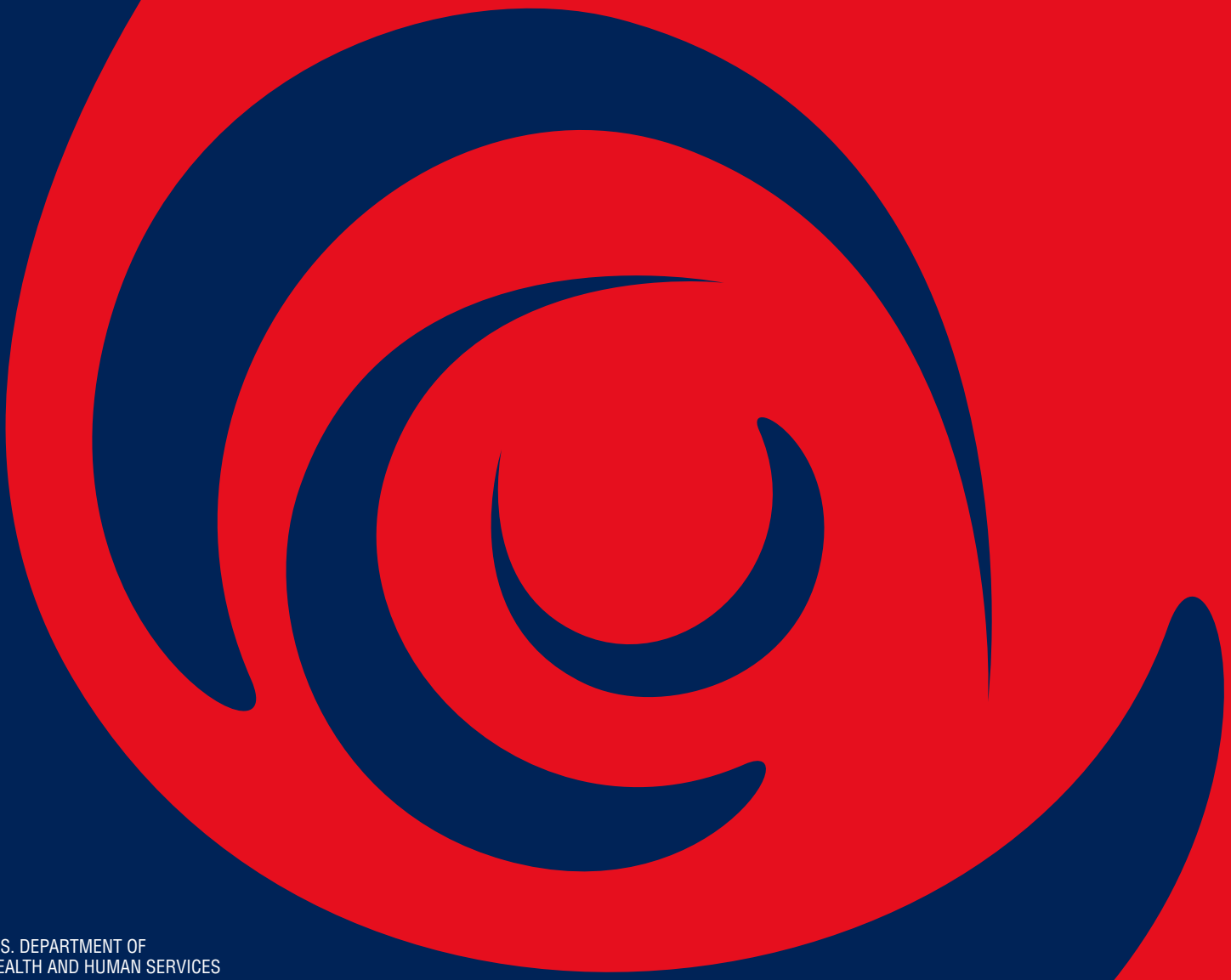
National Institute on Drug Abuse

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
National Institutes of Health

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.

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?*

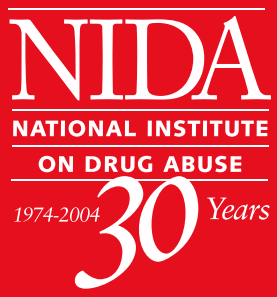
The community plan should guide actions for prevention over time. Once communities are mobilized, program implementation and sustainability require clear, measurable goals, long-term resources, sustained leadership, and community support to maintain momentum for preventive change. Continuing evaluations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



NIH Publication No. 04-4212(A)
Printed 1997
Reprinted 1997, 1999, 2001
Second Edition October 2003