Evidence-Based Prevention

“Evidence-based” programs are prevention methodologies that have been developed and evaluated using scientific processes. Experts use commonly agreed upon criteria for rating interventions, reaching a consensus that evaluation research findings are credible and sustainable. Evidence-based is also referred to as science-based and research-based models.

Principles of Effective Substance Abuse Prevention

Effective interventions share common principles that have been identified through careful evaluation of substance abuse prevention programs. These principles help guide prevention providers in structuring client services that are effective, innovative, and respond to the specialized needs of the community and the target population. Though variations among program developers exist, the development of nearly every program begins with an understanding of factors that place people at risk—or protect them from a behavior. In recent years there has been a focus on risk and protective factors as a unifying description and framework. The criteria used in rating model programs are provided below.

Theory is the degree at which programs reflect clear principles about substance abuse behavior.
Intervention Fidelity is how the program ensures consistent delivery.
Process Evaluation is whether the program implementation was measured.
Strategy/Implementation looks at how well the program selected its participants and how well they received it.
Attrition is whether the program retained participants during evaluation.
Outcome Measures is the relevance and quality of evaluation measures.
Missing Data relates to how developers addressed incomplete measurements.
Data Collection is the manner in which data was gathered.
Analysis examines the appropriateness and technical adequacy of data analyses.
Threats to Validity refers to the degree to which the evaluation considers other explanations for program effects.
Replications are the number of times the program has been used in the field.
Dissemination Capability is whether program materials are ready for implementation.
**Cultural/Age Appropriateness** determines how the program addresses different ethnic-racial and age groups.

**Integrity** is the overall level of confidence of the scientific rigor of the evaluation.

**Utility** looks at the overall pattern of program findings to inform prevention theory and practice.

### Risk Factors

Risk factors include those individual or social factors associated with an increased likelihood of a negative outcome. Risk Factors can be related to biological, behavioral, and social/environmental characteristics. They include characteristics such as family history, depression or residence in neighborhoods where substance abuse is tolerated. Research supports the idea that the more factors that place the child at risk for substance abuse, the more likely it is she or he will experience substance use.

### Protective Factors and Resilience

Protective factors appear to balance and buffer the negative impact of existing risk factors. Protective factors, such as solid family bonds and the capacity to succeed in school, help safeguard youth from substance abuse. In other words, building up a child’s protective factors may decrease their likelihood of substance use, even if risk factors are present. Conversely, decreasing a child’s risk factors can substantially lower their likelihood of future substance abuse.

### Domains

Risk and protective factors exist in every level at which an individual interacts with others and the society around him or her. The individual brings a set of qualities to each interaction that serve as a filter. One way to organize these factors is by six life or activity domains in which they occur. Researches have created specific subcategories of risk within each domain. They include:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Subcategory of Risk</th>
</tr>
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<tbody>
<tr>
<td>Individual</td>
<td>biological and psychological dispositions, attitudes, values, knowledge, skills, problem behaviors</td>
</tr>
<tr>
<td>Peer</td>
<td>norms, activities, bonding</td>
</tr>
<tr>
<td>Family</td>
<td>function, management bonding</td>
</tr>
<tr>
<td>School</td>
<td>bonding, climate, policy, performance</td>
</tr>
<tr>
<td>Community</td>
<td>norms, bonding, resources, awareness/mobilization</td>
</tr>
<tr>
<td>Society/Environment</td>
<td>norms, policy/sanctions</td>
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</table>
Six Effective Prevention Strategies (CSAP)

Great strides have been made in identifying effective programs, strategies, and principles that focus on preventing and reducing substance abuse and related risky behaviors. Using multiple strategies in multiple settings and working toward a few common goals offers the best chance to prevent young people from using alcohol, tobacco, and other drugs. There are seven key strategies, supported by research, that show they can be effective in reducing substance abuse. The following are the identified key principals for effective substance abuse prevention:

**Information Dissemination**
Communications can be broadly defined as attempts to inform, persuade or motivate behavior changes in a relatively well-defined and large audience. This is done by one-way communication from the source to the audience, with limited contact between the two.

**Education**
This strategy involves two-way communication and is distinguished from the information dissemination strategy by the interaction between the educator and the participants. Activities aim to affect critical life and social skills, including decision-making, refusal skills, critical analysis and systematic judgment abilities.

**Alternatives**
Provides for the participation of the target populations in activities that exclude substance use. Activities that are designed to provide healthy, positive, pro-social diversions for young people to steer them from alcohol and other drugs—can complement other strategies by occupying young people’s time during the non-school hours.

**Problem Identification and Referral**
This strategy aims at identification of those who have indulged in illegal/age-inappropriate use of tobacco or alcohol and those who have indulged in the first use of illicit drugs.

**Community-Based Process**
Aims to enhance the ability of the community to more effectively provide prevention and treatment services for substance abuse by involving multiple community sectors. Activities include organizing, planning, implementing, interagency collaboration, coalition building, and networking.

**Environmental**
Written or unwritten changes in community standards, codes, and attitudes, may influence incidence and prevalence of substance abuse in
the general population. This strategy is divided into two subcategories to permit distinction between activities that center on legal and regulatory and those that relate to service initiatives.

Selecting a Best Practice Program

Programs based on a set of strategies proven effective through rigorous evaluation will produce positive results by reducing risk factors, increasing protective factors and reducing substance abuse. Finding the best program for your community includes completing a thorough needs assessment, analyzing the data and selecting goals and objectives. The following set of questions may be helpful in selecting a program that appropriately fits the needs of your community.

- Does the program address the drug we found to be the greatest problem?
- Has the program been tested with the target population we have chosen?
- Does it address the domains that our needs assessment has identified as a priority?
- Do the program’s costs fit within our budget?
- Does the program address the risk and protective factors that our needs assessment has identified as a priority?
- Would our community be comfortable with the specified intervention components?
- Does the program include environmental approaches or will we have to select additional strategies that will blend well with this program?

A two-dimensional method, incorporating individual and environmental approaches, should be used when selecting a program to help maximize outcomes. Health is seen as a social issue, in addition to being an individual choice. Prevention approaches are directed at changing public policies to create environments that decrease the probability of substance abuse.

**Two-Dimensional Method to Intervention illustrated:**

<table>
<thead>
<tr>
<th>Individual</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach defines individual problems that place a person at risk.</td>
<td>Approach defines problem at the policy level.</td>
</tr>
<tr>
<td>Substance abuse is seen as personal choice.</td>
<td>Substance abuse is seen as both an individual and a systems issue.</td>
</tr>
<tr>
<td>Approach consists of short-term programs.</td>
<td>Approach involves long-term policy changes.</td>
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<tr>
<td>Programs are used to change individual behavior.</td>
<td>Strategies are used to influence changes in policies.</td>
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**Conclusion**

Communities that seriously consider prevention programs based on a set of strategies proven effective through rigorous evaluation chose the best program for their community. Utilizing a two-dimensional approach can expect to experience increasing protective factors while reducing risk factors and substance abuse.