

***Prevention and What Works:
9 Principles of Prevention
And the Socio-Ecological Model***

Primary Prevention

Any action, strategy or policy that prevents the problem behavior from *initially occurring*.*

*Definitions from Center for Disease Control

Who's the Focus?



Indicated

Aims to identify individuals who exhibit early signs of problem behaviors.

Selected

Focuses on groups whose risk of developing problems is above average distinguished by characteristics such as age, gender, family history, or economic status.

Universal

Addresses the entire population (national, local community, district) regardless of individual risk.

Presentation Based on:

Work done and article written by:

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of Effective Prevention Programs. *American Psychologist*, 58, 449-456.

Principles of Effective Prevention Programs

- Review of Reviews Approach
- Limited reviews to four prevention content areas: substance abuse, risky sexual behavior, school failure, juvenile delinquency and violence
- Reviewed 35 reviews of universal and selective prevention programs
- Reviewed articles to identify characteristics of successful programs – 252 characteristics

Nine Principles of Effective Prevention Programs

- **Comprehensive** 80%
- **Varied Teaching Methods** 69%
- **Sufficient Dosage** 57%
- **Theory Driven** 49%
- **Positive Relationships** 34%
- **Appropriately Timed** 66%
- **Socio-Culturally Relevant** 54%
- **Outcome Evaluation** 40%
- **Well-Trained Staff** 31%

Comprehensive

- **Definition:** Strategies should include multiple components and affect multiple settings to address a wide range of risk and protective factors of the target problem.
 - Multiple types of interventions
 - Address risk and protective factors at multiple socio-ecological levels

Primary Prevention: What's the Focus

SOCIETAL

Multi-partner collaborations to change laws & social norms that support teen dating violence.

COMMUNITY/ ORGANIZATION

Environmental influences designed to impact the climate, systems, and policies.

RELATIONSHIP

Interpersonal influences: peers, intimate partners, and family members.

INDIVIDUAL

Individual influences: biology, temperament, attitudes and beliefs; exposure to violence.

Risk and Protective Factors

- **Risk Factors** – associated with a greater likelihood of developing problem behavior. They are contributing factors – may or may not be direct causes. Not everyone who is identified as "at risk" develops behavior.*
- **Protective Factors** – may lessen the likelihood of problem behavior by buffering against risk: can exist at individual, relational, community, and societal levels.*

Sexual Violence Risk Factors

INDIVIDUAL

- Alcohol & drug use
- Coercive sexual fantasies
- Impulsive and antisocial tendencies
- Preference for impersonal sex
- Hostility towards women
- Hypermasculinity
- Childhood history of sexual and physical abuse
- Witnessed family violence as a child

RELATIONSHIP

- Association with sexually aggressive and delinquent peers
- Family environment characterized by physical violence and few resources
- Emotionally unsupportive familial environment

COMMUNITY

- Lack of employment opportunities
- Lack of institutional support from police and judicial system
- General tolerance of sexual violence within the community
- Weak community sanctions against sexual violence perpetrators

SOCIETAL

- Poverty
- Societal norms that support sexual violence
- Societal norms that support male superiority and sexual entitlement
- Societal norms that maintain women's inferiority and sexual submissiveness
- Weak laws and policies related to gender equity
- High tolerance for levels of crime and other forms of violence

Varied Teaching Methods

- **Definition:** Strategies should include multiple teaching methods, including some type of active, skills-based component.
 - Interactive Instruction
 - Practice skill development

Sufficient Dosage

- **Definition:** Participants need to be exposed to enough of the activity for it to have an effect.
 - More versus less contact
 - The greater the needs the greater the dosage or intensity contact
 - Booster/Follow-up Sessions

Theory Driven

- **Definition:** Preventive strategies should have a scientific justification or logical rationale.
 - Developed around the causes of the behavior
 - Developed based on evidenced based or informed that strategy will impact behavior

Positive Relationships

- **Definition:** Programs should foster strong, stable, positive relationships between peers and adults.
 - At least one adult invested in well being of youth

Appropriately Timed

- **Definition:** Program activities should happen at a time (developmentally) that can have maximal impact in a participant's life.
 - Before problem behaviors develop
 - Developmentally appropriate

Socio-culturally Relevant

- **Definition:** Programs should be tailored to fit within cultural beliefs and practices of specific groups as well as local community norms.
 - More than just translating to another language
 - Acknowledge the social norms and cultural/religious beliefs and practices
 - Include participants in planning and implementation

Outcome Evaluation

- **Definition:** A systematic outcome evaluation is necessary to determine whether a program or strategy worked.
 - Ongoing assessment/feedback

Well-Trained Staff

- **Definition:** Programs need to be implemented by staff members who are sensitive, competent, and have received sufficient training, support, and supervision.
 - Duration depends on content
 - Practice implementing program
 - Booster or Follow-up helpful
 - Low staff turnover

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**Applying the Principles of Prevention:
What Do Prevention Practitioners
Need to Know About What Works?**

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5/12/05

Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of Effective Prevention Programs. American Psychologist, 58, 449-456.

Prepared for the Centers for Disease Control and Prevention, Division of Violence Prevention

Principles of Effective Prevention Programs

Comprehensive Services

Definition: Strategies should include multiple components and affect multiple settings to address a wide range of risk and protective factors of the target problem.

Important Points:

- Effective programs address multiple areas of a person's life such as health, education, social connections, and social conditions by providing services in a variety of relevant settings.
- Effective programs offer a wide variety of activities to address the target problem, which usually has multiple risk factors. These activities may include several components such as curriculum-based interventions, media campaigns, systems change, and environmental strategies that can affect economic-social conditions.

Action Checklist:

- Does the program include multiple components?
- Does the program provide activities in more than one setting?
- Do the activities happen in settings related to the risk and protective factors associated with the problem?

Mentoring Example:

Research on mentoring indicates that community-based programs tend to be more effective than school-based ones (DuBois et al., 2002). With school-based programs, it may be necessary to include community resources from outside the school as well.

Some studies have found that mentoring for populations with a lot of needs (e.g. children who have been abused or are involved in the juvenile justice system) may be most effective when combined with other resources, such as community service and life-skills training.

When mentoring is included as part of a multi-component intervention, it is most effective when the mentoring is integrated with the other program components

Principles of Effective Prevention Programs

(e.g., mentors serve as coaches who help youth put into practice skills learned in a life-skills training curriculum) (Kuperminc et al).

Principles of Effective Prevention Programs

Varied Teaching Methods

Definition: Strategies should include multiple teaching methods, including some type of active, skills-based component.

Important Points:

- Effective programs focus on the development of skills that enable the participants to avoid problem behaviors. Skills that have been associated with effective prevention include helping participants develop their cognitive (thinking) skills, their ability to communicate assertively, and the ability to negotiate resisting the problem behavior.
- Effective programs provide hands-on experiences for participants. Rather than only depending on sharing information and discussion, effective programs facilitate activities (e.g., role plays, verbal and written practice) that allowed participants to develop and practice their new skills.

Action Checklist:

- Does the program include more than one teaching method?
- Does the strategy include interactive instruction, such as role-play and other techniques for practicing new behaviors?
- Does the strategy provide hands on learning experiences, rather than just presenting information or other forms of passive instruction?

Mentoring Example:

Two main approaches to mentoring have been identified:

- *The developmental approach, where the relationship is youth-led, relatively unstructured and the mentor is viewed primarily as a social asset.*
- *A more goal-directed approach, where the relationship tends to be more mentor-led and structured, and there is typically a goal such as increasing academic achievement or teaching the youth specific skills.*

A number of authors have suggested that a balance between these two types of mentoring is possible (Keller, Sipes) and may even be more beneficial (Larson).

Principles of Effective Prevention Programs

Sufficient Dosage

Definition: Participants need to be exposed to enough of the activity for it to have an effect.

Important Points:

- Dosage can be measured by the number of contact hours, including the number of sessions, and the length of the each session. Effective programs on average provide more contact with participants than ineffective programs.
- The amount of dosage needed to produce positive outcomes is contingent on the participant's level of risk and the amount deficits. The greater the risk factors of the participants, the greater the dosage necessary.
- Effective prevention programs provide some type of follow-up or booster sessions to help sustain the effects of the original intervention. The effects of most strategies diminish over time. Booster sessions support the continued use of information and skills learned in the original activity.
- Research has consistently shown that programs that emphasize a one-time presentation focused on raising awareness rarely produce behavioral change.

Action Checklist:

- Does the strategy provide more than one session?
- Does the strategy provide sessions long enough to present the program content?
- Does the intensity of the activity match the level of risk/deficits of the participants?
- Does the strategy include a schedule for follow up or booster sessions?

Mentoring Example:

Sufficient dosage appears to be important for mentoring programs to achieve results. Research on mentoring has shown that relationships that last for a year or longer are most beneficial, while those that are brief may have had negative effects on the youth that participated in them (Grossman & Rhodes, 2002). Also, the amount of time that mentors spend with the youth they work with matters. A set number of meetings has not been identified, but, regular contact (at least every couple of weeks) is recommended. Youth who are particularly vulnerable (e.g., youth who have been abused) are likely to need an intervention with more intensity (Grossman & Rhodes, 2002). Some intensive interventions have been developed for these populations (Britner & Kramer-Rickacby, 2005; Blinn-Pike, 2005).

Principles of Effective Prevention Programs

Theory Driven

Definition: Preventive strategies should have a scientific justification or logical rationale.

Important Points:

- Effective prevention programs are able to describe a theory about how problem behaviors develop. This theory is often used as a basis for developing an approach to intervention that addresses the problem before it develops.
- Effective prevention programs are also able to describe a theory of how or why the strategy is likely to change behavior. By describing a theory, the strategy model can be refined to maximize its chances of producing positive outcomes. A logic model is a theory of action.
- Effective prevention strategies use reverse engineering to prevent behavior problems and promote positive behaviors. They start with the goal or outcome in mind (after identifying the problem or need), and work backwards to develop a strategy that will produce the desired outcome.

Action Checklist:

- Does the program provide (or can you identify) a theory of how the problem behaviors develop?
- Does the program articulate a theory of how and why the intervention is likely to produce change?
- Bring your model of the problem and model of the solution together to develop a logic model.
- Based on the model of the problem and the model of the solution, do you believe that the program is likely that the program will produce change?

Mentoring Example:

In a meta-analysis that examined what factors contributed to the success of mentoring programs across different programs, DuBois et al. (2002) found that programs that utilized greater numbers of theory-based best practices yielded more favorable results.

Principles of Effective Prevention Programs

Positive Relationships

Definition: Programs should foster strong, stable, positive relationships between children and adults.

Important Points:

- Effective programs support the development of positive parent–child relationships. Strategies can be parent-focused interventions such as training in parenting skills, or facilitate communication between parent and child.
- In the absence of good parent-child relationship, effective programs provide an opportunity for youths to establish a strong relationship with at least one adult role model, who is invested in their well-being.
- Programs that provide an adult mentor (e.g., Big Brother/Big Sister) appear to be effective in providing children with an important, positive relationship, and in preventing poor outcomes.
- Effective prevention programs are careful not to depend too heavily on adult relationships that are focused on case management or therapy. For some problem behaviors, these types of professional relationships do not replace the need for positive connections with other adults.

Action Checklist:

- Does the program provide opportunities for parents and children to strengthen their relationship?
- For situations where parents are not available (or in addition to parents) or relevant, does the strategy offer opportunities for a participant to develop a strong connection with an adult mentor?
- Does the strategy provide opportunities for the participant to establish close relationships with people other than professional service providers?

Mentoring Example:

Positive relationships (characterized by mutuality, trust, and empathy) are seen as the primary way that mentoring leads to improved outcomes for youth who are mentored (Rhodes, 2005). Emotional closeness in relationships between mentors and youth is a stronger and more direct predictor of the perceived benefits and longevity of mentoring relationships than the frequency of contact between mentors and youth (Parra et al. 2002).

Principles of Effective Prevention Programs

Appropriately Timed

Definition: Program activities should happen at a time (developmentally) that can have maximal impact in a participant's life.

Important Points:

- Effective prevention programs focus on the risk factors and/or risk behaviors before they develop, rather than waiting for the problem behavior to develop before intervening.
- Effective programs are tailored to the intellectual, cognitive, and social development level of the participants. For example, effective teen pregnancy prevention interventions for middle school-aged students contain a different content than those for high school-aged students.

Action Checklist:

- Does the strategy happen before participants develop the problem behavior?
- Is the strategy timed strategically to have an impact during important developmental milestones related to the problem behavior?
- Does the activity content seem developmentally (intellectually, cognitively) appropriate for the target population?

Mentoring Example:

Most research on mentoring is focused on adolescents. Darling (2005) points out that this timing is developmentally appropriate, because adolescence is a period when youth are exposed to a variety of new risks, relationships with parents and peers are shifting, there are greater periods of unsupervised time, and youth may enter a workplace for the first time. While less research on mentoring younger children is available, it is likely that they can benefit from mentoring too, particularly if it is tailored to their developmental level. Cavell and Smith (2005) suggest that mentoring for children should focus more on play and structured activities that are meaningful for the child, because children are less likely to be able to build relationships with their mentors by spending time just talking, as do many adolescents.

Principles of Effective Prevention Programs

Socioculturally Relevant

Definition: Programs should be tailored to fit within cultural beliefs and practices of specific groups as well as local community norms.

Important Points:

- Effective programs are careful to tailor the content to make it culturally appropriate and relevant to its participants. When interventions are not relevant, the programs often have difficulty in recruiting and retaining the participants most in need of intervention.
- Making a program socio-culturally relevant means going beyond making cosmetic changes like translating the language or changing audio-visuals. It includes *deep structure* modifications, i.e., making changes in the materials or curricula that acknowledge the social norms and cultural/religious beliefs and practices of the target population.
- Effective programs are also careful not to adopt a one-size-fits-all approach. Activities that are flexible enough to adapt to unique circumstances of their participants are more likely to produce positive outcomes.
- One way to increase socio-cultural relevance is to include participants in the program planning and implementation. Typically, participants are invested in preventing poor outcomes, and may have ideas that can be used to compliment or enhance the activity.

Action Checklist:

- Does the strategy appear to be sensitive to the social and cultural realities of the participants?
- If not, are you capable of making the changes that are needed to make it more appropriate?
- Is the strategy flexible to deal with special circumstances or individual needs of potential participants?
- Is it possible to consult some potential participants to help you evaluate and/or modify the strategy?

Mentoring Example:

It is important to take socioeconomic and cultural factors into account in mentoring programs as well. Relatively little research has examined these factors in mentoring programs to date. The research available suggests that while it is not necessary to match mentors to youth based on race, it is important to address cultural issues by assessing cultural factors and providing cultural-competency training to mentors (Sánchez & Cólón, 2005).

Principles of Effective Prevention Programs

Outcome Evaluation

Definition: A systematic outcome evaluation is necessary to determine whether a program or strategy worked.

Important Points:

- Effective programs build an evaluation strategy into the implementation of the strategy (process evaluation). Approaches such as continuous quality improvement (CQI) have been shown to provide important ongoing feedback on the implementation process to make it more likely that they will achieve positive outcomes.
- Rather than waiting for an audit evaluation of the program outcomes at the end, evaluation can be used to provide feedback at several stages. Systems like Getting to Outcomes (GTO) provide a comprehensive system for program development, implementation, and evaluation.
- The evaluation plan for a program should match the logic model of the program. It should measure the desired outcomes of the program.

Action Checklist:

- Is there a plan for evaluating the program?
- Does the evaluation plan provide feedback prior to the end of the program?
- Is there a plan for receiving feedback throughout the program development and implementation?

Mentoring Example:

Mentoring is a popular approach and advocates of mentoring have promoted the outcomes it can affect. However, a meta-analysis that looked at the outcome research available on mentoring programs showed that overall, mentoring programs have produced only modest benefits for participating youth (DuBois et al., 2002). The same study showed that mentoring programs that monitored program implementation had greater effects than those did not.

Principles of Effective Prevention Programs

Well-Trained Staff

Definition: Programs need to be implemented by staff members who are sensitive, competent, and have received sufficient training, support, and supervision. Follow up (booster) training and technical assistance to staff are critical.

Important Points:

- To increase the likelihood of getting good outcomes, effective programs are implemented by staff members that receive formalized training to deliver the program. Trainings ranging from hours to multiple days are useful in allowing staff to practice delivering providing the intervention, and allowing them to get their questions answered.
- Reviews show that, even if the staff is sufficiently trained, the effect of the strategy may be limited by high rates of turnover, low morale, or a lack of “buy-in”. In addition to consistency in the program, a stable staff provides continuity to the program that allows the implementers to establish trusting relationships with the participants.

Action Checklist:

- Is there sufficient staff to implement the program?
- If so, has the staff received sufficient training and supervision and support to implement the program properly?
- Will efforts be made to encourage stability and high morale in the staff members who will provide the program?

Mentoring Example:

Research suggests that training for mentors is important to promote program success. DuBois et al. (2002) point out that providing on-going training to mentors was one of the factors that predicted larger effect sizes for mentoring programs. While the effect of training for staff of mentoring programs has not been studied, ongoing staff training and professional development has been identified as a best practice by the National Mentoring Partnership (MENTOR/National Mentoring Partnership, 2003).

Principles of Effective Prevention Programs

Fundamentals of Behavior, Learning and Behavior Change

Behavior is complex and is influenced by many factors, which can be broken down into two large categories:

- *individual factors* (beliefs, motivation, knowledge, skills, expectations)
- *environmental factors* (family, cultural norms, neighborhoods, public policy)

Some things we know about changing *individual-level factors* that determine behavior:

- The Performance Equation is $P = IC + S/K + M/I + Env$
 - Performance (or behavior) = inherent capability + skills/knowledge + motivation/incentive + environmental resources (Harless)
- Training—or teaching—only changes skills and knowledge. It cannot, by itself, overcome inherent capability deficits, lack of motivation/incentives, or lack of environmental resources. (Bichelmeyer)
- Increasing knowledge and skills is necessary but not sufficient to change behavior.
- When using training or teaching as a program component, keep in mind that:
 - Motivation affects what people pay attention to. (Information Processing Theory)
 - People process small amounts of information at one time. (Information Processing Theory)
 - People combine bits of information into “chunks” to help them remember it and to make decisions faster. (Information Processing Theory)
 - Without practice, people forget what they learned within 48 hours of learning it. (Bichelmeyer)
- Behavior that is reinforced (followed by a positive result) is more likely to happen again in the future. Behavior that is punished (followed by a negative result) is less likely to happen again in the future. (Social Learning Theory, Bandura)
- Behavior change is a process, not an event. (Stages of Change, Prochaska)
- People can be at different levels of readiness to change. Different levels of readiness include precontemplation, contemplation, decision, action, and maintenance. People can cycle through these stages more than once. (Stages of Change; Prochaska)

Principles of Effective Prevention Programs

*Some things we know or assume about changing **environmental** factors that determine behavior:*

- Individual-level strategies are limited in their ability to change the environment.
- To understand a problem behavior, one must understand the context of the behavior.
- It is necessary to influence environmental structures (family, cultural norms, environmental resources) to prevent negative human behavior and promote positive human behavior.
- To change environmental-level factors, strategies need to target families, schools, workplaces, faith organizations, communities, and policies, not just individuals.
- Communities (like people) pass through a series of steps or stages as they change. (Organizational Change Stage Theory)
- Examples of contextual factors that can be addressed by community-level strategies include:
 - Laws and norms about a particular problem
 - Availability of goods/materials associated with a problem (e.g., drugs, weapons)
 - Economic conditions (e.g., unemployment rates)
 - Neighborhood conditions