www.healthpolicy.iupui.edu/SEOW)). Once you have your list, the LEOW should discuss the strengths and weaknesses of each data source. Remember, not all data are equal, and there is no such thing as the “perfect” data source. In most cases, you will want to identify a set of data sources so you can examine patterns across different sources. Some things to consider in evaluating each data source are:

- What is the nature and extent of the data available from the source? What data elements are included? Are the data simply descriptive (e.g., lists of individuals arrested) or do they include additional information that might permit the identification of subgroups (e.g., age, race, gender, social class, residential location) or the “reasons” behind individuals substance abuse behavior (e.g., attitudes, beliefs, knowledge)?
- How recent are the data and are data available for several time periods (e.g., months, years)?
- How reliably are the data collected? That is, are the data collected the same way every time and likely to yield “consistent” results because of the data were collected in the same manner every time?
- How valid are the data? Do the data accurate reflect what is going on? Are the data collected in such a way that might create systematic “biases”? Are particular stakeholders more likely to be concerned about one type of data over another?

Because all data sources have strengths and weaknesses, scientists and public policy makers generally have greater confidence in the accuracy of conclusions when they are drawn from multiple data sources (e.g., use of alcohol is consistently highest among 18-21 years in data on treatment admissions, arrests for public intoxication, and alcohol-related fatal automobile accidents). Indeed, social scientists often try to “triangulate” or compare the patterns observed across several different data sources in order to evaluate the strength or “robustness” of a particular patterns. Thus, LEOWs are strongly encouraged to examine as many different types of data available as possible.

**Step 2: Determine the groups, locations, and/or situations where the use and/or negative consequences associated with the targeted substance are most severe.** Once you have access to your data, you should begin to examine the patterns of use and/or negative consequences associated with the substance your community was funded to address. As noted above, your community was identified as having significantly greater problem than other Indiana counties, but this observation may not be true of all individuals in the target population identified by the SEOW. Therefore, it is probably best to try and identify key sub-populations that are at particularly high risk. You may also wish to examine data regarding other substances, particularly substances that are often used together (e.g., alcohol and marijuana, cocaine, or meth). Indeed, the SEOW noted that co-morbid use of substances is actually somewhat more likely to occur in Indiana than in the nation as a whole.
A critical question you will need to answer is “high, compared to what?” Most social science is comparative. Indeed, the SEOW opted to use the national rates of various use and negative consequences measures as a “comparison point.” Local LEOWs could, for example, identify sub-groups that have especially high risk relative to the county rates or numbers overall. Alternatively, you might compare different subpopulations within your community to identify those that have the highest rates (e.g., white men versus African American men). Finally, you may also want to examine overtime trends within a single population or set of populations to highlight groups where a problem seems to be expanding dramatically.

The list of sub-populations is extensive. You will find, however, that different data sources often contain different kinds of information which limit your ability to look at some sub-populations. To thoroughly understanding what is going on in your community, you may need to compile several data sources to explore the patterns of consumption and negative consequences across different groups.

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<th>Key Analysis Question</th>
<th>Some Characteristics to Examine</th>
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| Who are exhibiting the most significant negative consequences? | • Demographic characteristics (e.g., age, race/ethnicity, gender, socio-economic status, income, education, sexual orientation)  
• Known high risk sub-populations groups (e.g., commercial sex workers, foster youth, individuals within the criminal justice system) |

**Step 3: Identify the “intervening,” “causal,” or “risk and protective” factors that are driving the patterns you identify.** Once you have a sense of what group(s) you think you should target, you will need to dig deeper and try to understand the factors driving these behaviors. To the extent possible with the data you have, you may be able to explore some of the potential intervening or causal factors driving these behaviors. Fortunately, there is a research literature that can help focus your analysis. Indeed, there are numerous studies that have outlined characteristics that are often associated with risk behavior (i.e., risk factors) as well as characteristics that tend to discourage risk behavior (i.e., protective factors). Your challenge will be to determine which risk and protective factors are operating in your target population. Keep in mind, there are probably multiple risk and protective factors influencing a particular group’s behavior, so your goal should be to identify as many forces as possible, as these will represent the most important “targets” for your strategic planning process. In the table below, we provide some questions to think about as you plan your analysis.

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| When, where, and under what conditions are these groups using/abusing or abusing the substance? | • When and where do these groups use/abuse the substance? Are their particular times of day (e.g., after school) or locations (e.g., a particular street or neighborhood) where they engage in these behaviors?  
• Are there particular situations when these engage in the behaviors (e.g., at parties, when parents away)?  
• What individual (e.g., attitudes, knowledge), familial (e.g., family involvement, regulation), social (e.g., peer or community norms), and environmental variables (e.g., exposure to alcohol or tobacco advertising, availability of alcohol) are encouraging or discouraging these groups to engage in problem behavior? |
Unfortunately, many of the readily available data do not provide a wealth of information about risk and protective factors that you can use to understand what is really happening in your community. In these situations, you may wish to conduct your own study or studies of your community to fill in these gaps. Given the short timeline and limited resources, your LEOW will need to think about what studies would provide the biggest return on investment with regard to your strategic planning process. There are a number of possibilities, however. You might, for example, conduct a brief survey of individuals you identified in Step 2 above to better understand the risk and protective factors influencing their behavior. You might also opt to do some simple observational studies where you count the number of alcohol related advertisements. You might consider conducting face-to-face interviews or focus groups with members of the high risk groups you identified and ask them about when and where they engage in the behavior as well as what individual, familial, social, and environmental factors are shaping the patterns of use/abuse. Collecting original data will require time and resources, and we encourage your LEOW to work closely with the youth and young adults in your community to get involved. Research has shown that youth can be valuable partners in substance abuse prevention research. Not only do they bring a valuable perspective to the project, involvement in the project also serves to reinforce prevention messages in the youth who participate. Of course, there are important challenges in conducting “youth action research” which you should investigate before you launch such a study.

Regardless, if your LEOW decides they would like to collect original data to support their decision-making, we strongly encourage you to work closely with your technical assistance provider and the SEOW support staff. There are many existing resources, and we can help you not “reinvent the wheel.” Even more important, where possible, we want to encourage communities to work together with the State so that the data that the individual communities collect can be shared with others to improve all of our understanding of the substance use and abuse challenges we face in the state of Indiana.

IV. USING THE FINDINGS FROM THE LEOW

Data-driven decision making requires an accurate and thorough understanding of what is happening. Ultimately, the findings from your LEOW will identify a set of priorities that your LAC will use to develop the required comprehensive strategic plan. Initiatives and programs outlined in your plan should logically follow from the needs identified in your LEOW report. In this regard, your plan is most likely to have a community-level impact when it reflects an in-depth and very detailed understanding of the local situation. Clearly, this is no easy task. The behaviors are complex, and local situations are very dynamic. For this reason, the LEOW’s work will be ongoing, in part, to monitor the impact of the final comprehensive strategic plan but also to monitor emerging challenges and guide community decision-makers to address them. Ultimately, the SPF SIG framework is founded on the idea that data-based decision making and evaluation will improve prevention programming and reduce the burden of substance use and abuse on our communities.