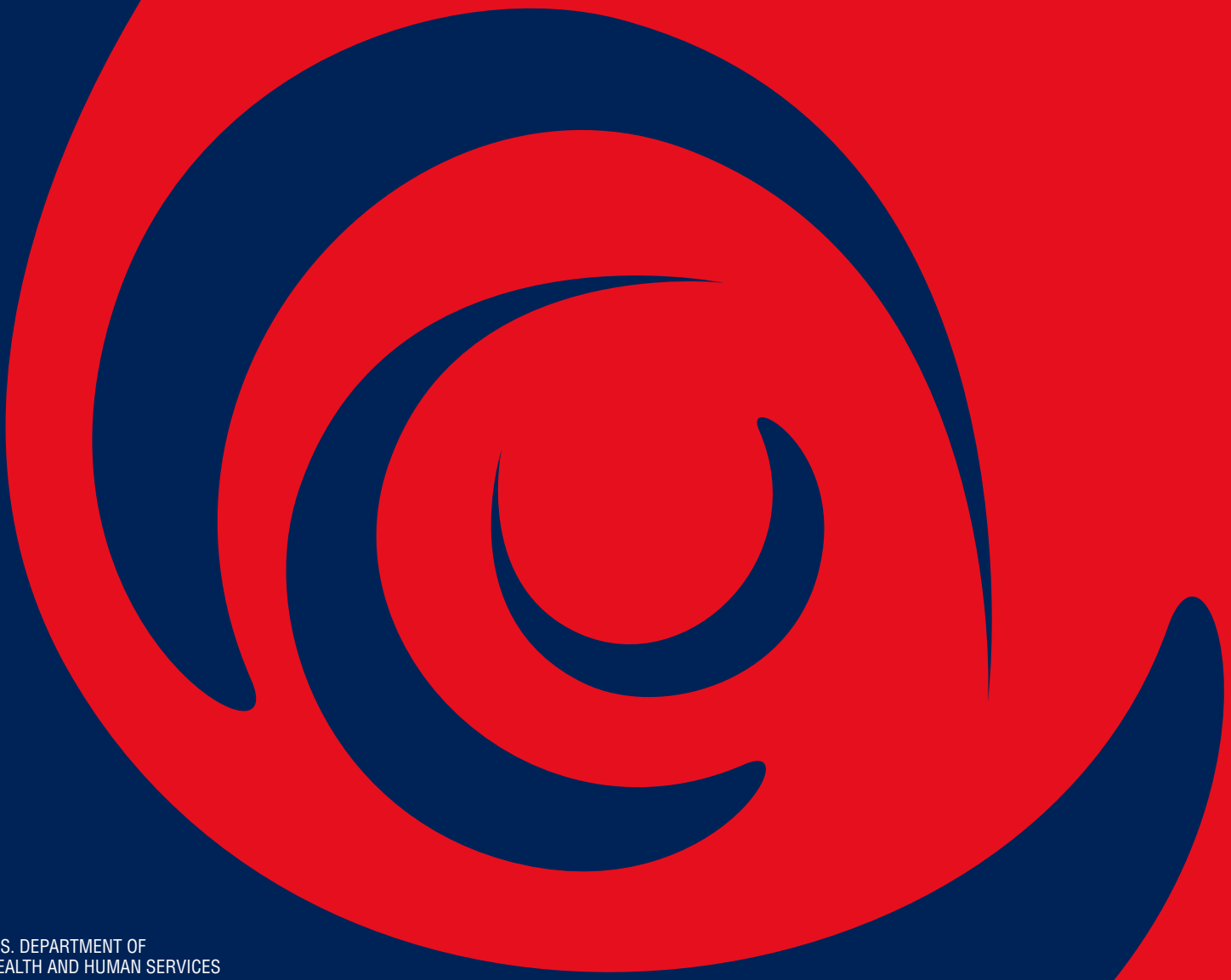
National Institute on Drug Abuse

Preventing Drug Use among Children and Adolescents

A Research-Based Guide

for Parents, Educators, and Community Leaders

Second Edition



U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
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Preface

Today's youth face many risks, including drug abuse, violence, and HIV/AIDS. Responding to these risks before they become problems can be difficult. One of the goals of the National Institute on Drug Abuse (NIDA) is to help the public understand the causes of drug abuse and to prevent its onset. Drug abuse has serious consequences in our homes, schools, and communities. From NIDA's perspective, the use of all illicit drugs and the inappropriate use of licit drugs is considered drug abuse.

Prevention science has made great progress in recent years. Many prevention interventions are being tested in "real-world" settings so they can be more easily adapted for community use. Scientists are studying a broader range of populations and topics. They have identified, for example, effective interventions with younger populations to help prevent risk behaviors before drug abuse occurs.

Researchers are also studying older teens who are already using drugs to find ways to prevent further abuse or addiction. Practical issues, such as cost-benefit analyses, are being studied. Presenting these findings to the public is one of NIDA's most important responsibilities.

We are pleased to offer our newest edition of the publication, *Preventing Drug Use among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders, Second Edition.* This edition includes updated principles, new questions and answers, new program information, and expanded references and resources. We also invite you to visit our Web site at www.drugabuse.gov where this publication and other materials related to the consequences, prevention, and treatment of drug abuse are offered. We hope that you will find the guide useful and helpful to your work.

Nora D. Volkow, M.D.
Director
National Institute on Drug Abuse

Introduction

In 1997, the National Institute on Drug Abuse (NIDA) published the first edition of *Preventing Drug Use among Children and Adolescents: A Research-Based Guide* to share the latest NIDA-funded prevention research findings with parents, educators, and community leaders. The guide introduced the concept of "research-based prevention" with questions and answers on risk and protective factors, community planning and implementation, and 14 prevention principles derived from effective drug abuse prevention research. Examples of research-tested prevention programs were also featured. The purpose was to help prevention practitioners use the results of prevention research to address drug abuse among children and adolescents in communities across the country.

Since then, NIDA's prevention research program has more than doubled in size and scope to address all stages of child development, a mix of audiences and settings, and the delivery of effective services at the community level. The Institute now focuses on risks for drug abuse and other problem behaviors that occur throughout a child's development. Prevention interventions designed and tested to address risks can help children at every step along their developmental path. Working more broadly with families, schools, and communities, scientists have found effective ways to help people gain the skills and approaches to stop problem behaviors before they occur. Research funded by NIDA and other Federal research organizations—such as the National Institute of Mental Health and the Centers for Disease Control and Prevention—shows that early intervention can prevent many adolescent risk behaviors.

This second edition, reflecting NIDA's expanded research program and knowledge base, is more than double the size of the first edition. The prevention principles have been expanded to provide more understanding about the latest research, and principles relevant to each chapter accompany the discussion. Additional questions and answers, a new chapter on community planning, and more information on the core elements in research-based prevention programs have been added. Each chapter ends with a "Community Action Box" for primary readers—parents, educators, and community leaders. As in the first edition, the descriptions of prevention programs are presented as examples of research-based programs currently available.

The expanded *Selected Resources* section offers Web sites, sponsored by Federal and private-sector agencies. Some feature registries of effective prevention programs with agency-specific selection criteria and other resources for community planning. The *Selected References* section includes up-to-date books and journal articles that provide more information on prevention research. NIDA hopes that this revised guide is helpful to drug abuse prevention efforts among children and adolescents in homes, schools, and communities nationwide.

Prevention Principles

These revised prevention principles have emerged from research studies funded by NIDA on the origins of drug abuse behaviors and the common elements found in research on effective prevention programs. Parents, educators, and community leaders can use these principles to help guide their thinking, planning, selection, and delivery of drug abuse prevention programs at the community level. The references following each principle are representative of current research.

Risk Factors and Protective Factors

PRINCIPLE 1 Prevention programs should enhance protective factors and reverse or reduce risk factors (Hawkins et al. 2002).

- The risk of becoming a drug abuser involves the relationship among the number and type of risk factors (e.g., deviant attitudes and behaviors) and protective factors (e.g., parental support) (Wills and McNamara et al. 1996).
- The potential impact of specific risk and protective factors changes with age. For example, risk factors within the family have greater impact on a younger child, while association with drug-abusing peers may be a more significant risk factor for an adolescent (Gerstein and Green 1993; Kumpfer et al. 1998).
- Early intervention with risk factors (e.g., aggressive behavior and poor self-control) often has a greater impact than later intervention by changing a child's life path (trajectory) away from problems and toward positive behaviors (Ialongo et al. 2001).
- While risk and protective factors can affect people of all groups, these factors can have a different effect depending on a person's age, gender, ethnicity, culture, and environment (Beauvais et al. 1996; Moon et al. 1999).

PRINCIPLE 2 Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs (Johnston et al. 2002).

PRINCIPLE 3 Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors (Hawkins et al. 2002).

PRINCIPLE 4 Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness (Oetting et al. 1997).

Prevention Planning

Family Programs

PRINCIPLE 5 Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information (Ashery et al. 1998).

Family bonding is the bedrock of the relationship between parents and children. Bonding can be strengthened through skills training on parent supportiveness of children, parent-child communication, and parental involvement (Kosterman et al. 1997).

- Parental monitoring and supervision are critical for drug abuse prevention. These skills can be enhanced with training on rule-setting; techniques for monitoring activities; praise for appropriate behavior; and moderate, consistent discipline that enforces defined family rules (Kosterman et al. 2001).
- Drug education and information for parents or caregivers reinforces what children are learning about the harmful effects of drugs and opens opportunities for family discussions about the abuse of legal and illegal substances (Bauman et al. 2001).
- Brief, family-focused interventions for the general population can positively change specific parenting behavior that can reduce later risks of drug abuse (Spoth et al. 2002b).

School Programs

PRINCIPLE 6 Prevention programs can be designed to intervene as early as *preschool* to address risk factors for drug abuse, such as aggressive behavior, poor social skills, and academic difficulties (Webster-Stratton 1998; Webster-Stratton et al. 2001).

PRINCIPLE 7 Prevention programs for *elementary school children* should target improving academic and social-emotional learning to address risk factors for drug abuse, such as early aggression, academic failure, and school dropout. Education should focus on the following skills (Ialongo et al. 2001; Conduct Problems Prevention Work Group 2002b):

- self-control;
- emotional awareness;
- communication;
- social problem-solving; and
- academic support, especially in reading.

PRINCIPLE 8 Prevention programs for *middle* or *junior high* and *high school students* should increase academic and social competence with the following skills (Botvin et al.1995; Scheier et al. 1999):

- study habits and academic support;
- communication;
- peer relationships;
- self-efficacy and assertiveness;
- drug resistance skills;
- reinforcement of antidrug attitudes; and
- strengthening of personal commitments against drug abuse.

Community Programs

PRINCIPLE 9 Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects even among high-risk families and children. Such interventions do not single out risk populations and, therefore, reduce labeling and promote bonding to school and community (Botvin et al. 1995; Dishion et al. 2002).

PRINCIPLE 10 Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone (Battistich et al. 1997).

PRINCIPLE 11 Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting (Chou et al. 1998).

Prevention Program Delivery

PRINCIPLE 12 When communities adapt programs to match their needs, community norms, or differing cultural requirements, they should retain core elements of the original research-based intervention (Spoth et al. 2002b), which include:

- **Structure** (how the program is organized and constructed);
- **Content** (the information, skills, and strategies of the program); and
- **Delivery** (how the program is adapted, implemented, and evaluated).

PRINCIPLE 13 Prevention programs should be long-term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals. Research shows that the benefits from middle school prevention programs diminish without followup programs in high school (Scheier et al. 1999).

PRINCIPLE 14 Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate student behavior. Such techniques help to foster students' positive behavior, achievement, academic motivation, and school bonding (Ialongo et al. 2001).

PRINCIPLE 15 Prevention programs are most effective when they employ interactive techniques, such as peer discussion groups and parent role-playing, that allow for active involvement in learning about drug abuse and reinforcing skills (Botvin et al. 1995).

PRINCIPLE 16 Research-based prevention programs can be cost-effective. Similar to earlier research, recent research shows that for each dollar invested in prevention, a savings of up to $10 in treatment for alcohol or other substance abuse can be seen (Pentz 1998; Hawkins 1999; Aos et al. 2001; Spoth et al. 2002a).

Chapter 1: Risk Factors and Protective Factors

This chapter describes how risk and protective factors influence drug abuse behaviors, the early signs of risk, transitions as high-risk periods, and general patterns of drug abuse among children and adolescents. A major focus is how prevention programs can strengthen protection or intervene to reduce risks.

What are risk factors and protective factors?

Studies over the past two decades have tried to determine the origins and pathways of drug abuse and addiction—how the problem starts and how it progresses. Many factors have been identified that help differentiate those more likely to abuse drugs from those less vulnerable to drug abuse. Factors associated with greater potential for drug abuse are called "risk" factors, while those associated with reduced potential for abuse are called "protective" factors. Please note, however, that most individuals at risk for drug abuse do not start using drugs or become addicted. Also, a risk factor for one person may not be for another.

As discussed in the Introduction, risk and protective factors can affect children in a developmental *risk trajectory,* or path. This path captures how risks become evident at different stages of a child's life. For example, early risks, such as out-of-control aggressive behavior, may be seen in a very young child. If not addressed through positive parental actions, this behavior can lead to additional risks when the child enters school. Aggressive behavior in school can lead to rejection by peers, punishment by teachers, and academic failure. Again, if not addressed through preventive interventions, these risks can lead to the most immediate behaviors that put a child at risk for drug abuse, such as skipping school and associating with peers who abuse drugs. In focusing on the risk path, research-based prevention programs can intervene early in a child's development to strengthen protective factors and reduce risks long before problem behaviors develop.

The table below provides a framework for characterizing risk and protective factors in five *domains,* or settings. These domains can then serve as a focus for prevention. As the first two examples suggest, some risk and protective factors are mutually exclusive—the presence of one means the absence of the other. For example, in the Individual domain, early aggressive behavior, a risk factor, indicates the absence of impulse control, a key protective factor. Helping a young child learn to control impulsive behavior is a focus of some prevention programs.

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Impulse Control
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Antidrug Use Policies
Poverty	Community	Strong Neighborhood Attachment

Other risk and protective factors are independent of each other, as demonstrated in the table as examples in the peer, school, and community domains. For example, in the school domain, drugs may be available, even though the school has "antidrug policies." An intervention may be to strengthen enforcement so that school policies create the intended school environment.

Risk factors for drug abuse represent challenges to an individual's emotional, social, and academic development. These risk factors can produce different effects, depending on the individual's personality traits, phase of development, and environment. For instance, many serious risks, such as early aggressive behavior and poor academic achievement, may indicate that a young child is on a negative developmental path headed toward problem behavior. Early intervention, however, can help reduce or reverse these risks and change that child's developmental path.

For young children already exhibiting serious risk factors, delaying intervention until adolescence will likely make it more difficult to overcome risks. By adolescence, children's attitudes and behaviors are well established and not easily changed.

Risk factors can influence drug abuse in several ways. They may be additive: The more risks a child is exposed to, the more likely the child will abuse drugs. Some risk factors are particularly potent, yet may not influence drug abuse unless certain conditions prevail. Having a family history of substance abuse, for example, puts a child at risk for drug abuse. However, in an environment with no drug-abusing peers and strong antidrug norms, that child is less likely to become a drug abuser. And the presence of many protective factors can lessen the impact of a few risk factors. For example, strong protection—such as parental support and involvement—can reduce the influence of strong risks, such as having substance-abusing peers. ***An important goal of prevention, then, is to change the balance between risk and protective factors so that protective factors outweigh risk factors.***

Chapter 1 **Principles**

Risk Factors and Protective Factors

PRINCIPLE 1 Prevention programs should enhance protective factors and reverse or reduce risk factors.

- The risk of becoming a drug abuser involves the relationship among the number and type of risk factors (e.g., deviant attitudes and behaviors) and protective factors (e.g., parental support).
- The potential impact of specific risk and protective factors changes with age. For example, risk factors within the family have greater impact on a younger child, while association with drug-abusing peers may be a more significant risk factor for an adolescent.
- Early intervention with risk factors (e.g., aggressive behavior and poor self-control) often has a greater impact than later intervention by changing a child's life path (trajectory) away from problems and toward positive behaviors.
- While risk and protective factors can affect people of all groups, these factors can have a different effect depending on a person's age, gender, ethnicity, culture, and environment.

PRINCIPLE 2 Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs.

PRINCIPLE 3 Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors.

PRINCIPLE 4 Prevention programs should be tailored to address risks specific to population or audience characteristics, such as age, gender, and ethnicity, to improve program effectiveness.

Gender may also determine how an individual responds to risk factors. Research on relationships within the family shows that adolescent girls respond positively to parental support and discipline, while adolescent boys sometimes respond negatively. Research on early risk behaviors in the school setting shows that aggressive behavior in boys and learning difficulties in girls are the primary causes of poor peer relationships. These poor relationships, in turn, can lead to social rejection, a negative school experience, and problem behaviors including drug abuse.

What are the early signs of risk that may predict later drug abuse?

Some signs of risk can be seen as early as infancy. Children's personality traits or temperament can place them at increased risk for later drug abuse. Withdrawn and aggressive boys, for example, often exhibit problem behaviors in interactions with their families, peers, and others they encounter in social settings. If these behaviors continue, they will likely lead to other risks. These risks can include academic failure, early peer rejection, and later affiliation with deviant peers, often the most immediate risk for drug abuse in adolescence. Studies have shown that children with poor academic performance and inappropriate social behavior at ages 7 to 9 are more likely to be involved with substance abuse by age 14 or 15.

In the Family

Children's earliest interactions occur within the family and can be positive or negative. For this reason, factors that affect early development in the family are probably the most crucial. Children are more likely to experience risk when there is:

- lack of mutual attachment and nurturing by parents or caregivers;
- ineffective parenting;
- a chaotic home environment;
- lack of a significant relationship with a caring adult; and
- a caregiver who abuses substances, suffers from mental illness, or engages in criminal behavior.

These experiences, especially the abuse of drugs and other substances by parents and other caregivers, can impede bonding to the family and threaten feelings of security that children need for healthy development. On the other hand, families can serve a protective function when there is:

- a strong bond between children and their families;
- parental involvement in a child's life;
- supportive parenting that meets financial, emotional, cognitive, and social needs; and
- clear limits and consistent enforcement of discipline.

Finally, critical or sensitive periods in development may heighten the importance of risk or protective factors. For example, mutual attachment and bonding between parents and children usually occurs in infancy and early childhood. If it fails to occur during those developmental stages, it is unlikely that a strong positive attachment will develop later in the child's life.

Outside the Family

Other risk factors relate to the quality of children's relationships in settings outside the family, such as in their schools, with their peers, teachers, and in the community. Difficulties in these settings can be crucial to a child's emotional, cognitive, and social development. Some of these risk factors are:

- inappropriate classroom behavior, such as aggression and impulsivity;
- academic failure;
- poor social coping skills;
- association with peers with problem behaviors, including drug abuse; and
- misperceptions of the extent and acceptability of drug-abusing behaviors in school, peer, and community environments.

Association with drug-abusing peers is often the most immediate risk for exposing adolescents to drug abuse and delinquent behavior. Research has shown, however, that addressing such behavior in interventions can be challenging. For example, a recent study (Dishion et al. 2002) found that placing high-risk youth in a peer group intervention resulted in negative outcomes. Current research is exploring the role that adults and positive peers can play in helping to avoid such outcomes in future interventions.

Other factors—such as drug availability, drug trafficking patterns, and beliefs that drug abuse is generally tolerated—are also risks that can influence young people to start to abuse drugs.

Family has an important role in providing protection for children when they are involved in activities outside the family. When children are outside the family setting, the most salient protective factors are:

- age-appropriate parental monitoring of social behavior, including establishing curfews, ensuring adult supervision of activities outside the home, knowing the child's friends, and enforcing household rules;
- success in academics and involvement in extracurricular activities;
- strong bonds with prosocial institutions, such as school and religious institutions; and
- acceptance of conventional norms against drug abuse.

What are the highest risk periods for drug abuse among youth?

Research has shown that the key risk periods for drug abuse occur during major transitions in children's lives. These transitions include significant changes in physical development (for example, puberty) or social situations (such as moving or parents divorcing) when children experience heightened vulnerability for problem behaviors.

The first big transition for children is when they leave the security of the family and enter school. Later, when they advance from elementary school to middle or junior high school, they often experience new academic and social situations, such as learning to get along with a wider group of peers and having greater expectations for academic performance. It is at this stage—early adolescence—that children are likely to encounter drug abuse for the first time.

Then, when they enter high school, young people face additional social, psychological, and educational challenges. At the same time, they may be exposed to greater availability of drugs, drug abusers, and social engagements involving drugs. These challenges can increase the risk that they will abuse alcohol, tobacco, and other drugs.

A particularly challenging situation in late adolescence is moving away from home for the first time without parental supervision, perhaps to attend college or other schooling. Substance abuse, particularly of alcohol, remains a major public health problem for college populations.

When young adults enter the workforce or marry, they again confront new challenges and stressors that may place them at risk for alcohol and other drug abuse in their adult environments. But these challenges can also be protective when they present opportunities for young people to grow and pursue future goals and interests. Research has shown that these new lifestyles can serve as protective factors as the new roles become more important than being involved with drugs.

Risks appear at every transition from early childhood through young adulthood; therefore, prevention planners need to consider their target audiences and implement programs that provide support appropriate for each developmental stage. They also need to consider how the protective factors involved in these transitions can be strengthened.

When and how does drug abuse start and progress?

Studies such as the National Survey on Drug Use and Health, formerly called the National Household Survey on Drug Abuse, reported by the Substance Abuse and Mental Health Services Administration, indicate that some children are already abusing drugs by age 12 or 13, which likely means that some may begin even earlier. Early abuse includes such drugs as tobacco, alcohol, inhalants, marijuana, and psychotherapeutic drugs. If drug abuse persists into later adolescence, abusers typically become more involved with marijuana and then advance to other illegal drugs, while continuing their abuse of tobacco and alcohol. Studies have also shown that early initiation of drug abuse is associated with greater drug involvement, whether with the same or different drugs. Note, however, that both one-time and long-term surveys indicate that most youth do not progress to abusing other drugs. But among those who do progress, their drug abuse history can vary by neighborhood drug availability, demographic groups, and other characteristics of the abuser population. In general, the pattern of abuse is associated with levels of social disapproval, perceived risk, and the availability of drugs in the community.

Scientists have proposed several hypotheses as to why individuals first become involved with drugs and then escalate to abuse. One explanation is a biological cause, such as having a family history of drug or alcohol abuse, which may genetically predispose a person to drug abuse. Another explanation is that starting to abuse a drug may lead to affiliation with more drug-abusing peers which, in turn, exposes the individual to other drugs. Indeed, many factors may be involved.

Different patterns of drug initiation have been identified based on gender, race or ethnicity, and geographic location. For example, research has found that the circumstances in which young people are offered drugs can depend on gender. Boys generally receive more drug offers and at younger ages. Initial drug abuse can also be influenced by where drugs are offered, such as parks, streets, schools, homes, or parties. Additionally, drugs may be offered by different people including, for example, siblings, friends, or even parents.

While most youth do not progress beyond initial use, a small percentage rapidly escalate their substance abuse. Researchers have found that these youth are the most likely to have experienced a combination of high levels of risk factors with low levels of protective factors. These adolescents were characterized by high stress, low parental support, and low academic competence.

However, there are protective factors that can suppress the escalation to substance abuse. These factors include self-control, which tends to inhibit problem behavior and often increases naturally as children mature during adolescence. In addition, protective family structure, individual personality, and environmental variables can reduce the impact of serious risks of drug abuse. Preventive interventions can provide skills and support to high-risk youth to enhance levels of protective factors and prevent escalation to drug abuse.

COMMUNITY ACTION BOX

- **Parents** can use information on risk and protection to help them develop positive preventive actions (e.g. talking about family rules) before problems occur.
- **Educators** can strengthen learning and bonding to school by addressing aggressive behaviors and poor concentration—risks associated with later onset of drug abuse and related problems.
- **Community Leaders** can assess community risk and protective factors associated with drug problems to best target prevention services.

Chapter 2: Planning for Drug Abuse Prevention in the Community

This chapter presents a process to help communities as they plan to implement research-based prevention programs. It provides guidance on applying the prevention principles, assessing needs and community readiness, motivating the community to take action, and evaluating the impact of the programs implemented. Additional planning resources are highlighted in *Selected Resources and References.*

How can the community develop a plan for research-based prevention?

Prevention research suggests that a well-constructed community plan incorporates the characteristics outlined in the following box.

THE COMMUNITY PLAN

- **Identifies** the specific drugs and other child and adolescent problems in a community;
- **Builds** on existing resources (e.g., current drug abuse prevention programs);
- **Develops** short-term goals relevant to implementation of research-based prevention programs;
- **Projects** long-term objectives so that plans and resources are available for the future; and
- **Incorporates** ongoing assessments to evaluate the effectiveness of prevention strategies.

Planning Process

Planning usually starts with an assessment of drug abuse and other child and adolescent problems, which includes measuring the level of substance abuse in the community as well as examining the level of other community risk factors (e.g., poverty) [see section on "How can the community assess the level of risk for drug abuse?" for more details]. The results of the assessment can be used to raise community awareness of the nature and seriousness of the problem and guide the selection of programs most relevant to the community's needs. This is an important process, whether a community is selecting a school-based prevention curriculum or planning multiple interventions that cut across the entire community.

Next, an assessment of the community's readiness for prevention can help determine additional steps that are needed to educate the community before beginning the prevention effort. Then, a review of existing programs is needed to determine gaps in addressing community needs and identifying additional resources.

Finally, community planning can benefit from contributions of community organizations that provide services to youth. Convening a meeting of leaders of youth-serving organizations can aid in coordinating ideas, resources, and expertise to help implement and sustain research-based programs. Planning for implementation and sustainability requires resource development for staffing and management, long-term funding commitments, and linkages with existing delivery systems.

How can the community use the prevention principles in prevention planning?

Several prevention principles provide a framework for effective prevention planning and programming by presenting key concepts in implementing research-

based prevention. Consider, for example, **Principle 3: "Prevention programs should address the type of drug abuse problem in the local community, target modifiable risk factors, and strengthen identified protective factors."** This principle describes how the plan should reflect the reality of the drug problem in that community and, importantly, what needs to be done to address it.

Community-wide efforts also can be guided by **Principle 9: "Prevention programs aimed at general populations at key transition points . . . can produce beneficial effects, even among high-risk families and children."** With carefully structured programs, the community can provide services to all populations, including those at high risk, without labeling or stigmatizing them.

In implementing a more specific program, such as a family program within the educational system, the principles address some of the required content areas. For instance, **Principle 5 states, "Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and information."**

The principles offer guidance for selecting or adapting effective programs that meet specific community needs. ***It is important to recognize, however, that not every program that seems consistent with these research-based prevention principles is necessarily effective.*** To be effective, programs need to incorporate the core elements identified in research (see Chapter 3). These include appropriate structure and content, adequate resources for training and materials, and other implementation requirements.

For more information on resources to help communities in prevention planning and the research underlying the prevention principles, see *Selected Resources and References*.

Chapter 2 **Principles**

Principles for Prevention Planning

PRINCIPLE 2 Prevention programs should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs.

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PRINCIPLE 11 Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting.

How can the community assess the level of risk for drug abuse?

To assess the level of risk of youth engaging in drug abuse, it is important to:

- measure the nature and extent of drug abuse patterns and trends;
- collect data on the risk and protective factors throughout the community;
- understand the community's culture and how that culture affects and is affected by drug abuse;
- consult with community leaders working in drug abuse prevention, treatment, law enforcement, mental health, and related areas;
- assess community awareness of the problem; and
- identify existing prevention efforts already under way to address the problem.

Researchers have developed many tools to assess the extent of a community's drug problem. Most of these tools assess the nature of the problem—what drugs are available and who is abusing them. Some of them assess the extent of abuse by estimating how many people are abusing drugs. Others assess factors associated with abuse, such as juvenile delinquency, school absenteeism, and school dropout rates. Researchers have also developed instruments that assess individual risk status. It is important when beginning the assessment process to collect sufficient information to help local planners target the intervention by population and geographic area.

As an example, the **Communities That Care** prevention operating system, developed by Hawkins and colleagues at the University of Washington (Hawkins et al. 2002), is based on epidemiological methods. An assessment is conducted to collect data on the distribution of risk and protective factors at the community level. This approach helps local planners identify geographic areas with the highest levels of risk and the lowest levels of protective resources. This analysis tool assists planners in selecting the most effective prevention interventions to address the specific risks of neighborhoods.

Other data sources and measurement instruments (such as questionnaires) that can help in community planning include the following resources.

- **Public access data.** Several large national surveys provide data to help local communities understand how their drug problems relate to the national picture. These include the National Survey on Drug Use and Health, Monitoring the Future Study, and Youth Behavior Risk Study. Information on accessing these data is provided in *Selected Resources and References*.
- **Public access questionnaires.** The studies listed above and many other federally sponsored data sets make the data collection instruments available for adaptation and use by the public. Communities can conduct local studies using these instruments to collect uniform data that can often be compared with national findings.
- **Archival data.** Data from public access files from school systems, health departments, hospital emergency rooms, law enforcement agencies, and drug abuse treatment facilities can be analyzed to identify the nature of the local drug problem and other youth problems.

- **Ethnographic studies.** Ethnographic approaches use systematic, observational processes to describe behaviors in natural settings, such as studying the abuse of drugs by youth gangs, and documenting the individual perspectives of those under observation.
- **Other qualitative methods.** Other qualitative methods, such as convening focus groups of representatives of drug-abusing subpopulations or key interviews with community officials, can be used to gain a greater understanding of the local drug abuse problem.

As each of these methods has advantages and disadvantages, it is advisable, permitting resources, to use multiple strategies to assess community risk to provide the best information possible.

The Community Epidemiology Work Group (CEWG), another data source pioneered in the early 1970s by NIDA and communities nationwide, is composed of researchers from 21 U.S. cities who collect or use archival data to characterize the nature of the drug problem in their locations. CEWG representatives meet with NIDA biannually to inform the Institute and fellow CEWG members of changing drug trends in their cities. The work group has developed a *Guide for Community Epidemiology Surveillance Networks on Drug Abuse* to help other communities use this approach to provide up-to-date information on local drug abuse problems.

Using information obtained through these many sources can help community leaders make sound decisions about programs and policies. Analyzing these data before implementing new programs can also help establish a baseline for evaluating results. To be most informative, periodic assessments need to be made routinely.

For more information on how communities can assess the level or risk of drug abuse in their community, see *Selected Resources and References*.

Is the community ready for prevention?

Identifying a serious level of risk in a community does not always translate into community readiness to take action. Based on studies of many small communities, researchers have identified nine stages of readiness that can guide prevention planning (Plested et al. 1999). Applying measures to assess readiness, prevention planners can then identify the critical steps needed to implement programs (see table on page 20). Although much of the research on the stages of community readiness has examined small communities, large communities find that these stages provide a structure to describe levels of awareness of drug issues in their community and readiness to embrace a prevention program. Awareness is assessed at two levels: that of the public (by examining the nature and level of drug coverage in the news) and that of officials (by determining if they have taken a position on drug abuse in the community).

Community leaders can begin assessing their community's readiness by interviewing key informants in their community. Additional planning and program sources can be found in *Selected Resources and References*. Web sites, contact information, and publications offer further information to guide community efforts.

ASSESSING READINESS*		COMMUNITY ACTION
Readiness Stage	Community Response	Ideas
1. No awareness	Relative tolerance of drug abuse	Create motivation. Meet with community leaders involved with drug abuse prevention; use the media to identify and talk about the problem; encourage the community to see how it relates to community issues; begin preplanning.
2. Denial	Not happening here, can't do anything about it	
3. Vague awareness	Awareness, but no motivation	
4. Preplanning	Leaders aware, some motivation	
5. Preparation	Active energetic leadership and decisionmaking	Work together. Develop plans for prevention programming through coalitions and other community groups.
6. Initiation	Data used to support prevention actions	Identify and implement research-based programs.
7. Stabilization	Community generally supports existing program	Evaluate and improve ongoing programs.
8. Confirmation/ Expansion	Decisionmakers support improving or expanding programs	Institutionalize and expand programs to reach more populations.
9. Professionalization	Knowledgeable of community drug problem; expect effective solutions	Put multicomponent programs in place for all audiences.

* Plested et al. 1999.

How can the community be motivated to implement research-based prevention programs?

The methods needed to motivate a community to act depend on the particular community's stage of readiness. At lower stages of readiness, individual and small group meetings may be needed to attract support from those with great influence in the community. At higher levels of readiness, it may be possible to establish a community board or coalition of key leaders from public- and private-sector organizations. This can provide the impetus for action.

Community coalitions can and do hold community-wide meetings, develop public education campaigns, present data that support the need for research-based prevention programming, and attract sponsors for comprehensive drug abuse prevention strategies.

But care is needed in organizing a community-level coalition to ensure that its programming incorporates research-tested strategies and programs—at the individual, school, and community levels. Having a supportive infrastructure that includes representatives across the community can reinforce prevention messages, provide resources, and sustain prevention programming. Introducing a school-based curriculum, however, requires less community involvement, but is still a focused preventive effort.

Research has shown that prevention programs can use the media to raise public awareness of the seriousness of a community's drug problem and prevent drug abuse among specific populations. Using local data and speakers from the community demonstrates that the drug problem is real and that action is needed. Providing some of the examples of research-based programs described in Chapter 4 can help mobilize the community for change.

How can the community assess the effectiveness of current prevention efforts?

Assessing prevention efforts can be challenging for a community, given limited resources and limited access to expertise in program evaluation. Many communities begin the process with a structured review of current prevention programs to determine:

- *What programs are currently in place in the community?*
- *Were strict scientific standards used to test the programs during their development?*
- *Do the programs match community needs?*
- *Are the programs being carried out as designed?*
- *What percentage of at-risk youth is being reached by the program?*

Another evaluation approach is to track existing data over time on drug abuse among students in school, rates of truancy, school suspensions, drug-abuse arrests, and drug-related emergency room admissions. The use of the information obtained in the initial community drug abuse assessment can serve as a baseline for measuring change in long-term trends. Because the nature and extent of drug abuse problems can change with time, it is wise to periodically assess community risk and protective factors to help ensure that the programs in place appropriately address current community needs.

Communities may wish to consult with State and county prevention authorities for assistance in planning and implementation efforts. Also, federally supported publications and other resources are available, as noted in *Selected Resources and References*.

In assessing the impact of individual programs, it is important for communities to document how well the program is delivered and the level of intervention participants receive. For example, in assessing a school-based prevention program, key questions to be asked include:

- *Have the teachers mastered the content and interactive teaching strategies needed for the selected curriculum?*
- *How much exposure have the students had to each content area?*
- *Is there an assessment component?*

The community plan should guide actions for prevention over time. Once communities are mobilized, program implementation and sustainability require clear, measurable goals, long-term resources, sustained leadership, and community support to maintain momentum for preventive change. Continuing evaluations keep the community informed and allow for periodic reassessment of needs and goals.

COMMUNITY ACTION BOX

Parents can work with others in their community to increase awareness about the local drug abuse problem and the need for research-based prevention programs.

Educators can work with others in their school and school system to review current programs, and identify research-based prevention interventions appropriate for students.

Community Leaders can organize a community group to develop a community prevention plan, coordinate resources and activities, and support research-based prevention in all sectors of the community.

Chapter 5: Selected Resources and References

Below are resources relevant to drug abuse prevention. Information on NIDA's Web site is followed by Web sites for other Federal agencies and private organizations. These resources and the selected references that follow are excellent sources of information in helping communities plan and implement research-based drug prevention programs.

Selected Resources

National Institute on Drug Abuse (NIDA)
National Institutes of Health (NIH)
U.S. Department of Health and Human Services (DHHS)

NIDA's Web site (www.drugabuse.gov) provides factual information on all aspects of drug abuse, particularly the effects of drugs on the brain and body, the prevention of drug abuse among children and adolescents, the latest research on treatment for addiction, and statistics on the extent of drug abuse in the United States. The Web site allows visitors to print or order publications, public service announcements and posters, science education curricula, research reports and fact sheets on specific drugs or classes of drugs, and the *NIDA NOTES* newsletter. The site also links to related Web sites in the public and private sector.

Other Federal Resources

Center for Substance Abuse Prevention (CSAP)
Substance Abuse and Mental Health Services Administration (SAMHSA), DHHS
5600 Fishers Lane
Rockwall 2, 9th Floor, Suite 900
Rockville, MD 20857
Phone: 301-443-9110
www.prevention.samhsa.gov

Centers for Disease Control and Prevention (CDC), DHHS
1600 Clifton Road
Atlanta, GA 30333
Phone: 404-639-3534
Phone: 800-311-3435 (toll-free)
www.cdc.gov

Safe and Drug-Free Schools Program
U.S. Department of Education (DoE)
400 Maryland Avenue, SW
Washington, DC 20202
Phone: 800-872-5327 (toll-free)
www.ed.gov

Drug Enforcement Administration (DEA)
U.S. Department of Justice (DOJ)
2401 Jefferson Davis Highway
Alexandria, VA 22301
Phone: 202-307-1000
www.dea.gov

Knowledge Exchange Network, SAMHSA, DHHS
P.O. Box 42490
Washington, DC 20015
Phone: 800-789-2647 (toll-free)
www.mentalhealth.org

National Clearinghouse for Alcohol and Drug Information (NCADI), SAMHSA, DHHS
Phone: 800-729-6686 (toll-free)
www.ncadi.samhsa.gov

National Institute on Alcohol Abuse and Alcoholism (NIAAA), NIH, DHHS
6000 Executive Boulevard, Willco Building
Bethesda, MD 20892
Phone: 301-443-3860
www.niaaa.nih.gov

National Institute of Mental Health (NIMH), NIH, DHHS
6001 Executive Boulevard, Room 8184, MSC 9663
Bethesda, MD 20892
Phone: 301-443-4513
www.nimh.nih.gov

National Institutes of Health (NIH), DHHS
9000 Rockville Pike
Bethesda, MD 20892
Phone: 301-496-4000
www.nih.gov

National Library of Medicine (NLM), NIH, DHHS
8600 Rockville Pike
Bethesda, MD 20894
Phone: 301-594-5983
Phone: 888-346-3656 (toll-free)
www.nlm.nih.gov

Office of Juvenile Justice and Delinquency Prevention (OJJDP), DOJ
810 Seventh Street
Washington, DC 20531
Phone: 202-307-5911
www.ojjdp.ncjrs.org/pubs/substance.html

Office of National Drug Control Policy (ONDCP)
P.O. Box 6000
Rockville, MD 20849
Phone: 800-666-3332 (toll-free)
www.whitehousedrugpolicy.gov

Substance Abuse and Mental Health Services Administration (SAMHSA), DHHS
5600 Fishers Lane
Rockville, MD 20857
Phone: 301-443-8956
www.samhsa.gov

Other Selected Resources

American Academy of Child and Adolescent Psychiatry (AACAP)
3615 Wisconsin Avenue, NW
Washington, DC 20016
Phone: 202-966-7300
www.aacap.org

American Academy of Family Physicians (AAFP): KidsHealth
11400 Tomahawk Creek Parkway
Leawood, KS 66211
www.familydoctor.org

American Academy of Pediatrics (AAP)
141 Northwest Point Boulevard
Elk Grove, IL 60007-1098
Phone: 847-434-4000
www.aap.org

American Psychological Association (APA)
750 First Street, NE
Washington, DC 20002
Phone: 800-374-2121 (toll-free)
Phone: 202-336-5510
www.apa.org

American Society of Addiction Medicine (ASAM)
4601 North Park Avenue, Arcade Suite 101
Chevy Chase, MD 20815
Phone: 301-656-3920
www.asam.org

Blueprints for Violence Prevention, Center for the Study and Prevention of Violence
Institute on Behavioral Science
University of Colorado at Boulder
900 28th Street, Suite 107
439 UCB
Boulder, CO 80309
Phone: 303-492-1032
www.colorado.edu/cspv/blueprints/

Center on Addiction and Substance Abuse (CASA) at Columbia University
633 Third Avenue, 19th Floor
New York, NY 10017
Phone: 212-841-5200
www.casacolumbia.org

Community Anti-Drug Coalitions of America (CADCA)
901 North Pitt Street, Suite 300
Alexandria, VA 22314
Phone: 800-542-2322 (toll-free)
www.cadca.org

Drug Strategies, Inc.
1150 Connecticut Avenue, NW, Suite 800
Washington, DC 20036
Phone: 202-289-9070
www.drugstrategies.org

Join Together
One Appleton Street, 4th Floor
Boston, MA 02116
Phone: 617-437-1500
www.jointogether.org

Latino Behavioral Health Institute
P.O. Box 1008
Thousand Oaks, CA 91360
Phone: 213-738-2882
www.lbhi.org

National Asian Pacific American Families Against Substance Abuse (NAPAFASA)
340 East Second Street, Suite 409
Los Angeles, CA 90012
Phone: 213-625-5795
www.napafasa.org

National Criminal Justice Reference Service (NCJRS)
P.O. Box 6000
Rockville, MD 20849
Phone: 800-851-3420 (toll-free)
Phone: 301-519-5500
www.ncjrs.org

National Families in Action (NFIA)
2957 Clairmont Road, NE, Suite 150
Atlanta, GA 30329
Phone: 404-248-9676
www.nationalfamilies.org

National Hispanic Science Network (NHSN)
Center for Family Studies
Department of Psychiatry & Behavioral Sciences
University of Miami School of Medicine
1425 NW 10th Avenue, 3rd Floor
Miami, FL 33136-1024
Phone: 305-243-2340
www.hispanicscience.org

National Prevention Network (NPN)
808 17th Street, NW, Suite 410
Washington, DC 20006
Phone: 202-293-0090
www.nasadad.org/Departments/Prevention/prevhme1.htm

Partnership for a Drug-Free America
405 Lexington Avenue, Suite 1601
New York, NY 10174
Phone: 212-922-1560
www.drugfreeamerica.org

Society for Prevention Research (SPR)
1300 I Street, NW, Suite 250 West
Washington, DC 20005
Phone: 202-216-9670
www.preventionresearch.org

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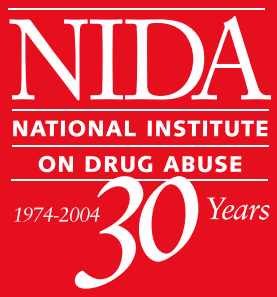

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