Drug Abuse Prevention:
What Works

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HOW TO USE THE DRUG ABUSE PREVENTION RESEARCH DISSEMINATION AND APPLICATIONS MATERIALS

Despite the best efforts of the Federal, State, and local governments, the abuse of drugs continues to pose serious threats to the health, and social and economic stability of American communities. The causes of and factors associated with drug abuse are complex and vary across different segments of the population. To be effective, prevention programs must address not only the drug abuse behavior itself but also the relevant cultural, ethnic, regional, and other environmental and biopsychosocial aspects of the population segments being targeted for the prevention efforts. Therefore, it is important to match the program with the population it is to serve and the local community context within which it is to be implemented. The challenge for prevention practitioners is to select, modify, or design prevention strategies that will meet the needs of their constituencies, whether they comprise a whole community or specific segments within a community.

The Drug Abuse Prevention Research Dissemination and Applications (RDA) materials, of which this handbook is a part, are designed to help practitioners plan and implement more effective prevention programs based on evidence from research about what works. These materials provide practitioners with the information they need to prepare their communities for prevention programming and to select and implement substance abuse prevention strategies that effectively address the needs of their local communities. These materials are intended for use by prevention practitioners who vary in their training and experience in the field but who are interested in developing prevention programs in their communities. The target audience for these documents includes prevention program administrators, prevention specialists, community volunteers, community activists, parents, teachers, counselors, and other individuals who have an interest in drug abuse and its prevention.

This handbook, Drug Abuse Prevention: What Works, provides an overview of the theory and research on which these materials are based. It includes a definition of prevention, descriptions of substance abuse risk and protective factors and a discussion of the key features of three prevention strategies—universal, selective, and indicated—that have proven effective. The handbook also explains how prevention efforts can be strengthened by using knowledge gained through research. In addition to this introductory handbook, the core set of materials also includes three other documents:

- **A brochure** describes the contents of this set of RDA materials and provides information about how prevention practitioners can obtain these materials.

- **Community Readiness for Drug Abuse Prevention: Issues, Tips and Tools** is a resource manual that introduces the concept of community readiness for substance abuse prevention programming. The manual defines community readiness and provides a rationale for assessing a community's readiness prior to the planning or implementation of substance abuse prevention activities. It then identifies seven factors for assessing a community's readiness and offers strategies for increasing readiness factors found to be deficient.

- **Drug Abuse Prevention and Community Readiness: Training Facilitator's Manual** is a 9-hour, modular training curriculum, designed for use by training facilitators in introducing prevention practitioners and community members to the basic theory of drug abuse prevention and the three prevention strategies. The facilitator's manual also provides them with the skills to assess and increase the readiness of a community to launch a prevention effort. The curriculum includes talking points for lectures, instructions for conducting discussions and exercises, and overheads and handouts.
These four core components are intended to be used together as a set. Three stand-alone documents provide more intensive guidance on implementing the three prevention models introduced in the core set of materials. Each manual provides more detailed information about the strategy, including a rationale for its use and a description of a research-based program model that illustrates the strategy. Information is provided on the key elements of the program, issues that need to be addressed to implement the program successfully, and resources that practitioners can access for more information about the program. These models have been selected because National Institute on Drug Abuse (NIDA) research indicates that these programs have been effective in preventing adolescent substance abuse. The following are the three stand-alone resource manuals:

- **Drug Abuse Prevention for the General Population** discusses the history and key features of universal prevention programs. The Project STAR Program—a communitywide program designed to teach adolescents the skills necessary to counteract the psychosocial influences that increase the likelihood of substance abuse—is described as an illustration of a universal prevention strategy.

- **Drug Abuse Prevention for At-Risk Groups** discusses the history and key features of selective prevention programs. The Strengthening Families Program—a family-focused program targeting children ages 6 to 10 whose parents are substance abusers—is described as an illustration of a selective prevention strategy.

- **Drug Abuse Prevention for At-Risk Individuals** discusses the history and key features of indicated prevention programs. The Reconnecting Youth Program—a school-based program targeting 9th-through 12th-grade students who are at risk for dropping out of school, substance abuse, and suicidal behavior—is described as an illustration of an indicated prevention strategy.

These examples of universal, selective, and indicated prevention illustrate how different communities have implemented these approaches effectively and show how the models can be varied in different settings. Their inclusion in these materials does not imply an endorsement by NIDA. More information on these program models can be found in a video prepared by NIDA titled *Coming Together on Prevention*, which is available from the National Clearinghouse for Alcohol and Drug Information (NCADI). (See appendix A.) If prevention practitioners determine that one or more of these case examples might be appropriate for their communities, they can use the relevant resource manual as a supplement to the RDA core package. The stand-alone resource manuals are not included as part of the RDA core package and have to be ordered separately. Figure 1 shows how a practitioner might use the documents in this set of RDA materials. Appendix A provides information on how to order the RDA core package, the stand-alone manuals, the video, and other materials on the three programs.

These RDA materials are not intended to be an all-inclusive discourse on drug abuse prevention and programming. The programs presented as illustrations of the three prevention strategies all target children or adolescents. This selection is purposeful because this population has been the major thrust of policy, research, and program efforts. This does not imply that there are no effective substance abuse prevention efforts targeting adults, only that this topic is beyond the scope of these materials.

**Purpose of This Handbook**

Given the nature and extent of the problem of drug abuse, this handbook is designed to provide the reader with a basic understanding of the concept of drug abuse prevention. This handbook is intended for use by prevention practitioners who are interested in developing, modifying, or expanding existing prevention efforts.
The primary objectives of this handbook are to:

- define drug abuse prevention in ways that are useful for the development of prevention initiatives;
- give an overview of some important concepts and models in drug abuse prevention;
- provide empirically-based information to demonstrate that drug abuse prevention works;
- offer a framework for thinking about and organizing prevention initiatives at the community level;
- provide working examples of effective prevention programs for practitioners who may be considering implementing one or more of the prevention models described in this set of materials; and
- motivate readers to consider initiating and/or participating in prevention efforts.

This handbook begins with a summary of the drug abuse problem in the United States and a discussion of drug abuse prevention, followed by a description of two types of antidrug strategies: supply reduction and demand deduction. This discussion introduces a new nomenclature for the classification of demand reduction strategies—universal, selective, and indicated prevention. This handbook reviews relevant literature on research-based theory for substance abuse prevention programming, including a summary of research findings on risk and protective factors associated with substance abuse. This handbook presents some general prevention approaches and guidelines for effectively addressing those factors and concludes with a summary of each of the program models used in these RDA materials to illustrate universal, selective, and indicated substance abuse prevention strategies.

Throughout this handbook and the other documents in the drug abuse prevention RDA materials, substance abuse is used to refer to illicit drug and alcohol abuse and to the use of tobacco products. Readers unfamiliar with the substance abuse and prevention terms used throughout this handbook are referred to the Center for Substance Abuse Prevention (CSAP) Prevention Primer: An Encyclopedia of Alcohol, Tobacco, and Other Drug Prevention Terms referenced in appendix A.
INTRODUCTION TO PREVENTION AND EXTENT OF THE PROBLEM

Drug abuse among young people and adults is a serious national health and social problem despite the efforts of Federal, State, and local governments during the past decade. National Household Survey data show a steady decline in the use of illegal drugs for Americans aged 12 and older from a peak of 24 million in 1972 to 11.4 million in 1992 (NIDA 1993). Although occasional cocaine use has decreased since 1985 and occasional
alcohol use has decreased since 1988, frequent cocaine use and heavy drinking have remained unchanged. According to findings from NIDA, illegal drug use is most prevalent among 18- to 25-year-olds. Most drug abusers (76 percent or 8.7 million people) are white males who are unemployed, have not completed high school, and reside in large cities (NIDA 1993).

Although progress seemed to have been made between 1982 and 1992 with decreased substance abuse among high school seniors, increased substance abuse among eighth, tenth and twelfth graders in the subsequent three years has been confirmed by the Monitoring the Future Survey (NIDA 1996). Findings from a recent Office National Drug Control Policy (ONDCP) symposium on causes for this upturn in adolescent use suggest many possible causes: popular youth culture, music glorifying the use of substances, reduced concern about the negative consequences of substance abuse, and significantly decreased levels of substance abuse prevention activity in schools.

Prevention of substance abuse is important to the health, social, and economic stability of this country, because the cost of substance abuse affects the well-being of Americans in all of these areas. The estimated cost of substance abuse in 1988 was $144.1 billion (Rice 1991), with roughly 60 percent of this cost resulting from alcohol abuse and 40 percent due to other drug abuse.

Substance abuse contributes significantly to rising health care costs in the treatment of alcoholism and drug addiction, as well as other diseases—such as diabetes, cirrhosis, cardiovascular disease, cancer, and fetal and neonatal disorders—that are associated with alcohol, tobacco, and other drugs. In one county in Florida, an estimated 11-15 percent of all pregnant women had been exposed to an illegal substance (Chasnoff et al. 1990). Such exposure has been associated with damage to a developing fetus and with other post partum disorders in infants and young children. Insufficient funding and lack of available treatment facilities for addicted women continue to hamper efforts to reduce this problem. The high correlation found between substance abuse and mental disorders further complicates drug treatment. In addition, substance abuse cure rates are low and relapse rates are very high.

From an economic and social perspective, substance abuse affects work productivity and unemployment, incidences of violence, family deterioration, and academic and other problems among young people. Reduced work productivity and unemployment correlate to substance abuse. According to the 1985 National Household Survey on Drug Abuse (NIDA 1985), employees who abuse substances have been found to exert a greater negative impact on the workplace than employees who do not. For example, substance abusers are late to work three times more often, they are 3.6 times more likely to have accidents, and they request sick leave three times more often than nonabusers.

Drug-related violence and gang activity are increasingly being reported in urban schools and neighborhoods. Poverty, lack of opportunities for youth, neighborhood disorganization, and deterioration in family circumstances all relate to increased illegal drug trafficking and increased drug susceptibility among youth from at-risk environments (Pagan 1987). Urban youth from low socioeconomic backgrounds are more vulnerable to becoming drug dealers (Elliott et al. 1989), and dealing often leads to substance abuse.

Huizinga and colleagues (Huizinga et al. 1991) found considerable overlap between delinquency, school failure, substance abuse, and teen pregnancy among several thousand youth in highrisk communities. Delinquency correlated significantly with drug abuse and early sexual activity, particularly among girls. The authors concluded that "targeting delinquency and substance abuse simultaneously in . . . prevention programs will more likely enhance the effectiveness of such programs in each problem area than will programs that focus uniquely on either substance abuse or delinquency. " Therefore, increasing prevention activities should be a
priority for communities in addressing the health, social, and economic consequences associated with substance abuse (Huizinga et al. 1991).
PREVENTION: WHAT IS IT?

Although there is no single definition of prevention, practitioners often agree that, as an antidrug strategy, "prevention offers communities an opportunity to stop . . . drug problems before they start, and provides hope for effecting community change to support healthy behaviors" (CSAP 1993). This chapter introduces two primary antidrug strategies: those designed to reduce the supply of illegal drugs and those designed to reduce the demand for drugs. Most of the chapter focuses on demand reduction strategies and describes the general universal, selective, and indicated prevention approaches (Gordon 1987; Institute of Medicine 1994). The key features of these methods are then summarized. The chapter concludes with a discussion of the difference between prevention and treatment.

Supply Reduction Strategies

Supply reduction strategies include any method used to reduce the availability of drugs, such as the destruction of drug crops, confiscation of drug shipments, border patrols, and criminal penalties for drug use and dealing. Within the realm of legal substances, such as alcohol and tobacco, supply reduction strategies include increasing taxes, increasing the legal age of use, increasing law enforcement, reducing product advertising, reducing the number of sales outlets, and imposing penalties for sales of these products to minors.

Since 1980, the War on Drugs has been fought with increasingly more funding earmarked by Congress for supply reduction approaches. The national budget for antidrug activities has risen from $1.5 billion in 1981 to $13.8 billion in 1996. In the late 1980s and early 1990s, approximately two-thirds of the drug control budget was allocated to supply reduction strategies and one-third to demand reduction activities.

Demand Reduction Strategies

Demand reduction strategies are designed to reduce the demand for illegal drugs. Prevention and treatment are part of demand reduction. Prevention attempts to reduce demand by decreasing risk factors and increasing protective factors associated with substance abuse. These factors are defined and discussed in the next chapter. Treatment is designed to decrease demand by stopping the substance abuse in the addicted or abusing individual.

In general, prevention may have any of five targets: the individual, the peer group, the school, the family, and the community. Prevention programs can be implemented in a variety of settings. For instance, a program targeting a peer group can be set up in a school, and a program targeting the family can be conducted in a community setting, such as a church or neighborhood center. Prevention programs for youth have tended to focus on only one of these five areas. Recent research results suggest that the effectiveness of prevention programs increases when more than one area is targeted in a comprehensive community prevention program. These RDA materials focus on three of these target areas: the school, the family, and the community.

The Public Health Classification System

Within the traditional public health classification of disease prevention, first proposed by the Commission on Chronic Illness (1957), antidrug strategies may target:

- the agent—the substance itself: alcohol, tobacco, and other drugs;
• the host—a person and his or her biological, psychological, and social susceptibilities to alcohol and other drug problems, as well as the knowledge and attitudes that influence the substance using behavior; and

• the environment—the setting in which the substance using behavior occurs, including the community mores, or norms, that shape the behavior.

Prevention strategies can focus on any of these targets. Attempts to change the agent are considered supply reduction strategies; attempts to alter the individual's desire for the substance are demand reduction strategies. Environmental strategies focus on the surroundings of the substance abuser: the community, school, or workplace. Environmental prevention strategies can be used for supply and demand reduction.

Within the public health classification of prevention, antidrug efforts have been organized along a continuum of primary, secondary, and tertiary prevention (Commission on Chronic Illness 1957; CSAP 1991). The goal of primary prevention is to protect individuals who have not begun to use substances, thereby decreasing the incidence of new users. The goal of secondary prevention (also called early intervention) is to intervene with persons in the early stages of substance abuse or exhibiting problem behaviors associated with substance abuse to reduce and/or eliminate substance use. The goal of tertiary prevention is to end substance dependency and addiction and/or ameliorate the negative effects of substance abuse through treatment and rehabilitation. In this model, tertiary prevention is most often referred to as treatment, but also includes rehabilitation and relapse prevention. The public health classification of prevention has been criticized by practitioners as confusing, particularly in its failure to distinguish secondary prevention (early intervention) from primary prevention or tertiary prevention (treatment).

The Institute of Medicine Classification System

In a 1994 report on prevention research, the Institute of Medicine (IOM 1994) proposed a new framework for classifying prevention based on Gordon's (1987) operational classification of disease prevention. The IOM model divides the continuum of care into three parts: prevention, treatment, and maintenance. The prevention category is divided into three classifications—universal, selective, and indicated prevention interventions, which replace the confusing concepts of primary, secondary, and tertiary prevention. NIDA has adopted this classification system. Although the IOM system distinguishes between prevention and treatment, intervention in this context is used in its generic sense and should not be construed to imply an actual treatment protocol. The last section of this chapter discusses the interface of prevention, treatment, and maintenance.

Within the IOM classification system, prevention programs are organized along a targeted audience continuum—that is, the degree to which any person is identified as an individual at risk for substance abuse. The at-risk determination is based on a combination of risk and protective factors associated with substance abuse. A risk factor is an association between some characteristic or attribute of an individual, group, or environment and an increased probability of certain disorders or disease-related phenomena at some point in time (Berman and Jobes 1991). Protective factors inoculate, or protect persons and can strengthen their determination to reject or avoid substance abuse. Protective factors can inhibit self-destructive behaviors and situations that advance substance abuse. These are discussed in the next chapter. The universal, selective, and indicated prevention interventions represent the population groups to whom the interventions are directed and for whom they are thought to be optimal, given an assessment of risk and protective factors.
Universal prevention strategies address the entire population (national, local community, school, neighborhood), with messages and programs aimed at preventing or delaying the abuse of alcohol, tobacco, and other drugs. Selective prevention strategies target subsets of the total population that are deemed to be at risk for substance abuse by virtue of their membership in a particular population segment—for example, children of adult alcoholics, dropouts, or students who are failing academically. Indicated prevention strategies are designed to prevent the onset of substance abuse in individuals who do not meet DSM-III-R or DSM-IV criteria for addiction, but who are showing early danger signs, such as falling grades and consumption of alcohol and other gateway drugs.

These three types of prevention interventions do not correspond well with the public health model of primary, secondary and tertiary prevention. The overall aim of all of these strategies is to reduce the number of new cases of substance abuse, as defined by the DSM-III-R or DSM-IV. These interventions are designed to reduce the length of time that the early signs of substance abuse continue and to halt the severity and intensity of the progression of substance abuse. These interventions also are intended to reduce the severity and intensity of the problem so that the individuals at risk for substance abuse do not go on to require a clinical diagnosis of the disorder.

**Universal Preventive Intervention Strategies**

A universal preventive intervention is one that is desirable for all members of a given population. For example, it would include the general population and subgroups such as pregnant women, children, adolescents, and the elderly. The mission of universal prevention is to deter the onset of substance abuse by providing all individuals the information and skills necessary to prevent the problem. All members of the population share the same general risk for substance abuse, although the risk may vary greatly among individuals. Universal prevention programs are delivered to large groups without any prior screening for substance abuse risk. The entire population is assessed as at-risk for substance abuse and capable of benefiting from prevention programs (IOM 1994).

The risk and protective factors addressed in universal prevention programs may reflect some individual or subgroup characteristics, but primarily reflect environmental influences such as community values, school support, economic and employment stability, and so on. For example, some individuals may be physically and emotionally happy; they may be academically successful and have a wide circle of friends who also are academically successful; they may be involved in a variety of positive school activities; they may have families who are supportive and have solid positive values; and they may have high self-esteem and a sense of purpose in life. All these factors would serve to protect these individuals from drug abuse. Other individuals may be failing in school or work and come from dysfunctional families. All of these people may live in communities where there is a high rate of crime, drug dealing, and community dysfunction. Regardless of their individual risk for substance abuse, all of these people could benefit from universal prevention strategies.

General examples of universal preventive interventions include the use of seat belts, immunizations, prenatal care, and smoking prevention (IOM 1994). Examples of universal preventive interventions for drug abuse include substance abuse education for all children within a school district, media and public awareness campaigns within inner-city neighborhoods, and school policy changes regarding drug-free zones.

Universal prevention programs vary in type, structure, and design and can include school family-, and community-based programs. An example of a school-based universal program is the life skills training program described by Botvin and colleagues (Botvin et al. 1990a). Universal family-based programs include dissemination efforts to families within the general population, such as the *Preparing for the Drug-Free Years (PDFY)* program of Hawkins and colleagues (Hawkins et al. 1987). This program was implemented through school and community agencies in Oregon. An example of a community-based universal prevention approach that involves multiple program elements that are delivered within a broad community context is the *Midwestern Prevention Project (Project STAR)* developed by Pentz and...
colleagues (Pentz et al. 1990). This program is described in more detail later in this handbook and in the stand-alone document *Drug Abuse Prevention for the General Population*. 
Key Features of Universal Prevention Programs

Regardless of the specific focus of universal prevention programs, they all share common characteristics. These include the following:

- The programs are designed to reach the entire population, without regard to individual risk factors, and they generally are designed to reach a very large audience;
- They are designed to delay or prevent substance abuse;
- Participants are not recruited to participate in the programs;
- The degree of individual substance abuse risk of the program participants is not assessed—the program is communicated to everyone in the population regardless of whether they are at risk for substance abuse;
- The programs usually have lower staff-to-audience member ratios than selective or indicated programs and may require less time and effort from the audience;
- Staff members can be professionals from other fields, such as teachers or school counselors, who have been trained to deliver the program; and
- Costs are spread over a large group and tend to be lower on a per-person basis than selective and indicated programs.

Selective Preventive Intervention Strategies

Selective prevention interventions target specific subgroups that are believed to be at greater risk than others. Risk groups may be identified on the basis of biological, psychological, social, or environmental risk factors known to be associated with substance abuse (IOM 1994), and targeted subgroups may be defined by age, gender, family history, place of residence such as high drug-use or low-income neighborhoods, and victimization by physical and/or sexual abuse. Selective prevention targets the entire subgroup regardless of the degree of risk of any individual within the group. One individual in the subgroup may not be at personal risk for substance abuse, while another person in the same subgroup may be abusing substances. The selective prevention program is presented to the entire subgroup because the subgroup as a whole is at higher risk for substance abuse than the general population. An individual's personal risk is not specifically assessed or identified and is based solely on a presumption given his or her membership in the at risk subgroup.

The risk factors assessed and addressed in selective prevention programs reflect both individual and subgroup characteristics (for example, high sensation seekers, delinquent peer group associations, familial substance abuse), as well as environmental influences like high rates of crime, unemployment, and community disorganization. For example, one subgroup may have physical or mental health problems, experience academic difficulties and school failure, yet live in neighborhoods with low crime rates and high employment (protective factors). They share risk factors with the subgroup as a whole and are considered part of the subgroup for purposes of selective preventive interventions.

General examples of selective preventive interventions include home visitation and infant daycare for low birth-weight children and annual mammograms for women with a family history of breast cancer (IOM
Examples of selective preventive interventions for substance abuse include special clubs and groups for children of alcoholics, rites of passage programs for at-risk males, and skills training programs that target young children of substance-abusing parents. The children may be drug-free but are at risk of subsequently developing drug abuse.

Generally, selective prevention programs are operated in schools or community agencies. Some selective prevention programs include education and skills training programs. Other selective prevention approaches include mentoring and tutoring. The *Strengthening Families Program* developed by Kumpfer and colleagues (Kumpfer et al. 1989) is an example of a family focused selective prevention program. This program is described later in this handbook and is presented in a separate stand-alone document *Drug Abuse Prevention for At-Risk Groups*.

### Key Features of Selective Prevention Programs

Key features shared by selective prevention programs include the following:

- Programs target subgroups of the general population that are determined to be at risk for substance abuse;
- They are designed to delay or prevent substance abuse;
- Recipients of selective prevention are known to have specific risks for substance abuse and are recruited to participate in the prevention effort because of that group's risk profile;
- The degree of individual vulnerability or personal risk of members of the targeted subgroup generally is not assessed, but vulnerability is presumed on the basis of their membership in the at-risk group;
- Knowledge of specific risk factors within the target group allows program designers to address specific risk reduction objectives;
- Selective prevention programs generally run for a longer period of time and require more time and effort from participants than universal programs;
- Selective programs require skilled staff because they target multiproblem youth, families, and communities that are at risk for substance abuse;
- The programs may be more expensive per person than universal programs because they require more time and effort; and
- The program activities generally are more involved in the daily lives of the participants and attempt to change the participants in specific ways, for example, by increasing participants' communication skills.

### Indicated Preventive Intervention Strategies

The mission of indicated prevention is to identify individuals who are exhibiting early signs of substance abuse and other problem behaviors associated with substance abuse and to target them with special programs. The individuals identified at this stage, though showing signs of early substance use, have not reached the point
where a clinical diagnosis of substance abuse, as defined by DSM-III-R or DSM-IV criteria, can be made. They are exhibiting substance abuse-like behavior, but at a subclinical level (IOM 1994). Indicated prevention approaches are used for individuals who may or may not be abusing substances, but exhibit risk factors—such as school failure, interpersonal social problems, delinquency, and other antisocial behaviors, and psychological problems such as depression and suicidal behavior—that increase their chances of developing a drug abuse problem. Indicated prevention programs address risk factors associated with the individual, such as low self-esteem, conduct disorders, and alienation from parents, school, and positive peer groups. Less emphasis is placed on assessing or addressing environmental influences, such as community values. The aim of indicated prevention programs is not only the reduction in first-time substance abuse, but also reduction in the length of time the signs continue, delay of onset of substance abuse, and/or reduction in the severity of substance abuse. Individuals can be referred to indicated prevention programs by parents, teachers, school counselors, school nurses, youth workers, friends, or the courts. Young people may volunteer to participate in indicated prevention programs.

General examples of indicated prevention in the health field include training programs for children experiencing early behavioral problems, medical control of hypertension, and regular examinations of persons with a history of basal cell skin cancer (IOM 1994). In the field of substance abuse, an indicated preventive intervention would be a substance abuse program for high school students who are experiencing a number of problem behaviors, including truancy, falling academic grades, juvenile depression, suicidal ideation, and early signs of substance abuse. Other examples of indicated substance abuse prevention programs include student assistance programs, where teachers and counselors refer students showing academic, behavioral, and emotional problems to counseling groups and family-focused programs for the prevention of substance abuse.

An example of a family-focused indicated prevention program is the Structural Family Therapy program developed by Szapocznik and colleagues (Szapocznik et al. 1989a). An example of a school-based indicated prevention program is the Reconnecting Youth Program developed by Eggert and colleagues (Eggert et al. 1990). This school-based program is designed for youth already engaged in substance abuse and/or other negative behaviors, such as truancy, emotional distress, and acting-out. This program is described later in this handbook and in the stand-alone document Drug Abuse Prevention for At-Risk Individuals.

Key Features of Indicated Prevention Programs

The key features shared by indicated prevention programs include the following:

• Programs target individuals who are experiencing early signs of substance abuse and other related problem behaviors;

• Programs are designed to stem the progression of substance abuse and related disorders:

• Programs can target multiple behaviors simultaneously;

• Individuals are specifically recruited for the prevention intervention;

• The individual's risk factors and problem behaviors are specifically addressed;

• Programs require a precise assessment of an individual's personal risk and level of related problem behaviors, rather than relying on the person's membership in an at-risk subgroup;
• Programs are frequently extensive and highly intensive; they typically operate for longer periods of time (months), at greater frequency (one hour per day, five days a week), and require greater effort on the part of the participants, than do selective or universal programs;

• Programs attempt to change the participants' behaviors;

• Programs require highly skilled staff that have clinical training and counseling or other clinical intervention skills; and

• Programs may be more expensive per person to operate than either universal or selective programs because they require more intensive work with individuals and small groups and more highly skilled staff.

Prevention Versus Treatment

Prevention and treatment are both designed to reduce the demand for drugs. Prevention attempts to reduce demand by decreasing risk factors and increasing protective factors associated with substance abuse, and treatment addresses clinically diagnosed substance abuse and reduces the negative effects associated with drug dependency and addiction. The essential difference between these strategies is that prevention addresses a problem before it occurs, and treatment addresses the problem after it occurs and is clinically diagnosed. IOM (1994) divides treatment into two components: case identification and standard treatment for known disorders.

In the IOM nomenclature, neither treatment nor maintenance plays a part in prevention. In fact, the sole focus of prevention efforts is on decreasing the degree of vulnerability to substance abuse of the target audience. Within this system, vulnerability is defined by the relative balance between the risk and protective factors of the target audience.

The IOM classification system views prevention and treatment on a spectrum of intervention that concludes with maintenance. According to IOM (1994), maintenance interventions are supportive, educational, and/or pharmacological in nature and are provided on a long-term basis to persons who have met the DSM-III-R or DSM-IV diagnostic criteria for substance abuse. In the drug abuse field, maintenance includes relapse prevention efforts to deter recurrence and aftercare and rehabilitation programs to reintegrate into society.

This chapter has identified prevention as one type of antidrug abuse strategy: namely, demand reduction. The discussion presented the rationale for establishing three categories of research-based prevention approaches—universal, selective, and indicated. The key features of each of these prevention approaches were listed, and the relationship of risk and protective factors to the use of universal, selective, and indicated prevention program strategies was described. The chapter concluded with a discussion of the distinction between substance abuse prevention and treatment.

The next chapter will discuss risk and protective factors and who is at risk for substance abuse and related problems. The chapter will briefly examine the focus of prevention programs on resiliency and then will describe some effective prevention program strategies. Finally, some guidelines for effective prevention programming will be presented.
PREVENTION: WHAT WORKS?

This chapter reviews key literature on research-based prevention programming, specifically the types of risk and protective factors that make youth vulnerable to drug abuse and related problems. Next, the chapter examines some current trends in prevention research and programming, including prevention strategies that focus on the school, family, and community. The chapter concludes with a brief discussion of comprehensive community coalitions and an overview of guidelines for effective substance abuse prevention.

There is growing support within the drug abuse prevention field and among program funders for prevention efforts to be based on the results of empirical research regarding the causes of substance abuse as well as the effectiveness of prevention programs. A new emphasis on tailoring prevention programs to be culturally, developmentally, and geographically appropriate has caused prevention programs to proliferate. The challenge now is to determine the primary risk and protective factors for the populations targeted by these programs and to develop prevention approaches that will have the greatest effect on the most important risk and protective factors. This tailored approach requires knowledge and understanding about the factors that cause substance abuse, methods for assessing risk and protective factors, knowledge of potential prevention strategies, and the ability to make those strategies most effective for prevention program participants. This approach to prevention, therefore, requires an empirical research base.

The primary reason to base the choice of a prevention approach on empirical research is to improve effectiveness. Guessing about what causes substance abuse is not an effective way to select the best prevention strategy. Practitioners can take some specific steps to guide their selection of the prevention approach that has the most potential to help the targeted population. The Prevention Strategies table discussed in this chapter (pages 26 and 27) summarizes effective substance abuse prevention strategies based on available prevention research. The practitioner must apply what is known about effective prevention strategies in the selection of a prevention program for the community.

Drug abuse prevention efforts should be focused on risk factors (and the individuals and groups that are at risk) and their reduction, on protective factors and their increase or maintenance, or on risk and protective factors in the same program. Substance abuse has many causes and differs among individuals and subgroups. Alcohol and drug dependencies are caused by complex interactions of biological, social, and psychological factors that change with developmental stage. However, an understanding of the reasons for substance abuse is critical to the design of successful prevention efforts. It is no longer sufficient to justify prevention programs on the basis of philosophical or political beliefs, a scientific basis for prevention programs is needed.

Who is at Risk?

Given the right circumstances, anyone can develop a substance abuse problem. Some individuals and groups are at greater risk for developing the problem than others, but it is not always possible to distinguish those at risk for substance abuse from those who are not.

As the prevention field has matured, researchers have learned a great deal about the origins of substance abuse. They continue to acquire more information on risk and protective factors and what can be applied in real life settings. For instance, researchers know that some individuals are more susceptible to using illicit drug than others and have developed a variety of means to identify youth and adults at risk for substance abuse (Kumpfer 1989). This research has enabled prevention practitioners to develop effective programs for their communities.

One issue which continues to be investigated is what factors are associated with an individual going beyond initial drug use to drug abuse and then what is associated with chronic drug abuse. Fortunately, the majority of initial
drug use does not lead to chronic drug abuse with its profound consequences. The factors that predispose a person to initial drug use are somewhat distinct from those that predispose an individual to chronic drug abuse. In general, initial drug use and infrequent drug involvement, which neither escalate nor have major negative consequences, are a function of social and peer factors, while chronic drug abuse appears to be more related to biological and psychological processes (Glantz and Pickens 1992).

Although the biological components of substance abuse can be demonstrated in animals within controlled laboratory conditions, it is more difficult to determine the nature and extent of this factor in humans in real life settings. For example, results from studies focusing upon drug abuse rates of monozygotic (identical) twins, dizygotic (non-identical) twins and adopted children clearly demonstrate that there is a genetic contribution to substance abuse. The exact nature of this influence has not yet been determined, although it is likely that the magnitude of this contribution is less than was previously hypothesized (Pickers et al. 1991). Many psychiatric disorders are known to have biological if not genetic factors. Many drug abusers have comorbid psychiatric disorders and the children of people with certain psychiatric disorders are more likely to become drug abusers (Kessler 1995). The relationship between these psychiatric disorders and drug abuse, however, is far from clear.

These findings are further complicated because parents contribute social and environmental in addition to genetic factors to their children. Although biological and genetic factors play an important role in drug abuse, it is also clear that these factors interact in complicated ways with psychological, social, and environmental factors to ultimately determine avoidance of drug use or drug abuse. Prevention researchers are attempting to integrate these scientific findings to better understand the processes associated with drug abuse and to develop cost-effective interventions to prevent drug abuse.

Substance abuse has many causes and involves a complex interaction of risk factors. These risk factors can be categorized in several ways. One way is to group them in the same five areas that prevention programs target (Hawkins et al. 1992a):

- Individual and interpersonal risk factors: low self-esteem, genetic susceptibility, sensation seeking, aggressiveness, conduct problems, shyness, rebelliousness, alienation, academic failure, low commitment to school, and so on.


- Family risk factors: alcoholic parents; perceived parent permissiveness toward drug/alcohol use; lack of or inconsistent parental discipline; negative communication patterns; conflict; low bonding; stress and dysfunction caused by death, divorce, incarceration of parent(s), or low income; lack of extended family or support systems; emotionally disturbed parent(s); parenting problems; lack of skills to cope with family problems; parental rejection (for example, the unwanted child); lack of adult supervision; lack of family rituals (such as holiday family gatherings); poor family management and communication; physical and/or sexual abuse; and parental or sibling substance abuse (Kumpfer and Alvarado 1995). Strengthening families can reduce the negative effects of family environmental influences on youth for substance abuse. Prevention strategies can include conducting parenting programs, providing family support, and providing family
• skills training. Family therapy has been found to reduce the effects of substance abuse risk factors including delinquency, misconduct, and depression (Kumpfer and Alvarado 1995).

• School risk factors: lack of support for positive school values and attitudes; school dysfunction; high rates of substance abuse and prosubstance abuse norms; drug using gang members; low teacher and student morale; school climate that provides little encouragement and support; student perceptions that teachers do not care about them; lack of appreciation for school and the educational process; academic failure; lack of involvement in school (Downs and Rose 1991) due to discrimination, lack of opportunities for involvement and reward, perceived unfair rules, and norms that are conducive to substance abuse (Hawkins et al. 1992a). School climate improvement programs, such as Project PATHE and HIPATHE (Kumpfer et al. 1991), have been effective in reducing the negative effects of adolescent substance abuse.

• Community risk factors: high crime rate, high population density, physical deterioration, availability, norms supporting alcohol and other drug abuse, ambivalent or prosubstance abuse community values and attitudes; community dysfunction, transient populations; lack of active community institutions; lack of feeling part of the community; being in a community that condones substance abuse; disorganized neighborhoods lacking leadership; lack of opportunities for youth involvement in positive activities; high rates of substance abuse; poverty and lack of employment opportunities (Hawkins et al. 1992b); easy availability of drugs and alcohol; and lack of economic mobility and social supports. Increased opportunities for positive community involvement may reduce the effects of the negative environmental influences on youth for substance abuse.

Survey research studies often are used also as the basis for identifying risk factors based on demographic factors. Demographic risk factors include: gender; ethnicity; age; socioeconomic status; employment; income; education; and location of residency.

Many prevention programs target individuals who are at risk for substance abuse solely on the basis of demographic risk factors, such as race or ethnicity. Indeed, the common belief that ethnic youth are more at risk for substance abuse than other youth has led to the development of many prevention programs for them. Therefore, communities need to be sure that local demographic information indicates that the groups or individuals targeted for prevention efforts are the right ones. A community might find that the major risk factor for substance abuse may be an at-risk neighborhood with high rates of substance abuse and crime, not ethnic group, age, unemployment, or educational level.

What can be confusing is that there are so many factors that have been determined to put a child at risk for drug use. To integrate these findings in a meaningful way, it is important to remember that when a child is born, he/she is born not only into a family, but also a community and a society. The child also is born with characteristics that have been shaped by the uterine environment as well as by family characteristics. The child's potential to become a functional member of the community is the outcome of numerous interactive processes with a large variety of sources of influence. Various influencing factors also will have differing importance throughout the child's lifetime.

Reviewing the risk factors for drug using behaviors, it is clear that some aspects of the child's social and psychological developmental process are more important than others. For instance, primary caregivers serve an essential role in providing nurturing stimulation and opportunities for the infant to communicate with the world around them. Failure to form such a relationship during early development has been linked to poor language skills and cognitive abilities as well as inappropriate self-regulatory behaviors in early childhood. The child's family during his or her early development also is the major socialization agent to learn interpersonal skills. All
these abilities ease the transition from the shelter of the family environment to that of the school and community. Failure in any of these processes may increase the child's risk to fail in another stage and can handicap the child when making necessary transitions. Furthermore, successive failures from one life transition to another can accumulate, and the child's adaptation to the community and society may be so impeded that he or she becomes alienated and does not assume appropriate roles.

Other drug abuse prevention research focuses on identifying the more immediate processes associated with drug use. This research has identified the age period at which drug use is initiated and the processes involved in the progression from illegal use of licit substances such as tobacco and alcohol to the use of illicit drugs such as marijuana (Chen and Kandel 1995; Kandel and Yamaguchi 1985). Such efforts have found that children who understand the negative physical, psychological, and social effects of drugs are often protected for initiating drug use. Research also continues to examine the formation of peer groups and their role in introducing negative behaviors such as drug use among preadolescents and adolescents.

Protective Factors as a Focus of Prevention Programs

Recent research has focused upon identifying factors and processes that protect the child against such failures. Although the concept of protection clearly counters that of risk, protective factors and processes are not necessarily the exact opposite of risk factors. For instance, not having an alcoholic parent (a possible risk factor for substance abuse) may be positive but not necessarily protective. Findings from research on protective factors is still emerging and the relative impact of these protective factors and processes on overcoming risk factors is yet unclear.

There also has been an emerging trend in the drug abuse prevention field to introduce the concept of resilience and to review its applicability to drug abuse. The resilience movement grows out of a literature that explores individuals' responses to stressors such as schizophrenia, poverty, and physical or psychological trauma. This research has found that there are children who have been exposed to these negative risk factors yet who exhibit positive, adaptive behaviors rather than maladaptive behaviors and outcomes (Werner 1989). The interest in resilience among drug abuse researchers emerged as they examined children who are considered to be vulnerable to drug abuse due to the number of risk factors they have but who do not succumb to drug abuse. The research then attempted to determine what made these children resilient compared to others exposed to similar negative risk factors. Findings indicate that personality and temperament are important. These characteristics include:

- optimism;
- empathy;
- insight;
- intellectual competence;
- self-esteem;
- direction or mission;
- and determination and perseverance.

Other research indicates that the child having purposes in life and the skills to achieve these purposes play a role. These life skills include:

- emotional management;
- interpersonal social skills;
- intrapersonal reflective skills;
• academic and job skills;
• ability to restore self-esteem;
• planning skills;
• and life skills and problem-solving ability.

Although the concept and research findings on resilience illustrate positive adaptation to life situations, environments and transitions, there are some issues about this concept which need to be further explored and clarified. As mentioned above, the concept of resilience has been frequently viewed as an individual trait or characteristic which will help the individual positively adapt to a variety of situations in different circumstances and environments at a number of periods or transitions throughout the person's life. It has not yet been determined whether this assumption is accurate. Resilience may be more specific to situations, circumstances, environment and different life transitions or problems. Certain resilience skills may work with a particular problem or transition at a particular age in certain circumstances and environments, but may not be effective with other transitions at other ages or with other circumstances, risk factors or environments.

Clearly, the resilience concept has intuitive appeal, but further research is needed to clarify its role and refine its application to drug abuse prevention efforts. More important to prevention is the integration of these findings with those on protective factors, such as family bonding, a warm supportive parent (or surrogate), child relationships, academic success and positive peer relationships. This integration would be within a developmental framework that examines the achievement of resilience and adaptation skills in the family, school, peer and environmental domains. It would also address interactions across these domains to reinforce these skills and the cumulative impact of successes towards protecting youth against drug abuse.

Effective Prevention Strategies

Prevention professionals need to incorporate this wealth of research information together with what they know about the specific characteristics of persons who use and abuse drugs in communities and with known age-relevant methods to impact children's attitudes and behaviors in order to design an effective prevention intervention.

Several major targets of prevention activities are the individual, the peer group, the family, the school, and the community. Prevention programs have tended to focus on one area at a time. However, research has suggested that the effectiveness of prevention activities increases when the activities focus on more than one area: that is, when individuals and subgroups are targeted through more comprehensive prevention efforts that focus simultaneously on the family, the school, and the community.

Because of the intractable nature of substance abuse in the 1990s, prevention efforts have taken this broader approach. Substance abuse prevention has come a long way from the days of short-term educational programs to more comprehensive strategies. Through research and experience, prevention specialists have learned that:

• No one program or approach will eliminate all substance abuse; and
• Effective prevention approaches are tailored to the needs of each at-risk target group and are designed with input from those groups.

In recent years, effective prevention programs have been designed based on the results of thorough needs assessments. These needs assessments have included analyses of the family, school, and community
environments that influence youth, as well as assessments of individual risk and protective factors. Individuals from at-risk groups have become active participants in the identification, planning, and sometimes the implementation and evaluation of the prevention strategies designed for them.

School, Family, and Community Prevention Strategies

Table 1 on pages 26 and 27 provides an overview of universal, selective, and indicated approaches to prevention as they have been applied in prevention programs focused on the school, family, and community. Examples are provided of the types of prevention programs that have been effectively implemented for general populations (universal programs), targeted at-risk subgroups (selective programs), and individuals who are experiencing problem behaviors (indicated programs). The table offers guidance in the selection of each type of prevention approach. For example, information and education programs, such as media campaigns, have been effectively implemented in schools when the programs have targeted the general school population.

Parent skills training programs, however, have been effectively implemented with families within the general population (universal programs) and within specific subgroups (selective programs for dysfunctional and substance-abusing families, for example). The essential distinction between these parent skills training programs is not the content of the programs, but the targets of the programs: universal family skills training programs for every family in the population regardless of risk status versus selective family skills training programs for at-risk groups of families.

The intervention site can be selected on the basis of which risk and protective factors need to be addressed. Individual and peer group risk factors can be addressed in any of these sites—the family, the school, or the community. Universal, selective, or indicated prevention strategies are selected on the basis of the target audience. The following discussion provides more detailed information about universal, selective, and indicated approaches in school, family, and community prevention programs. See also Community Readiness for Drug Abuse Prevention: Issues, Tips and Tools, and Drug Abuse Prevention and Community Readiness: Training Facilitator's Manual.

School-Based Prevention Strategies

School-based substance abuse prevention strategies have served as the primary method for reaching young people. These approaches include information and education programs, prevention education and skills training, school management changes including changes in policies and instruction, tutoring and mentoring programs, and parent-peer groups. The most common school programs for substance abuse prevention have used health education curricula that involve the use of informational sessions about substances. Life skills and peer resistance training programs are generally conducted with students in the fifth through eighth grades. Some States have developed mandatory programs.

Information or education programs using scare tactics are used less often because research and experience have demonstrated that they are either counterproductive or ineffective and that students learn better with a low fear appeal message and with a credible communicator.
Information and Education Programs

These types of programs represent universal approaches and rely on mass dissemination of information about the health consequences of substance abuse. They include media campaigns, health education curricula, and school assemblies, and are low-cost approaches. Programs that use an information dissemination strategy provide knowledge and awareness of:

- the pharmacological effects of substances;
- the health, psychological, and social consequences of abuse;
- community attitudes, norms, and legal sanctions; and
- general health education.

Information and education approaches increase students' knowledge about drugs, but whether they have any impact on decreasing or delaying the initiation of substance abuse is not known because most information programs do not measure these objectives (Moskowitz 1983). Programs providing information about substance abuse consequences may be most effective in deterring youth who are at low risk for substance initiation, particularly initiation of substances that are highly addictive or have well-accepted negative effects, such as designer drugs. Information programs also help persons living with substance abusers and persons wanting information about the signs of substance abuse, intervention methods, and referral resources.

Information-only approaches to prevention have been criticized on the following grounds:

- Knowledge alone may not change behavior. The theory underlying prevention assumes that a change in knowledge will affect a change in attitudes that affect behavior. Several studies have provided little empirical support for this theory (Wallach and Barrows 1981; Goodstadt 1981) although there is support for a relationship between belief in the harmful consequences of substance abuse and reduced abuse (Johnston 1991).
- Youth most at risk for substance abuse are school dropouts. They will be missed by most school-based information programs.
- The information source may not be credible.
- Most information-only programs are too short to produce behavior change.
- Often drug information is not designed to match local cultural and ethnic traditions.

Prevention Education and Skills Training Programs

This approach includes interaction between the educator and the participants. These programs are designed to target social, cognitive, or psychological competencies or skills and to change attitudes and beliefs about substance abuse. These programs are more intensive (more hours per person and greater effort by participants) than information-only programs and, therefore, cost more per participant. Examples of effective
prevention education and skills training strategies include life skills training, peer and media resistance training, peer leadership/peer helper programs, children of substance abuse groups, and parenting and family skills training classes. Youth or adult involvement in the design, implementation, and evaluation of these educational training programs is encouraged (National Assembly 1994).

Skills training approaches help students learn appropriate and adaptive social skills so they are able to resist pressures to use substances. Research has shown that youth who possess a variety of social competencies are more resistant to substance abuse. To improve their effectiveness, skills training programs often are incorporated into comprehensive programmatic efforts or a curriculum is expanded to include the training program. The currently popular skills training programs, known as social competency programs, approach prevention from three perspectives:

- Social influence approaches involve resistance training to media persuasion and social skills training for resistance to peer influences (Pentz 1983; Pentz et al. 1989);
- Normative education approaches encourage adoption of antidrug use norms and correct inflated estimates about the number of youth who use substances (Hansen 1992; Hansen and Graham 1991); and
- Life skills and social skills approaches teach communication skills; stress-, anger-, and anxiety-management skills; and the skills to select nonsubstance using friends, and to resist media and peer pressure to use substances (Botvin et al. 1990 a,b; Botvin and Botvin 1992). Skills development programs often include training in assertiveness techniques to help youth avoid negative influences.

Young people who have a variety of social competencies are more resistant to substance abuse. Social competencies often included in youth skills training programs are assertiveness to avoid negative influences to use substances, communication skills, decision making, ability to restore self-concept, anger and stress management, and social skills to make friends.

A wide variety of techniques are employed in these programs. Many programs employ behavioral skills training techniques involving demonstrations of effective and ineffective behaviors and participant role plays with feedback and reinforcement for behavior change.

The IOM (1994, p. 264) review of substance abuse prevention concluded that, when combined, the peer resistance and normative education approaches appear to have some effectiveness in "producing modest significant reductions during early adolescence in the onset and prevalence of cigarette smoking, alcohol, and marijuana use across a number of experimental studies conducted by a variety of investigators (Ellickson and Bell 1990; Hansen et al. 1988; McAlister et al. 1980; see Hansen 1992 for a recent review). " Peer-led classes appear to be more effective than teacher-led classes (Botvin et al. 1990a; Goplerud 1993; Klepp et al. 1986; McAlister 1983; Perry et al. 1989, 1990).

To improve effectiveness, these programs often are imbedded within a supportive, comprehensive program or the curriculum is expanded. A 24-session version of Botvin's Life Skills Training Program, implemented in Philadelphia alternative schools, was found to increase knowledge about tobacco and alcohol use, increase negative attitudes towards marijuana use, and decrease school problems, incidents of drunken aggression, and legal problems. Although the Super II (Atlanta, Georgia) program with 11- to 16-year-olds was only an eight-session curriculum (because it is part of a larger development program), the program was able to increase substance abuse knowledge and self-esteem and to decrease substance abuse and related problems.
School-based universal programs are not without potential risks for at-risk or substance abusing students. Several studies have found increased use of tobacco and alcohol in students who were already using (Ellickson and Bell 1990; Gottfredson 1990; Moskowitz 1989). The IOM (1994) concluded that school campaigns that show substance abuse as non-normative behavior may isolate students who are already using substances. Selective prevention approaches are needed to avoid isolating students who are at risk from positive, nonusing friends.

Prevention education and skills training programs can be universal, selective, or indicated. If every student in a school is given assertiveness training, then the training program is a universal prevention effort. If only at-risk subgroups are given the training, the program is a selective prevention effort. If specific students are given the assertiveness training because they are experiencing early signs of substance abuse or other behavior problems, the training is aimed at those and related behaviors and the training program is an indicated prevention effort.

Tutoring Programs

Selective and indicated tutoring programs are used as prevention approaches to reduce early signs of substance abuse in youth who have academic problems and who are at risk by improving academic achievement, decreasing peer rejection, and decreasing disruptive behavior (Cole and Krehbiel, 1984). Some tutoring programs employ a cross-age approach in which older students tutor younger students. Other programs use adult mentors, college students, or teachers to tutor students, either during or after school hours.

Mentoring Programs

Mentoring programs attempt to convey positive values, attitudes, and life skills through the development of a one-to-one relationship with a positive role model. The mentor may be a community volunteer who is matched for cultural similarity to the youth or a college student, parent, or business professional. This approach is typically part of a more comprehensive program. Some effective intergenerational programs have used retired people as mentors, and some programs have combined big brother/big sister program models with wilderness outings. The SMARTmoves program, for example, a substance abuse prevention curriculum based on a peer resistance skills training model, has been effectively implemented in public housing communities by Boys and Girls Clubs (Schinke et al. 1992).

Peer-Oriented Programs

Peer-oriented programs offer an important and effective prevention strategy for youth because association of vulnerable youth with substance-using peers has been shown to be a significant immediate risk factor for substance abuse (Dielman et al. 1989a; Newcomb et al. 1986; Swaim et al. 1989). Many prevention programs include some form of peer-oriented approach, such as peer resistance training or normative education. Resistance to peer pressure can be increased through the involvement of young people in peer resistance training programs that have been shown to delay initiation of substance abuse (Dielman et al. 1989b; Pentz et al. 1989). Research suggests that peer programs may increase the effectiveness of prevention efforts by focusing on strategies and providing guidance that help youth learn to select more appropriate peers. For information on criteria for selecting peers for peer-oriented training programs, contact the researchers cited.

Family-Based Prevention Strategies
Parent and family universal, selective, and indicated programs are important drug abuse prevention approaches for youth, because parents are the primary agents for the socialization of children. Coombs and colleagues (Coombs et al. 1991) found parental influence for 9- to 17-year-old Hispanic/Latino and white youth to be more important than peer influence in the youth's reasons for not abusing substances.

Family-based universal approaches include parent education programs, parent involvement programs, and parent and family skills training programs. Selective and indicated family-based approaches include parent and family skills training programs; parent support groups; parent-peer groups such as Tough Love for troubled youth; family case management and home visits; family counseling; and structured family therapy. For more information on family therapy approaches to drug abuse prevention, especially structured family therapy, see the Handbook for Program Administrators in the NIDA Working with Families to Support Recovery RDA package and the Family Dynamics and Interventions Clinical Report.

Until recently few efforts were made to involve large numbers of parents in the general population in universal family-based prevention programs (Rohrbach et al., in press). Therefore, outcome data on the effectiveness of universal family-focused efforts are scant. One example is Preparing for the Drug-free Years (Hawkins et al. 1987), a five-session program for junior-high school students and their parents. A version of this program is designed to improve school success of second graders, lead to lower rates of school failure, aggressive behavior, delinquency, and alcohol abuse by the time students reached the fifth grade (Hawkins et al. 1992b).

Parenting and Family Skills Training and Counseling Programs

These types of programs have been shown to be effective in reducing individual and family risk factors for substance abuse among children whose substance-abusing parents were either in treatment (Catalano et al., in press; DeMarsh and Kumpfer 1986; Kumpfer 1993; Kumpfer et al. 1996) or not in treatment (Kumpfer 1990). Most parenting and family skills training programs can demonstrate immediate reductions in depression, aggression, conduct disorders, poor family management, intentions to use tobacco and alcohol (DeMarsh and Kumpfer 1986; Bry 1983), and school achievement and delinquency in pre-adolescents (Fraser et al. 1988; Patterson et al. 1982; Patterson et al. 1992). Work by DeMarsh and Kumpfer (1986) suggests that parent-child relationships improve more when programs involve work with the entire family than when only the parents receive training or when the program involves separate child skills training and parent training. Overall, family-focused strategies have been shown to be superior to child-only approaches (McMahon 1987).

Several variations of family skills training have been developed that can be tailored to the needs of a family. Family counseling, in which a therapist monitors the changes in parent and child interaction patterns throughout the counseling process, has been useful for many families at risk. Lipsey (1992) found that family counseling was effective with young people at risk for substance abuse. Skills-oriented counseling had the greatest effect on youth at risk for substance abuse. Family skills training, where the target child and other family members participate in structured activities designed to modify interaction patterns, appears to be the most promising family-focused approach to prevention.

Structured Family Therapy Programs

Indicated prevention programs have been used with young people who have initiated substance abuse or manifested other behavioral problems. Effective family programs include the Family Effectiveness Training Program (FET), the Bicultural Effectiveness Training Program (BET), and Structural Family Therapy programs developed by Dr. Jose Szapocznik at the University of Miami (Santisteban et al. 1993; Szapocznik et al. 1989a,b). The Handbook for Program Administrators in the NIDA Working with Families to Support Recovery
RDA package and the *Family Dynamics and Interventions Clinical Report* are good resources on indicated family approaches.

A number of prevention researchers support structured family-based prevention strategies as necessary components of any comprehensive prevention plan for delinquency (Fraser et al. 1988; Loeber and Stouthammer-Loeber 1986; McMahon 1987) and substance abuse (Kaufman and Kaufman 1979; Kaufman 1986; Kaufman and Borders 1988). As noted by Kazdin (1993), prevention programs with early and broad impact, such as parent and family programs, are critically important to the success of prevention.

**Community-Based Prevention Strategies**

Broad-based community prevention efforts have kept substance abuse issues in a prominent place on the public agenda. Community prevention efforts have produced a constituency to press for more comprehensive policies to address substance abuse issues at the Federal, State, and local levels.

Strengthening community environments entails two distinct prevention efforts: the first targets individuals and groups, and the second targets settings and circumstances associated with substance abuse problems. In the first instance, prevention efforts are initiated through community agencies and organizations that focus on prevention goals for at-risk individuals and groups. These types of efforts are represented by the selective and indicated prevention approaches described in this handbook. In the second instance, prevention initiatives are directed toward factors within the community (such as substance related policies and community norms) that support or are otherwise associated with, the substance abuse problem. These types of initiatives are described in the discussion of universal prevention; the most salient example being the health policy change component of Project STAR.

Community-based approaches address substance abuse prevention through a number of points of contact, including community organizations, governmental and nongovernmental agencies and organizations, religious and educational institutions, and the workplace. The most effective community approaches touch on all these contact points and include public awareness campaigns; information clearinghouses; alternative programs such as youth clubs, sports, and recreation; mentoring and rites of passage programs; and skills training programs.

**Public Awareness Programs**

Public awareness programs are the primary universal approaches for providing community-based prevention for adults. Such programs include media campaigns, films, pamphlets, clearinghouse resource centers, radio and television public service announcements, health fairs, advertisements, hot lines, and speakers' bureaus. The general consensus among prevention researchers is that, when combined with other community prevention strategies, media campaigns provide needed information and positively affect a community's social norms (Wallach 1985).

**Alternative Programs**

Selective alternative approaches to substance abuse prevention are provided through recreational, athletic, cultural, and educational activities that are sponsored by community organizations or schools for individuals at risk for substance abuse. The rationale for alternative programs is that they reduce substance abuse by providing young people with alternatives that are incompatible with substance abuse. Because research supports a link between thrill seeking and substance abuse (Hawkins 1992a), many alternative programs involve
experiential education activities such as wilderness experiences, ropes courses, mountain climbing, rappelling, and rafting.

Alternative indicated programs include gang and delinquency prevention and cooperative community service programs, such as removing graffiti from public buildings and developing community murals, building homes, and volunteering (Tobler 1986). One alternative program, Amazing Alternatives, developed by Murray and Perry (1985) is a systematic approach to prevention that helps youth identify health-enhancing alternatives to meet their needs.

Rites of Passage Programs

Rites of passage programs focus on skills development through strategies designed to build resiliency. These programs encourage the development of responsibility in young people as members of the adult community. They also emphasize the importance of values and youth's link with the community. Some selective and indicated prevention programs include group discussions, while others focus on skills training and competency development.

Comprehensive Community Coalitions

Prevention professionals have begun to take a broader view of substance abuse by emphasizing a shared responsibility for prevention throughout the community. To maximize their effectiveness, substance abuse prevention programs have been included in efforts to create community coalitions. Community coalitions bring together diverse groups and resources to plan and implement comprehensive, local prevention efforts. Such efforts are designed to strengthen school, family, and community environments.

The community coalition, as an organizing strategy for substance abuse prevention, has moved the prevention field to a greater consideration of multiple, comprehensive local prevention strategies that are more likely to be effective. The underlying premise of this comprehensive approach is that one prevention approach that affects only one area of influence on youth is not likely to be as effective as a comprehensive program that addresses multiple sources of influence, such as families, peers, school staff, community members, churches, employers, and coworkers. Comprehensive community coalitions incorporate groups and activities as diverse as substance abuse prevention task forces and church-sponsored youth groups.

Although they increase resources and the availability of substance abuse prevention services, coalitions require specific strategies to improve the school, family, and community environments of young people to reduce their risk for substance abuse. Determining the right prevention strategy for a group or individual can be accomplished most effectively if the strategy is selected to address risk factors within the individual and his or her environment. Community prevention approaches aimed at vulnerable groups and individuals focus on three primary sites for intervention: schools, families, and communities.

An effective comprehensive community coalition for substance abuse prevention is the Midwestern Prevention Project (Pentz et al. 1989, 1990), which is highlighted in this handbook and described in greater detail in Drug Abuse Prevention for the General Population.

Guidelines for Effective Drug Abuse Prevention

There is no single, best prevention program, but some programs will be more effective with certain target groups. The following general guidelines are based on current research.
• Comprehensive, multicomponent prevention approaches are more effective than single element approaches for modifying a broader range of risk factors.

• Long-term prevention programs have a longer lasting impact on at-risk groups.

• The higher the level of risk the greater the intensity of the prevention effort required for maximum effectiveness.

• Tailoring the prevention strategy to the cultural traditions of the population is critical to success.

• Theory-based prevention programs that address risk and protective factors from a developmental perspective by targeting the most receptive ages or strategic times are likely to have greatest impact.

• Prevention strategies applied early in life are likely to be more effective for children in at-risk environments.

• Family-focused prevention efforts may have a greater impact than strategies that are only child-focused or parent-focused.

• Prevention programs in which staff are warm, empathetic, genuine, competent, and non-substance-abusing are more effective than programs whose staff do not possess these characteristics.

This chapter has examined the myriad risk and protective factors associated with substance abuse that affect the outcomes of prevention programming efforts. Having described who is at risk and some of the factors that protect against substance abuse, the chapter presented examples of effective school-, family-, and community-based prevention programs and strategies that can be used to address those risk and protective factors. Finally, this chapter listed some general guidelines for prevention practitioners to use in selecting programs for different target groups.

Substance abuse and its related problems raise complex issues, including the types of substances (alcohol, cocaine, heroin, and marijuana) used and the potential costs in addressing them. Efforts to address the resolution of these problems will require appropriate and well thought-out intervention strategies. When implementing substance abuse prevention programs, practitioners should consider the research on which prevention programs are based. The following chapter provides some guidance for practitioners in their consideration and selection of research-based prevention approaches that may be appropriate for their particular communities. A more detailed discussion of funding to cover the cost of prevention initiatives is provided in another document in this RDA package, Community Readiness for Drug Abuse Prevention: Issues, Tips and Tools.

The following chapter will discuss the rationale for the use of empirical research in the selection and implementation of substance abuse prevention strategies and programs. The chapter will focus on some of the issues to consider and specific steps that prevention practitioners can take when choosing research-based prevention programs.
WHY RESEARCH-BASED PREVENTION?

Research findings are an important guide to which prevention strategies work and, more important perhaps, which do not. The history of medicine, social work, psychiatry, and other helping professions is full of well-intentioned plans, programs, and projects that their advocates believed had to work, but that later research found made no difference or made matters worse. Only theory-based, carefully planned, well-executed, and critically analyzed research can determine what works and what does not.

This chapter discusses some of the issues that research indicates practitioners should consider in the selection and implementation of substance abuse prevention programs. The chapter then presents specific steps for choosing research-based prevention programs. The chapter concludes with a discussion of issues to consider in the use of selective and indicated prevention program approaches.

Knowledge gleaned from research of issues involved in implementing prevention programs at the community level can help practitioners make important decisions that can affect program outcomes. Some program implementation issues include:

- tailoring program components for maximum benefit;
- targeting programs to the most appropriate groups;
- determining comparability of program effects; and
- understanding the importance of program evaluation.

Tailoring Program Components for Maximum Benefit

Practitioners must consider not only research findings on a specific program element (for example, an educational program or an alternative recreational program), but also the effects that may occur when several strategies (that may not be especially powerful individually) are combined into a comprehensive, coordinated program. In a comprehensive program, the whole may be greater than the sum of its parts. Additionally, research results that suggest a program has no effect in one group do not mean that the program will not work for another group. For example, a resistance skills training program aimed at a subset of at-risk students in one school may not have much effect, but the same program offered to all students in the school may be effective in lowering the overall incidence of substance abuse in the total school population.

Targeting Programs to Appropriate Groups

Federal government research policies require that studies be conducted with diverse populations in terms of gender and race/ethnicity, which is important to ensure that all groups are studied as fully as possible. However, it is reasonable to expect that prevention programs will have different effects on various groups because cultural, psychological, and other factors will affect how people respond to different prevention efforts. For example, the pressures to smoke crack or its availability may be quite different for adolescents living in inner-city neighborhoods than for those living in suburban or rural areas. Therefore, a selective prevention program that works in one setting may not be as effective in another, even though the age group, gender, and racial/ethnic origins of the program participants are the same.
Determining Comparability of Program Effects

What does all this mean for decision making about effective prevention programs? Although it is important to determine whether a program concept has been evaluated using a rigorous research approach, it is important to look beyond whether the research showed positive findings. The prevention practitioner must consider who was enrolled in the study to determine if the population and setting are comparable to the local situation. If they are comparable, then outcomes comparable to those achieved in the study should be expected. However, if the population and setting are not comparable, then perhaps the program can be adjusted to fit the local situation. For example, an indicated school-based peer education program may be effective in one community but impractical in another where a large proportion of commuting students preclude an afterschool program for most of the students who would be eligible. However, the same basic approach might be developed in the context of recreational athletics, a community center, or religious institution.

The Relevance of Program Evaluation

Lack of research support, or even negative findings, may not mean a program idea that has not been empirically proven to work should be ignored. Sometimes the most important ingredient in program success is the commitment and enthusiasm of the providers and the community that wants to launch it. An approach that seems to make a lot of sense, given the problems in the community, might be worth pilot testing to learn whether the program seems to work for the particular environment and target audience.

This may not be as difficult as it sounds. NIDA has developed an RDA package on program evaluation, How Good is Your Drug Treatment Program?, that is available to help agencies and organizations without major resources conduct their own program evaluations. Although the RDA package on program evaluation focuses on evaluating treatment programs, some of the concepts and discussion in the package are relevant to prevention programs. For information about how to obtain this RDA package, see appendix A.

One of the most important aspects of the evaluation process is deciding what the program should accomplish and how to determine if the program is working. The program's goal then becomes a guidepost in determining its effectiveness.

Steps for Choosing Research-Based Prevention Programs

The following steps are guidelines for choosing a prevention program based on empirical research.

- **Step 1. Identify effective substance abuse prevention models and programs.**

  A good place to begin is to read reviews of the literature on the causes of substance abuse to become familiar with the most recent research. Some excellent sources include a review by Hawkins and colleagues (Hawkins et al. 1992b); Communities That Care (Hawkins et al. 1993) and The Making of a Drug-Free America (Falco 1993). Identify prevention programs that research has shown to be effective and discuss the possible advantages of those strategies within the particular community.

- **Step 2. Gather local data.**

  To obtain information about the local substance abuse problem, the prevention practitioner can:
- Contact other substance abuse prevention specialists within State or county government substance abuse agencies for any local household or school surveys that may contain clues to why certain youth abuse substances;

- Determine who the substance abusers are and what sorts of problems (consequences) attach differentially to their abuse of substances;

- Determine the characteristics of at-risk groups in terms of age, gender, race/ethnicity, education, and income, and whether these characteristics change for different substance abusers; and

- Find out if any geographic analyses have been conducted to determine at-risk neighborhoods. The Geographic Information System (GIS), a computer program for analyzing census data, can be used to determine demographic correlates of substance abuse by specified neighborhoods within a community. For more information on the GIS, see *Community Readiness for Substance Abuse Prevention: Issues, Tips and Tools*.

• *Step 3. Determine local causes of substance abuse.*

In choosing a research-based prevention program, practitioners need to determine which strategies will alter the causes of substance abuse in local at-risk populations. Local research studies may be useful resources for relevant information. This information may be obtained by contacting researchers at local colleges or universities who may have conducted such studies. The State's division on substance abuse often will have information about the best researchers to contact.

It is possible that no studies have been conducted to determine why vulnerable individuals in the local population abuse substances. National research studies may be a useful source of research information. To establish the local validity of national research results, focus groups might be conducted with local community residents—parents, teachers, youth workers, therapists, and/or young people themselves—to determine why persons at high risk use substances. Surveys developed with the help of local researchers also may yield useful information.

• *Step 4. Determine the at-risk population(s).*

Once a determination is made of the major groups of substance abusers, the groups and/or individuals at risk can be targeted for prevention programs. The focus of the prevention efforts may be the entire community, specific subgroups, or individuals.

• *Step 5. Determine where to target prevention efforts.*

At this point, a practitioner can determine where to target the prevention effort. Decisions must be made about whether prevention efforts should occur:

- Before any risk indicators appear in the general population—*universal* approaches would be called for;

- At the point where specific subgroups have been identified to be at risk—*selective* approaches would be appropriate; or
At the point where individuals have early signs of substance abuse or problems associated with substance abuse, such as poor grades, isolation, or antisocial behavior—*indicated* approaches would be required.

- **Step 6. Determine where to focus prevention efforts.**

Next, the practitioner must decide where to focus prevention efforts. The Prevention Strategies table 1 (pages 26 and 27) is useful for helping to determine whether to focus a prevention effort on the school, the family, or the community and where the best access to the at-risk groups and individuals can be achieved.

- **Step 7. Determine if the community is ready for prevention efforts.**

The extent to which the community is ready to undertake a prevention program is critical to the overall success of the effort. The practitioner must objectively assess community readiness. In areas where the community is determined *not* to be ready, *Community Readiness for Drug Abuse Prevention: Issue, Tips and Tools* and *Drug Abuse Prevention and Community Readiness: Training Facilitator's Manual* in this *Drug Abuse Prevention* RDA package are available to provide guidance.

- **Step 8. Choose a prevention approach.**

Choosing a type of prevention approach will depend on the information gathered in the seven preceding steps. For example, the practitioner will need to determine which approach(es) will best address the problem precursors and whether the necessary resources are available to implement a strong, effective prevention program. The practitioner may find the stand-alone resource manuals for universal, selective, and indicated prevention in this set of RDA materials to be particularly useful.

**Considerations in Planning a Selective Prevention Intervention**

Because of increasing evidence that some youth who are at risk for substance abuse can be identified as early as the first grade (for example, certain types of aggressive youth, see Kellam and Brown 1982; Kellam et al. 1991), prevention research is being focused on the long-term support needs and environmental modifications that can reduce the degree of vulnerability among this highly vulnerable group (Cole et al. 1994). Thus, selective prevention strategies can begin as early as kindergarten for youth who have been identified by teachers and/or parents as being at risk for subsequent behavior problems. In some cases the implementation of selective programming at earlier ages for at-risk group members will delay or eliminate the need for indicated programming at some time in the future because the selective program addresses risk factors before symptomatic problem behaviors emerge. Parent and family skills training are selective prevention approaches that can be implemented early before the problems have a chance to increase in severity.

**Special Issues in Implementing an Indicated Prevention Program**

Several important issues need to be considered when planning an indicated prevention program:

- Using valid and reliable measures of risk factors and symptomatic behaviors to ensure that actual at-risk youth are recruited for the program and to help monitor improvements related to program participation;
• Negative labeling and the potential for stigmatizing youth in indicated prevention programs; and

• How to begin prevention programming.

Some prevention specialists (Hawkins et al. 1987) believe that prevention efforts should target at-risk and problem-prone schools, neighborhoods, or communities rather than individuals, because of concern about labeling individuals. The broad targeting of schools or neighborhoods may be one solution to attracting and recruiting vulnerable youth into prevention programs without labeling them as at-risk. Involving some youth and families in prevention programs that they do not need and that may have negative effects is not only costly and ineffective, it is potentially unethical. However, if the concern about labeling is not addressed, then youth may be denied services from which they might benefit.

Assessment of the presence of behavioral or emotional precursors of substance abuse (such as conduct disorders, depression, and delinquency) and early signs of substance abuse are important considerations for prevention practitioners when designing indicated prevention programs. The practitioner must determine that potential program participants possess the factors that place them at risk for substance abuse. Such assessment can be accomplished through a number of means. Teachers and school counselors or parents can administer standardized test batteries that can be used to diagnose problems. Risk assessment instruments also can be used to determine who is at risk. One strategy might be to have youth who are suspected of having a problem referred to an indicated prevention program based on a risk assessment. Then indicated prevention activities can be created that address each risk factor and associated problem behavior.

This chapter has presented an overview of research-based prevention, including a discussion of some of the important factors that practitioners should consider when implementing substance abuse prevention programs. The chapter discussed the rationale for tailoring prevention program components for maximum benefits and targeting prevention program activities to appropriate audiences. The importance of determining the comparability of research-based program efforts for particular population groups and the relevance of evaluating the effects of prevention programming efforts were also discussed. This chapter presented specific steps for choosing research-based prevention programs and some issues to consider in the use of selective and indicated prevention program approaches.

The following chapter will present an overview of the three program models highlighted in this set of drug abuse prevention RDA materials that are case examples of universal, selective, and indicated prevention strategies. Project STAR, the Strengthening Families Program, and the Reconnecting Youth Program are each described according to their key elements.
OVERVIEW OF PREVENTION PROGRAM MODELS

The research presented in this handbook has shown that individuals in at-risk populations are more likely to be exposed to certain biological, psychological, social, and environmental factors that place them at increasingly higher risk for substance abuse than individuals who have not been exposed to those factors and/or possess protective factors that increase their resilience. Prevention research indicates that theory-based prevention models and programs that focus on risk and protective factors can prevent adolescent substance abuse. The following substance abuse prevention program models are examples of research-tested universal, selective, and indicated prevention approaches. The programs described here are variations of the models introduced in the preceding chapter. These descriptions show how the models can be adapted to different situations.

These three examples are presented for illustrative purposes because they have demonstrated effectiveness in preventing substance abuse. They are examples of programs that prevention practitioners might consider implementing in their communities. These model programs are not being endorsed by NIDA. More detailed information on these program models can be found in a video prepared by NIDA entitled Coming Together on Prevention and in the following resource manuals, which can be ordered separately:

- Drug Abuse Prevention for the General Population;
- Drug Abuse Prevention for At-Risk Groups; and
- Drug Abuse Prevention for At-Risk Individuals.

Each of these manuals contains a resource section. The resource information includes the names, addresses, and telephone numbers of persons to contact for specific information about the respective programs; training and technical assistance opportunities and resources; and other information about the model programs including costs and available program-related materials.

Universal Prevention: Project STAR

The Midwestern Prevention Project, Project STAR (Pentz et al. 1989, 1990), is a communitywide, multicomponent universal substance abuse prevention program for students in early adolescence, in grades seven and eight. Project STAR (Students Taught Awareness and Resistance), which uses the school, family, and broader community environments as the launch sites for prevention programming, began in 1984 in Kansas City, Missouri and was later replicated in Indianapolis, Indiana. The Kansas City program is referred to as Project STAR and the Indianapolis program as Project I-STAR. Unless otherwise specified, the term Project STAR refers to both programs.

This research-based, universal prevention program has the following five elements:

- a school-based program;
- mass media programming;
- a parent program;
- community organization; and
• health policy change.

Project STAR is a universal prevention program because an entire community receives the prevention messages through the media, and all the residents benefit from the community organization and health policy changes. All of the children in the designated grades receive the school program and their families receive the parent program without regard to their individual risk status or their membership in an at-risk subgroup.

The five elements of Project STAR are designed to be implemented in the sequence given. The school-based program and mass media programming are implemented concurrently, and the media component continues throughout the project. These are followed by the parent program, community organization, and the health policy change component. Some overlap occurs in the implementation of all these elements. This sequencing is recommended to increase the visibility and support and, ultimately, the impact of the project at all levels within the community. Each element is briefly described in the following paragraphs.

School-Based Program

The core of the school-based program is a social influence curriculum that is integrated into classroom instruction by trained teachers over a two-year period. During the first year, a 13-lesson core curriculum is taught, followed by a five-lesson booster curriculum in the second year. Each of the lessons takes approximately 45 minutes of class time to complete. Classroom work is supplemented by homework that is completed by both students and parents. Teachers are given an intensive three-day training (two days for the basic curriculum, one day for the booster curriculum) during which they learn the Project STAR teaching methods and strategies to encourage homework participation. This educational component focuses on increasing students' resistance skills. In the process, an antidrug climate is established throughout the school and community. This is accomplished through other interrelated facets of the school program, specifically, the active support of the school administration—principals and school district personnel—and student skill leaders who serve as role models for various aspects of skill development.

Mass Media Programming

Mass media programming is used to introduce, promote, and reinforce the implementation and maintenance of Project STAR. The media component, which begins at the same time as the school component and continues throughout Project STAR, is designed to provide the most effective means to disseminate the prevention message throughout the community. It also increases exposure of the project and relevant substance abuse issues. Representatives from the media initially are encouraged to attend a two-hour overview session conducted by program staff. A media representative is then encouraged to participate formally in the community organization component of the program. Contact is maintained with the print, television, and radio media through press releases and other public relations strategies. Program staff work with advertising agencies and communications or public relations departments in businesses or universities to develop the content for public service announcements and educational or training tapes.

Parent Program

The parent program involves parents in several ways to increase student participation and expand the educational reach of the project. Parents are encouraged to participate in the school component by working with their children on homework assignments that they are required to complete together. Parents are encouraged to participate in a school-based parent organization that organizes initiatives and activities that limit youths' accessibility to substances, supports fundraising efforts, and backs local school policies on substances. The
parents are also given training opportunities that help develop effective communication, substance use resistance skills, and other techniques that support their children's substance-free behaviors. This parent skill-training program consists of two 2-hour sessions conducted at the school site. Parents are encouraged to participate in the community organization component of Project STAR.

Community Organization

Community organization is the glue that holds Project STAR together. It is a formal organization designed to develop support for Project STAR among volunteers and leaders from all sectors of the community and to oversee the implementation and maintenance of the program. Community organization involves local leaders who work to ensure the integrity of the project, provide direction regarding the development of health policies concerning illicit drugs, help maintain communitywide support for substance abuse prevention, develop community campaigns to complement other program components, and help identify sources of consistent funding.

Health Policy Change

The health policy change component of Project STAR is the mechanism used to develop and implement local health policies that affect drug, alcohol, and tobacco laws. Policy development is one of the tasks of community organization. Policy changes can include monitoring drug-free school zones, setting policies for drug-free workplaces, restricting smoking in public places, and establishing guidelines for teacher referral of students to substance abuse counseling programs.

The results of extensive evaluations in Kansas City and Indianapolis indicate that Project STAR is an effective multicomponent, communitywide universal prevention strategy for reducing youth substance abuse and changing students' attitudes toward drug and alcohol abuse. Specifically, the Kansas City project results showed a significant decrease in alcohol, tobacco, and marijuana use among the students who participated in the project one year following their participation. This decrease in tobacco, alcohol, and marijuana abuse was maintained for more than three years after program participation.

Similar results from the Indianapolis project showed that students who participated in the program were less likely to smoke marijuana, drink alcohol, and abuse illegal drugs than students who did not participate in the program. The overall effectiveness of the Midwestern Prevention Project is discussed in greater detail in Drug Abuse Prevention for the General Population. As a result of the significant impact of the project on substance abuse among youth in those two midwestern cities, other jurisdictions have implemented and are beginning to evaluate community substance abuse prevention programs like Project STAR.

Selective Prevention: The Strengthening Families Program

The Strengthening Families Program (Kumpfer 1987; Kumpfer et al. 1989) is an example of a multicomponent, family-focused selective prevention program for 6- to 10-year-old children of substance abusers. This is a selective prevention program because the parents of these children have abused substances and the children as a group share this familial risk factor for future substance abuse. The children involved in the program are not individually assessed to be at risk for substance abuse. The Strengthening Families Program (SFP) began in 1983 as an effort to help substance-abusing parents improve their parenting skills and reduce the risk factors for their children. The SFP provides prevention services through a group modality strategy that includes the following three elements:

- a parent training program;
- a children's skills training program; and
• a family skills training program.

The SFP is presented in 14 consecutive weekly sessions, each lasting from two to three hours. Each week focuses on a different topic. In the first hour, the parents and children meet separately in their respective skills training groups. During the second hour, the parents and children come together for family skills training. Announcements before the training begins, breaks between groups, and meals can take an additional hour. The optimal parent group consists of six to eight sets of parents (or eight to twelve individual parents), and the optimal children's group consists of six or seven children. After the second hour, participants have dinner and listen to a speaker, film, or other entertainment related to substance abuse prevention. Descriptions of the three elements follow.

Parent Training Program

The parent training program is designed to improve parenting skills and diminish the parent's substance abuse. Parents work with trained program implementers or therapists to learn appropriate ways to deal with their children's problem behaviors and alternative ways to increase positive interactions with their children. They use a structured parent handbook that contains worksheets, activity sheets, contracts, and plans for group activities. They are guided through group exercises by the therapists.

Children's Skills Training Program

The children's skills training program is designed to decrease negative behaviors and develop more socially acceptable behaviors in the children of substance-abusing parents. The children work with trained program therapists to learn appropriate social and behavioral skills to enhance positive interactions with their parents that will serve to improve the family environment. The children use a structured children's handbook that contains worksheets, activity sheets and stories, and are guided through group exercises and activities by the therapists.

Family Skills Training Program

The family skills training program is designed to change the family environment by involving the parents and their children in learning and practicing together as a family the new behaviors they are learning in their skills training programs. Family members are given exercises to practice at home to reinforce the behaviors they have learned during the training. Family sessions are designed to help parents develop a better understanding of the emotional needs of their children while learning to enjoy them. At the same time, the supportive and nonpunitive environment helps the children learn to express the feelings that are often suppressed in their efforts to cope with their stressful family environments.

The SFP model has been adapted for use with diverse racial/ethnic groups, and training manuals have been developed for these adaptations. Although the program was developed for predominantly white, middle-class families in and around Salt Lake City, the SFP has been made culturally appropriate for use with urban and rural African-American families, Asian/Pacific Island families, Hispanic/Latino families, and families from low socioeconomic status regardless of race/ethnicity. The program is being evaluated for use with 10- to 14-year-olds as well.

Evaluations of the SFP indicate that it is an effective, family-focused, selective prevention strategy for enhancing family relationships. The SFP was shown to be effective in reducing family conflict, improving family communication and organization, and improving the behavior of the children by reducing conduct
disorders, aggressiveness, and emotional problems. The overall effectiveness of the Strengthening Families Program is discussed in greater detail in Drug Abuse Prevention for At-Risk Groups.

**Indicated Prevention: The Reconnecting Youth Program**

The Reconnecting Youth Program (Eggert et al. 1990) is an example of a school-based indicated prevention program that targets youth in the ninth through twelfth grades, with multiple risk factors for substance abuse and signs of multiple problem behaviors such as substance abuse, depression, and suicidal ideation. The program teaches skills to build resilience to risk factors and to moderate the early signs of substance abuse. This is an indicated prevention program because students are individually assessed and must meet the following criteria to qualify for the program:

- Below average credits earned for the student's expected grade level;
- In the top 25th percentile for class absences per semester; and
- A pattern of declining grades with a grade point average (GPA) less than 2.3 (on a 4.0 scale), or a precipitous drop in GPA of 0.7 or greater.

Any student meeting *either* of the following criteria also qualifies for the program:

- Prior school dropout status; or
- A referral from any school personnel—teacher, counselor, school nurse, secretary, administrator—as being in serious jeopardy of school failure *and* meeting one or more of the preceding criteria.

The Reconnecting Youth Program is based on a psychoeducational model and incorporates social support and life-skills training in which students acquire skills through a positive peer group approach, nonconventional teaching methods, and flexible teaching environments. This research-based program consists of the following elements:

- Personal Growth Class (PGC);
- Social activities and school bonding; and
- School system crisis response plan.

**Personal Growth Class**

The PGC combines positive peer group work with life skills training. The life skills training curriculum is incorporated into the regular classroom and is offered as a 20-week course that meets five days a week for 55 minutes each day. It is recommended that the class be offered for credit, although typically it is offered as an elective. The life skills training curriculum teaches four skills described below. Each skill is designed to be taught in four-week units, with a two-week introductory overview, or *getting started* unit, at the beginning of the course, and a two-week *wrap-up* unit at the end. Through the daily classroom sessions, students learn skills to improve their school performance and personal relationships, and to interact with a new peer group struggling with the same life situations. The life skills training units are as follows:
• Self-esteem enhancement;
• Decision making;
• Personal control; and
• Interpersonal communication.

**Self-Esteem Enhancement**

The self-esteem enhancement unit is designed to help group members appreciate the meaning of, and processes for, enhancing their self-esteem. The group learns what self-esteem is and how it affects their daily lives. They learn and practice skills of *positive self-talk* and self-appraisal, and they learn how to accept responsibility for their actions, how to handle criticism, and how to set personal goals for self-improvement. The group members learn specific skills—visualization, self-praise, group praise, and relaxation techniques—for increasing self-esteem, and they learn how to apply the skills in a variety of situations. These skills are used in teaching the other three units.

**Decision Making**

The decision-making unit is designed to teach group members skills for effective decision making as a strategy for personal empowerment. They learn that decisions have consequences and how to base decisions on the consequences rather than impulse. Students learn how to make, set, and achieve goals, and they learn how to make decisions as a group. They also learn strategies for reaching agreement in a group, resolving conflicts, and making individual and group contracts.

**Personal Control**

The personal control unit is designed to teach the group to use problem-solving skills to reduce stress and manage anger and depression. The group learns that moods are inner reactions to outside events and personal experiences. They learn to be aware of and to identify moods, and then to practice the strategies they have learned to manage these reactions more constructively.

**Interpersonal Communication**

The interpersonal communications unit is designed to foster strategies for effective interpersonal communication and conflict resolution. Group members learn about verbal and nonverbal communication, and they learn to apply effective communication strategies in negotiating with friends, teachers, and parents. Finally, the group learns and practices skills for effectively resolving conflict.

**Positive Peer Culture**

In addition to the life skills training, a second feature of the PGC involves developing a positive peer culture. Skills training is presented in a structured sequence, within a positive peer group in which students are given key concepts and strategies for improving specific skills. Students are given an opportunity to practice those skills with real-life situations. An adult leader guides the students in the development of these new skills and provides feedback as they practice the new ideas and concepts.
The PGC employs group dynamics as a major aspect of the learning process, and the group experience provides the motivation and direction for learning to occur. As the group develops, the issues raised in the group become the basis for introducing and working on specific skills. By using group work and discussion skills, the leader is able to relate the students' issues to the planned skills training session and activities. The challenge for the group leader is to balance the students' daily needs and crises with related skills building, skills application, and group problem-solving applied to the students' current concerns and real-life issues. The curriculum allows flexibility as long as the class does not become a crisis management hour rather than a class designed to teach specific skills.

Social Activities and School Bonding

The second key element of the Reconnecting Youth Program, social activities and school bonding, is a practical extension of the life-skills training. The intent of this program element is to:

- reinforce health-promoting activities and teach students how to expand their repertoires of recreational and social activities;

- teach students to see service as an opportunity for growth; and

- provide the students with opportunities for developing close friendships and

- bonding to their school.

Social activities and school bonding activities differ in their purposes. Social activities occur outside of the school setting. Through participation in such activities, students learn to work with others to solve dilemmas and practice social skills they are taught in class. Substance-free weekends, in which students engage in an activity such as attending a sporting event together, are a cornerstone of the social activities element of the Reconnecting Youth Program. School bonding activities reconnect participating youth to the larger institution. The key for successfully bonding students with the school is to use the students' strengths to meet identified needs within the school. For example, students who relate well to others can act as mentors for younger students to demonstrate skills the younger students can use to build their resilience.

Crisis Response Plan

The third element of the Reconnecting Youth Program is a school-system crisis response plan for addressing suicide or accidental death due to the association between suicidal thoughts and substance abuse. The plan details methods for preventing suicide, responding to suicide or accidental death, and preparing for postsuicidal interventions. The plan provides guidelines for assessing suicidal behavior, making appropriate interventions, and responding to suicidal or accidental death. Information is included on how to train staff, students, and parents to recognize signs of suicidal thinking and to intervene appropriately.

Parents are encouraged to become involved in supporting the program through classroom activities; this may include providing assistance with at-home activities. They also are encouraged to learn the signs of substance abuse so they will be able to intervene early if the child develops a substance abuse problem.

Finally, the involvement of the broader community is encouraged as a means for supporting youth in the program. For example, school administrators and teachers are encouraged to establish links and form alliances with community groups, especially agencies and organizations that work with young people who are at risk for substance abuse and other problems, to strengthen the curriculum and the base of support within the community.
Evaluations of the Reconnecting Youth Program indicate that it is an effective strategy for reaching youth early in their substance abuse and antisocial activity before they drop out of school. The program was shown to be effective in reducing illegal drug abuse, reducing abuse progression, and decreasing drug abuse control problems and adverse use consequences. The program demonstrated its efficacy in enhancing personal control, reducing depression and suicide-risk behaviors, and improving the school performance and bonding of students with the school. The overall effectiveness of the program is discussed in greater detail in Drug Abuse Prevention for At-Risk Individuals.

SUMMARY AND CONCLUSIONS

Prevention practitioners and members of school and community task forces and coalitions are seeking the best prevention approaches for their local populations. This handbook has reviewed many causes of drug abuse and several prevention approaches. The root causes of drug abuse differ from person to person, and prevention approaches must accommodate these differences. The task for local prevention practitioners is to use the information in this handbook and other documents in the Drug Abuse Prevention RDA materials to select, modify, or design prevention programs to address these differences effectively. Prevention strategies must be developmentally appropriate, locally appropriate, gender-sensitive, and culturally relevant.

This handbook has provided an empirical basis for drug abuse prevention strategies and presented simple ideas to help practitioners:

- identify the relevant drug abuse issues in their communities;
- define a theory of prevention that will apply to the local community;
- determine the type of prevention programming that will be most appropriate for the community; and
- outline program implementation steps that can be undertaken for drug abuse prevention at the local level.

Equipped with this kind of information, a community can choose with greater confidence a prevention approach that stands a good chance of being effective in meeting its needs. There are a number of approaches, and combinations of approaches, that prevention practitioners can take in addressing drug abuse problems. This handbook provides guidance in determining which approach(es) will be most effective: universal prevention for the entire community, selective prevention for specific at-risk subgroups, and/or indicated prevention for individuals demonstrating subclinical signs of substance abuse behaviors and other related problems. The most effective prevention program for drug abuse problems is the one that gets the job done. When the prevention program has been properly selected and implemented, then it can be successful.
REFERENCES


CONTACTS AND RESOURCES: RESEARCH-BASED PREVENTION MODELS FOR DRUG ABUSE

The following drug abuse prevention program models are highlighted in the Drug Abuse Prevention RDA set of materials. The name and address of the principal investigator conducting the research for each model is provided, followed by information on the availability of training manuals, formal training services, consultation, and technical assistance.

Project STAR, a communitywide prevention program:

Mary Ann Pentz, Ph.D.
Department of Preventive Medicine
University of Southern California
1540 Alcazar Avenue, Suite 207
Los Angeles, CA 90033
Phone: (213) 342-2582
Fax: (714) 494-7771

Manuals, training, and technical assistance services are available from the research group at the University of Southern California, as follows:

- School component—teacher and peer leader training, manuals, and parent-child workbook;
- Parent component—parent and school principal training, manuals, and parent-child workbook;
- Community organization component—training;
- Policy component—training;
- Media component—training; and
- Evaluation—evaluation instruments, services, and data collection training tape.

Training costs are $150 to $250 per person per day, from a minimum of $1,500 up to a maximum of $2,500 per day, depending on the nature of the presentation. Technical assistance costs are negotiated on a case-by-case basis. Further information about materials, training, or technical assistance also can be obtained by contacting:

Project I-STAR
5559 West 73rd Street
Indianapolis, IN 46268
Phone: (317) 291-6844

Strengthening Families, a family-focused prevention program for children of substance-abusing parents:

Karol L. Kumpfer, Ph.D.
Department of Health Education
HPERN-215
University of Utah
Salt Lake City, UT 84112
Phone: (801) 581-7718
Manuals, training, and evaluation services and instruments are available from the program developers, evaluators, or implementors by contacting Dr. Kumpfer. A 3-day training costs $2,000 plus travel for a group of up to 16 participants.

Costs for program materials are:

- Family Training Therapist Manual $25
- Parents' Skills Training Manual 25
- Parent Handbook 25
- Children's Skills Training Manual 25
- Children's Handbook (6 to 12 years) 25
- Implementation Manual 25
- Evaluation Package 25

7-Manual Package Total: $175

African-American Parent Handbook 25

8-Manual Package Total: $200

Reconnecting Youth, a school-based prevention program for at-risk youth:

Leona L. Eggert, Ph.D., R.N.
Psychosocial and Community Health Department
P.O. Box 357263 University of Washington
Seattle, WA 98195
Phone: (206) 543-9455 or 543-6960
Fax: (206) 685-9551
e-mail: eggert@u.washington.edu

Consultation and technical assistance are available by contacting Dr. Eggert. Materials and training are also available. Program awareness can be gained in a day. Full-scale training requires 3 to 5 days and is limited to small groups. Prices for the training vary depending on the number of people to be trained. Rates are structured on an honorarium plus-expenses basis. A curriculum and leaders' guide, Reconnecting Youth: A Peer Group Approach to Building Life Skills, is available for $139. For materials and training, contact:

Susan Dunker or Peter Brooks
National Educational Service
1252 Loesch Road
P.O. Box 8
Bloomington, IN 47402-0008
Phone: (812) 336-7700
Toll Free: (800) 733-6786
Fax: (812) 336-7790
CONTACTS AND RESOURCES: COMMUNITY READINESS FOR DRUG ABUSE PREVENTION

Eugene R. Getting, Ph.D.
Scientific Director
Barbara Plested,
Research Associate
Tri-Ethnic Center for Prevention Research
Colorado State University
C79 Clark Building
Fort Collins, CO 80523
Phone: (800) 835-8091
Fax: (970) 491-0527

Abraham Wandersman, Ph.D.
Professor
Department of Psychology
University of South Carolina
Columbia, SC 29208
Phone: (803) 777-7671
Fax: (803) 777-0558

SOURCES OF INFORMATION ON COMMUNITY COALITIONS

The Anti-Drug Abuse Act of 1988 provided congressional authorization and funding for the Center for Substance Abuse Prevention (CSAP) to create more than 250 community partnerships nationwide (Davis 1991). Additional community substance abuse prevention coalitions and community action groups have been implemented by:

• State and local governments, for example, Rhode Island (Florin et al. 1992) and Oregon (Hawkins et al. 1992a);

• National foundations, for example, Henry J. Kaiser Family Foundation (Tarlov et al. 1987) and Robert Wood Johnson Foundation Fighting Back and Join Together coalitions (Robert Wood Johnson Foundation 1989);

• Federal Public Health Service agencies, for example, the National Cancer Institute's COMMIT and ASSIST tobacco and cancer reduction programs (Best et al. 1988; Shopland 1989), the Planned Approach to Community Health (PATCH) health promotion program of the U.S. Centers for Disease Control and Prevention (Kreuter 1992), and the Weed and Seed Program of the Bureau of Justice Assistance; and

• Schools and universities, for example, the university coalitions sponsored by the Department of Education/Fund for the Improvement of Post-Secondary Education (DOE/FIPSE) and local school boards.
POTENTIAL FUNDING SOURCES

Federal Grants

Most Federal substance abuse funding is provided as either demonstration and evaluation grants or prevention research grants. These funding mechanisms require evaluations and data collection processes to determine the effectiveness of the programs. These are not service grants (See list of Federal Government agencies).

Potential Federal funding sources for demonstration grants include:

- Center for Substance Abuse Prevention (CSAP);
- Center for Substance Abuse Treatment (CSAT);
- Office of Juvenile Justice Delinquency Prevention (OJJDP);
- Bureau of Justice Assistance (BJA);
- U.S. Department of Housing and Urban Development (HUD); and

Potential Federal funding sources for research grants include:

- National Institute on Drug Abuse (NIDA);
- National Institute on Alcohol Abuse and Alcoholism (NIAAA); and
- National Institute of Mental Health (NIMH).

Other Grants

Service grants are available through individual State block grant mechanisms or through local county funding sources.

FEDERAL GOVERNMENT AGENCIES

Bureau of Justice Assistance (BJA)
U.S. Department of Justice
633 Indiana Avenue, N.W.
Washington, DC 20531
Phone: (202) 514-6278
Implements national and multistate programs, offers training and technical assistance, establishes demonstration programs, and conducts research to reduce crime, enforce drug laws, and improve the functioning of the criminal justice system. Offers the following information clearinghouse:

Bureau of Justice Assistance Clearinghouse (BJAC): (800) 688-4252

**Bureau of Justice Statistics (BJS)**
U.S. Department of Justice
633 Indiana Avenue, N.W.
Washington, DC 29531
Phone: (202) 307-0765

Focuses on drugs and crime data and covers law enforcement and crime rates. Offers the following information clearinghouses:

BJS Automated Information System
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000
Phone: (202) 307-6100

Offers drug- and crime-related information and materials. Fax-on-demand and Internet services also available.

BJS Clearinghouse
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000
Phone: (202) 307-6100

Distributes drug- and crime-related publications.

**Center for Substance Abuse Prevention (CSAP)**
U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Rockwall II, 5600 Fishers Lane
Rockville, MD 20857
Phone: (301) 443-0365

Focuses attention and funding on the prevention of substance abuse. Offers the following hotline:

Drug-Free Workplace Helpline (DFWH): (800) 843-4971

**Center for Substance Abuse Treatment (CSAT)**
U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Rockwall II, 5600 Fishers Lane
Rockville, MD 20857
Focuses attention and funding on the development and assessment of treatment techniques and models. Offers the following hotline:

CSAT's National Drug Information and Treatment Referral Hotline: (800) 662-4357

**Centers for Disease Control and Prevention**

U.S. Department of Health and Human Services
1600 Clifton Road, N.E.
Atlanta, GA 30333
Phone: (404) 639-3311 or 3534

Researches and develops cures for diseases worldwide. Offers the following information clearinghouse:

CDC National AIDS Clearinghouse
P.O. Box 6003
Rockville, MD 20849-6003
Phone: (800) 458-5231

Offers information on AIDS-related resources and services. Publications are also available on substance abuse issues related to HIV.

**Crime Prevention and Security Division**

U.S. Department of Housing and Urban Development
451 Seventh Street, S.W.
Washington, DC 20410
Phone: (202) 708-1197

Awards drug elimination grants each year.

Drug Information and Strategies Clearinghouse
P.O. Box 6424
Rockville, MD 20849
Phone: (800) 578-3472

Offers the following information clearinghouse:

Distributes materials on substance abuse prevention in public housing.

**U.S. Department of Housing and Urban Development (HUD)**

451 Seventh Street, S.W.
Washington, DC 20410
Phone: (202) 708-0685

Focuses on all aspects of housing. Community programs target at-risk youth and work to improve neighborhoods.
Fund for the Improvement of Post-Secondary Education (FIPSE)
U.S. Department of Education Seventh and D Streets, S.W.
Room 3100
Washington, DC 20202-5175
Phone: (202) 708-5750

Funds drug and violence prevention programs aimed at students enrolled in institutions of higher education. Program encourages colleges and universities to develop programs to prevent alcohol and other drug use for their students and staff.

U.S. Government Printing Office (GPO)
Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-7954
Phone: (202) 783-3238
Fax: (202) 512-2250

Publishes and makes available numerous publications on many topics, including substance abuse. Many publications are available free of charge.

National Clearinghouse on Child Abuse and Neglect (NCCAN) Information
P.O. Box 1182
Washington, DC 20013-1182
Phone: (703) 385-7565
Phone: (800) 394-3366

Serves as a major resource center for the acquisition and dissemination of child abuse and neglect materials; free publications catalog on request.

National Clearinghouse for Alcohol and Drug Information (NCADI)
P.O. Box 2345
Rockville, MD 20847-2345
Phone: (800) 729-6686
TDD: (800) 487-4889

Houses and catalogs numerous publications on all aspects of substance abuse. Provides computerized literature searches and copies of publications, many free of charge.

National Institute of Justice (NIJ)
U.S. Department of Justice
633 Indiana Avenue, N.W.
Washington, DC 20531
Phone: (202) 307-2942

Conducts research and sponsors the development of programs to prevent and reduce crime and improve the criminal justice system.

National Institute of Mental Health (NIMH)
Focuses on research in mental health and related issues.

**National Institute on Alcohol Abuse and Alcoholism (NIAAA)**
U.S. Department of Health and Human Services
National Institutes of Health
5600 Fishers Lane
Rockville, MD 20857
Phone: (301) 443-3860

Focuses attention and funding on research on alcohol abuse and alcoholism and their treatment.

**National Institute on Drug Abuse (NIDA)**
U.S. Department of Health and Human Services
National Institutes of Health
5600 Fishers Lane
Rockville, MD 20857
Phone: (301) 443-6245

Contacts: William J. Bukoski, Ph.D.
Chief, Prevention Research Branch
Division of Epidemiology and Prevention Research
Room 9A-53
Phone: (301) 443-1514

Susan L. David, M.P.H.
Coordinator, Epidemiology and Prevention Research
Division of Epidemiology and Prevention Research
Room 9A-53
Phone: (301) 443-6543

Focuses attention and funding on research on substance abuse and its treatment and on the dissemination and application of this research.

**National Technical Information Service (NTIS)**
Order Desk
5285 Port Royal Road
Springfield, VA 22161
Phone: (703) 487-4650
Fax: (703) 321-8547
Fax Receipt Verification: (703) 487-4679
RUSH Service: (800) 553-NTIS (additional fee)
Makes available numerous publications on many topics, including substance abuse.

**Office of Justice Programs (OJP)**  
U.S. Department of Justice  
633 Indiana Avenue, N.W.  
Washington, DC 20531  
Phone: (202) 307-5933

Operates many programs to prevent and treat substance abuse-related crime.

**Office of Juvenile Justice Delinquency Prevention (OJJDP)**  
U.S. Department of Justice  
633 Indiana Avenue, N.W.  
Washington, DC 20531  
Phone: (202) 307-5911

Focuses on program development and research to prevent and treat delinquency in at-risk youth. Offers the following information clearinghouse:

- Juvenile Justice Clearinghouse  
- National Criminal Justice Reference Service (NCJRS)  
  Box 6000  
  Rockville, MD 20849-6000  
  Phone: (800) 638-8736

  Provides publications on juvenile crime and drug-related issues.

**Office of National Drug Control Policy (ONDCP)**  
Executive Office of the President  
Washington, DC 20500  
Phone: (202) 467-9800

Is responsible for national drug control strategy; sets priorities for criminal justice, drug treatment, education, community action, and research. Offers the following information clearinghouse:

- Drugs and Crime Clearinghouse  
  160 Research Boulevard  
  Rockville, MD 20850  
  Phone: (800) 666-3332

  Distributes statistics and drug-related crime information.

**Safe Drug-Free School Program**  
U.S. Department of Education  
600 Independence Avenue, S.W.  
Washington, DC 20202  
Phone: (202) 260-3954
Funds drug and violence prevention programs that target school-age children. Training and publications are also available.
OTHER PREVENTION PROGRAMS AND ORGANIZATIONS

The following list of programs, organizations, and hotlines is provided for the reader seeking additional resources. Inclusion on this list should not be construed as an endorsement by NIDA.

**Community Anti-Drug Coalition of America (CADCA)**
901 North Pitt Street
Suite 300
Alexandria, VA 22314
Phone: (703) 706-0560
Fax: (703) 706-0565

A membership organization for community alcohol and other drug prevention coalitions, with a current membership of more than 3,500 coalition members. Provides training and technical assistance and publications and advocacy services and hosts a National Leadership Forum annually.

**Narcotics Education**
6830 Laurel Street, N.W.
Washington, DC 20012
Phone: (202) 722-6740
Phone: (800) 548-8700

Publishes pamphlets, books, teaching aids, posters, audiovisual aids, and prevention materials designed for classroom use on narcotics and other substance abuse.

**National Center for the Advancement of Prevention**
11140 Rockville Pike Suite 600
Rockville, MD 20852
Phone: (301) 984-6500

Produces documents on a variety of prevention and community mobilization and readiness topics.

**National Families in Action**
2296 Henderson Mill Road, Suite 300
Atlanta, GA 30345
Phone: (404) 934-6364

Maintains a drug information center with more than 200,000 documents; publishes *Drug Abuse Update*, a quarterly journal containing abstracts of articles published in journals, academic articles, and newspapers on drug abuse and other drug issues.

**Parents Resource Institute for Drug Education, Inc. (PRIDE)**
3610 Dekalb Technology Parkway, Suite 105
Atlanta, GA 30303
Phone: (770) 458-9900
Phone: (800) 241-9746

Offers drug prevention consultant services to parent groups, school personnel, and youth groups. In addition, provides drug prevention technical assistance services, materials, and audio and visual aids.
Partnership for a Drug-Free America  
405 Lexington Avenue  
16th Floor  
New York, NY 10174  
Phone: (212) 922-1560

Conducts advertising and media campaigns to promote awareness of substance abuse issues.

Prevention First Inc.  
2800 Montvale Drive  
Springfield, IL 62704  
Phone: (312) 793-7353

Produces a variety of print and audiovisual products on various prevention topics.

TARGET  
National Northwest Federation of State High School Associations  
11724 Plaza Circle  
P.O. Box 20626  
Kansas City, MO 64195  
Phone: (816) 464-5400

Offers workshops, training seminars, and an information bank on substance use and prevention.

Toughlove International  
P.O. Box 1069  
Doylestown, PA 18901  
Phone: (215) 348-7090  
Phone: (800) 333-1069


Hotlines

Al-Anon Funnily Group Headquarters  
Phone: (800) 356-9996

Provides printed materials specifically aimed at helping families dealing with the problems of alcoholism. Available 9 a.m. to 4:30 p.m. EST.

Alcohol and Drug Hotline  
Phone: (800) 8214357  
Phone: (801) 272-4357 in Utah
Provides referrals to local facilities where adolescents and adults can seek help. Operates 24 hours.

**Child Help USA**  
Phone: (800) 422-4453

Provides crisis intervention and professional counseling on child abuse. Gives referrals to local social services groups offering counseling on child abuse. Operates 24 hours.

**Covenant House Nineline**  
Phone: (800) 999-9999

Crisis line for youth, teens, and families. Locally based referrals throughout the United States. Help for youth and parents regarding drugs, abuse, homelessness, runaway children, and message relays. Operates 24 hours.

**Depression, Awareness, Referral and Treatment (D/ART)**  
Phone: (800) 4214211

Provides free brochures about the symptoms of depression, its debilitating effects on society, and information about where to get effective treatment. Operated by the National Institute on Mental Health. Operates 24 hours.

**Grief Recovery Institute**  
Phone: (800) 4454808

Provides counseling services on coping with loss. Available 9 a.m. to 5 p.m. PST.

**National Mental Health Association (NMHA)**  
Phone: (800) 969-6642

Provides a recorded message for callers to request a pamphlet that includes general information about the organization, mental health, and warning signs of illness. Available 9 a.m. to 5 p.m. EST.
GENERAL PUBLICATIONS ON PREVENTION

The following publications are available from:

Join Together
441 Stuart Street, 6th Floor
Boston, MA 02116
Phone: (617) 437-1500
e-mail: jointogether.org


GOVERNMENT PUBLICATIONS

National Institute on Drug Abuse
Research Dissemination and Application Packages (NIDA RDA Packages)

NIDA RDA packages are available from the National Clearinghouse for Alcohol and Drug Information (NCADI), the National Technical Information Service (NTIS), and/or the U.S. Government Printing Office (GPO). (See list of Federal Government agencies.) NCADI, NTIS, and GPO publication numbers and costs are listed for each RDA package.

Drug Abuse Prevention Package (4 publications), NCADI Order No. PREVPK

This package is designed to help prevention practitioners plan and implement more effective prevention programs based on evidence from research about what works. The core package should be ordered and read first because it provides the information needed to prepare communities for prevention programming. Three stand-alone resource manuals then can be ordered. These manuals each provide information and guidance on implementing a specific prevention strategy introduced in the core package. The core package is available free of charge from NCADI (Order No. PREVPK) while supplies last.

- Brochure
- Drug Abuse Prevention: What Works
- Community Readiness for Drug Abuse Prevention: Issues, Tips and Tools
- Drug Abuse Prevention and Community Readiness Training Facilitator's Manual

Drug Abuse Prevention Resource Manuals

These manuals are available free of charge from NCADI while supplies last.

- Drug Abuse Prevention for the General Population, NCADI Order No. BKD200
- Drug Abuse Prevention for At-Risk Groups, NCADI Order No. BKD201
- Drug Abuse Prevention for At-Risk Individuals, NCADI Order No. BKD202

How Good Is Your Drug Abuse Treatment Program Package (4 publications)

This package deals with treatment program evaluation; however, much of it is applicable to substance abuse prevention programming.

- NTIS #PB95-167268/BDL: $44.00 (domestic) + postage; $88.00 (foreign) + postage
- GPO #017-024-01554-7: $33.00 (foreign rate add 25-percent surcharge for special handling. If by airmail, an additional cost is added.)
Working With Families To Support Recovery Package (4 publications), NCADI Order No. FAMILYPK

This package is designed to disseminate research-based family therapy treatment approaches to the drug abuse field. It is available free of charge from NCADI while supplies last.

National Institute on Drug Abuse
Clinical Reports (NIDA Clinical Reports)

All NIDA Clinical Reports are available from NCADI. (See list of Federal Government agencies.) NCADI publication numbers are listed for each clinical report.

Family Dynamics and Interventions, NCADI Order No. BKD147

Mental Health Assessment and Diagnosis of Substance Abusers, NCADI Order No. BKD 148

National Institute on Drug Abuse
Research Monographs

All NIDA Research Monographs are available from NCADI. (See list of Federal Government agencies.) NCADI order numbers are listed for each research monograph.

Drugs and Violence: Causes, Correlates, and Consequences. NIDA Research Monograph 103, NCADI Order No. M103


Methodological Issues in Epidemiological, Prevention, and Treatment Research on DrugExposed Women and Their Children. NIDA Research Monograph 117, NCADI Order No. M117

Advances in Data Analysis for Prevention Intervention Research. NIDA Research Monograph 142, NCADI Order No. M142

Adolescent Drug Abuse: Clinical Assessment and Therapeutic Interventions. NIDA Research Monograph 156, NCADI Order No. M156

National Institute on Drug Abuse
Videotapes for Prevention Practitioners

These videotapes are available from NCADI. (See list of Federal Government agencies.) Order numbers are provided for each tape.

Coming Together on Prevention, 1994, 27 minutes, NCADI Order No. VHS66, $8.50

Dual Diagnosis, 1993, NCADI Order No. VHS58, $8.50

Adolescent Treatment Approaches, 1991, NCADI Order No. VHS40, $8.50
There are various other NIDA publications and products on various prevention and other related topics, some of which are listed below. For a full list, contact NCADI for a catalog. In addition, future products related to prevention will be announced through flyers and the NIDA Notes newsletter. Readers with access to computers can find out about new materials by calling up NIDA on its World Wide Web homepage at http://www.nida.nih.gov/

Drug Use Among Racial/Ethnic Minorities, NCADI Order No. BKD180

Monitoring the Future Survey—Prevalence of Various Drugs for 8th, 10th, and 12th Graders, 1996, NCADI Order No. BKD213

Center for Substance Abuse Prevention (CSAP) Publications

CSAP has a wide range of prevention products addressing various prevention topics and targeted populations. These products include resource guides, manuals, pamphlets, posters, videotapes, and data reports. Target populations include educators, community leaders, families, health professionals, and youth. Publications are also available in Spanish. CSAP products are available from NCADI. For a full list, contact NCADI for a catalog. Publications cited in this Drug Abuse Prevention RDA package are given below. NCADI publication numbers are listed for each publication.


Center for Substance Abuse Treatment (CSAT)

Publications

CSAT has two series of publications, some of whose issues address topics of interest to substance abuse prevention professionals. Topics include dual diagnosis, assessment and treatment of adolescents, and so forth. The two series are called Technical Assistance Publications Series (TAPS) and Treatment Improvement Protocol Series (TIPS). CSAT publications are available from NCADI. (See list of Federal Government agencies.) For a full list, contact NCADI for a catalog.

Other Government Publications

The following publications are available from the agencies. (See list of Federal Government agencies.)
