Strategic Planning for Environmental Prevention: 7 Key Components

The process for strategic planning for environmental prevention using a logic model and a management information system involves seven key components. This process is illustrated below. The process allows for incorporating new learning such that the local environmental prevention effort becomes more effective over time. Note that movement through all seven components may result in adjustment in chosen strategies and how they are implemented and even in the selected key intermediate variables and how they are measured. This process uses two main tools – logic model and a management information system (MIS).

**Component 1: Outcome & Measures.** Identifying the specific substance abuse problem (Outcome) which the community wishes to address via the local environmental prevention project and how to measure in order to determine effectiveness.

The identified outcome, for example, “underage drinking” or “alcohol-involved traffic crashes” is selected uniquely by each community. Therefore, this component defines the specific local outcome which is targeted and identifies the specific measure (or measures) to be used as relevant for that community in evaluating effectiveness. In addition to local needs or priorities based upon epidemiological data, the selected outcome may be based on requirements of the state and/or a grant to the community. The outcome may be further specified to focus, for example, on reduction of frequency of underage drinking or high volume of drinking among youth or reduction of alcohol-involved harm such as vehicle crashes and fatalities.
Component 2: Initial Logic Model of Key Intermediate Variables. Utilizing scientific evidence to begin construction of a local logic model composed of key intermediate variables and their measurement that science has shown as important to reducing the specific outcome. Guidance for selecting measurement of each intermediate variable is provided by Creating a Local Prevention Data Storage and Retrieval System.

This component of strategic planning results in an initial Logic Model that relates key intermediate variables known through science to the outcome selected in Component 1. A requirement of this component is intensive use the science guides to incorporate the key intermediate variables chosen based on the identified outcome and science as documented in:

- Scientific Evidence for Developing a Local Logic Model on Alcohol-Related Motor Vehicle Crashes
- Scientific Evidence for Developing a Logic Model on Underage Drinking

Science has shown that changes in the intermediate variables produce changes in the outcome. This component of the process clarifies the differences between the outcome and its measure and the key intermediate variables and their measurement. One or more indicators are selected for measuring changes in each intermediate variable as outlined in the scientific guide entitled:

- Collecting Data in Support of a Local Strategic Plan Using a Logic Model.

Display and documentation of the logic model can be accomplished by utilizing software entitled DoView or a paper version.

Component 3: Logic Model with Evidence-based Strategies. Utilizing scientific evidence to include in the local logic model strategies that have the potential to affect the key intermediate variables and their measurement.

Using the science guides listed above, this component involves review of alternatives and the selection of strategies that have been demonstrated by research to directly impact the key intermediate variables. Again, strategies do not affect the outcome directly, but affect intermediate variables already designated in the Logic Model, which in turn impact the outcome. These strategies are included in the Logic Model. One or more indicators may be chosen to monitor the frequency and strength of each prevention strategy as described in the data collection guide listed above.

Component 4: Management Information System (MIS) and Data Collection Plan. Constructing a Management Information System (MIS) based upon the local Logic Model.
The guide listed above provides direction for designing and organizing the MIS, and for collecting local and archival data required by the local Logic Model. The MIS and the data collection plan are constructed to be ready for actual data entry.

**Component 5: Data Collection and Loading the MIS.** Collecting the required data and loading, maintaining and updating the local MIS.

This is an ongoing process in which a variety of data sources are utilized depending what and where data are available and the resources available to the community to collect data. Alternatives in measuring specific intermediate variables and strategies are shown in the local data collection guide.

**Component 6: Monitoring Measures Using a Dashboard.** Developing and utilizing a Dashboard from the MIS to monitor measures of the outcome, intermediate variables and strategies.

Data from the local MIS is displayed in a dashboard for use by local staff and coalition to determine the strengths and limitations of current environmental work. Time series data analysis can be effectively used to demonstrate the overall effectiveness of a local environmental prevention effort and the contributions of strategies and intermediate variables.

**Component 7: Management of Strategies and Adjusting Logic Model.** Making decisions based on the data to adjust and manage strategies to increase effectiveness of the prevention effort.

This component requires skill in making decisions based on data to modify and manage strategies (type and intensity) as necessary based upon data from MIS and dashboard. Further, modification may be made in the logic model as needed based upon these decisions. This leads back to either or both of components 2 or 3 to continue use of the logic model as a living document and to keep the strategic planning process in active status.