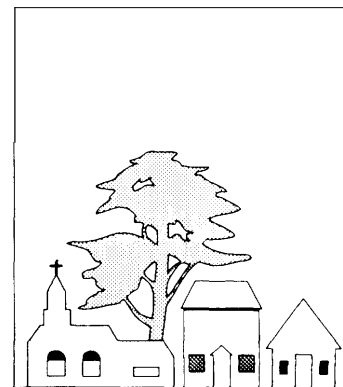


# Community Activity Settings 8

**T**his chapter reviews substance use and abuse-related research on factors and interventions in homes, schools, workplaces, recreational and other developmental settings, and community-wide settings. These community activity settings are the major physical and social arenas in communities where individuals interact and learn their values, attitudes, and behaviors, some of which can increase or reduce the likelihood that individuals will use and abuse substances. The addition of treatment settings of all types and correctional settings would provide a fairly comprehensive and systematic overview of all the major settings in communities. Those settings are not discussed at length in this report, however, because of its focus primarily on prevention, even though comprehensive prevention strategies will almost always want to include treatment and correctional components as well.

By focusing on any one of these settings, researchers interested in substance use and abuse can study the interplay of multiple factors in a context, and practitioners can implement programs designed for specific settings. By examining all of these settings together, policy makers and practitioners interested in substance abuse and the healthy development of individuals and communities can identify and, within available resources, implement concrete, systematic, and comprehensive preventive interventions for communities as a whole. The development and strengthening of community-wide norms against the use of substances may well be one of the more important ways to protect individuals against the use of substances. The section on communities discusses some of the issues and tools for community-wide prevention planning and coordination,





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that's worth fighting for.

Partnership for a Drug-Free America

## HOMES AND FAMILIES

Although American society expects families in their homes to take the lead in dealing with substance abuse and other problem behaviors (69), families in this country generally receive only limited outside support in protecting themselves against substance abuse. This situation may result in part from the belief that most nuclear families can raise their children largely independently and therefore do not need outside support, and in part from the belief that teens and young adults are more influenced by their peers. The first belief, however, is not supported by long-standing practices in most societies, where extended families and life-long neighbors have traditionally helped raise children (although in the United States many parents do not have access to these additional child-rearing resources because of urbanization, high technology, and family mobility). And the second belief is being questioned by growing evidence that certain parenting practices and family intervention programs can significantly reduce the risk of substance abuse among adolescents and young adults.

An extensive and growing body of research strongly suggests that many families do need, and can benefit from, support from outside the family, and can often protect their children from substance abuse, even into adolescence and adulthood. While some of the findings reported here may appear to be commonsensical, they are presented because they have been addressed by researchers as part of a growing body of increasingly rigorous research. Some of the studies focus on risk and protective factors that are known or thought to be associated with substance use and abuse, while others focus directly on substance use and abuse. To reduce redundancy, factors and programs discussed elsewhere in this report are for the most part not considered here.

### ■ Protective Factors

Families can protect against substance use and abuse by providing close family relationships, sufficient monitoring, clear messages about sub-

stance use and abuse, and attractive alternatives to substance use and abuse.

### *Close Family Relationships*

Family relationships can help protect against substance use and abuse when they are characterized by closeness and warmth, effective and positive discipline, and successful problem solving and communications. For example, young people who report feeling close to their families are less likely to abuse substances than those who report not feeling close to their families. Parents in such families are more likely to comfort their children when they are afraid, have two-way communications, and give children some say in what happens to them (83,86,152). Because such parents spend more time with their children, there can be more conflict, but the time spent together can also lead to greater mutual understanding and acceptance (23,59).

Parents can better channel their children away from substance use and abuse if they have routinely used effective, age-appropriate discipline methods, including clear expectations and rules about homework, television, curfews, and drugs and alcohol. Such methods are particularly effective when they are enforced by praise and encouragement, instead of by threatening, nagging, and blaming (42,47). In contrast, ineffective or provocative family management practices, including overly harsh or reluctant discipline practices and inconsistent followthrough, are associated with early sampling of substances and later abuse (8,15). Unruly behaviors in childhood can lead children to poor achievement in school, social rejection by more conventional peers, and greater association with other children with behavior problems (46).

Skillful handling of problems by families helps children learn how to distance themselves from problems and address them with specific problem-solving strategies (77). Such skills can help children later avoid the use and abuse of substances. By contrast, families where children eventually abuse substances do not make deci-

sions and solve problems as well as other families (97). Positive caregiving and discipline can prevent negative outcomes even for highly stressed, minority, low socioeconomic status (SES), urban families (177). When the birth parents are not available, effective parenting by a surrogate, relative, or neighbor can also be protective (173).

### ***Sufficient Monitoring***

When parents or parent surrogates know how their children are spending their time, the risk of substance abuse is low (47). Such monitoring may prevent abuse by reducing access to substances, preventing use of substances, or allowing parents to identify substance use earlier and to apply sanctions. Monitoring may also entail greater involvement by parents in their children's lives, which may help render substance use and abuse less appealing by enhancing feelings of trust, warmth, and closeness in the family. Such monitoring prevents substance sampling across ages, ethnicities, and settings.

Single parents and working parents are often less able to monitor their children thoroughly, because they can be in only one place at a time. However, grandmothers, aunts, after-school personnel, and other caring and supportive adults can also monitor children and help reduce deviant behaviors (59,88). Early autonomy and unsupervised leisure time apparently increase the risk of substance use and abuse by children.

### ***Clear Messages About Effects of Substances, Including Sanctions***

Children are more likely to avoid the use of substances if they know that use will bring negative outcomes, such as adverse physical and psychological effects, disapproval, and penalties imposed by parents. Many children develop expectations about the effects of substances as early as the preschool years (100), influenced primarily by their parents. Frequent parental use even of aspirin, cold pills, prescribed psychotropic medi-

cations (85), and cough medicine can give children positive expectations about the effects of substances (61).

When parents apply reliable penalties, such as revoking privileges, and coach their children about the adverse effects of substances, use is likely to discontinue (6). By contrast, if the possible adverse effects (e.g., illness and depression) are not emphasized and few negative sanctions are applied when adolescents first use marijuana, while the immediate experiences are to feel pleasantly stoned and potent (87), then continued use and adult drug problems are more likely (37). Parental disapproval of children's alcohol use has been found to be protective across ethnic groups (33). Increased appreciation of risks and social disapproval of substance use is credited with the recent downturn in cocaine and marijuana use nationally (5).

### ***Attractive Alternatives to Substance Use and Abuse***

Participation in religious and other conventional and challenging activities can protect against substance use and abuse (26,8 1,111, 173). Especially important are activities about which youth are passionate.

Parents are more likely to guide their children away from substance use and abuse if parents have instilled hope in their children to succeed as adults (172). By contrast, some children do not look forward to and plan for adulthood, but learn only short-term thinking (see box 8-1 ) and have been encouraged by their parents to believe they cannot succeed.

Parents of inner-city African American children face special difficulties in holding out hope for their children's success through traditional opportunities. Unemployment among African American men is almost 50 percent (24) and the marriage rate among African American women is low and still declining (10), with substance use and abuse among African Americans increasing

### BOX 8-1: Example of Short-Term Thinking

Eighteen-year-old Lyle is a senior at an Inner-city high school. In four weeks, he will receive his high school diploma. In six months, he will become a father.

Lyle has a significant history of delinquent behavior, including assault, drug dealing, and grand larceny. He has recently withdrawn from a gang because "it's gotten crazy and it's gotten really out of hand" and "I don't want to die." However, he adds, "I still hang with the fellows and stuff like that."

Because he "feels like working," Lyle is looking forward to getting out of high school. He has no plans for college, which he regards as "too much hassle, to tell you the truth." His plans for the future are vague—to "work, make money, you know"—but he tries not to think about it much because, "you know, you might die." For Lyle, "the way everything's happening now, you can't really think about the future the way things happen now, you can get shot coming out of your house. You can be shot in the window, you know."

Lyle is a daily smoker of ten or more cigarettes, a habit he describes as "like a everyday routine—whenever I can get time to smoke one, I'll smoke one." He drinks a couple beers almost daily, and also smokes marijuana "most likely" every day.

But Lyle avoids harder drugs, like cocaine, because "I don't want to kill myself." By way of explanation, he adds "I'd rather kill myself slowly than fast."

SOURCE: H. Stauber, "I've Got Plenty of Cells to Waste: Perceptions of danger and invulnerability among reckless-behaving adolescents," Unpublished paper, Harvard Graduate School of Education in progress.

as they reach 26 to 34 years of age, instead of decreasing as with other racial and ethnic groups (164).

## ■ Risk Factors

Families also face risk factors, such as parental neglect and rejection, behavioral problems and crime, physical and sexual abuse, substance abuse in the family, failure in school, emotional problems, negative life events, early use of substances, substance abuse in the neighborhood, and poverty, unemployment, and hopelessness. Because some of these factors are discussed elsewhere in this report, this section will focus only on parental neglect and rejection, physical and sexual abuse, substance abuse in the family, negative life events, and drug trafficking in the neighborhood.

### *Parental Neglect and Rejection*

Children who are neglected anytime, but especially from earliest childhood, are at greater risk of substance abuse (17,142). When children have been continually rejected, they become immune to parental guidance. Such children fail to form

close relationships, get along with others, solve problems, and regulate impulses.

### *Physical and Sexual Abuse*

Physical or sexual abuse in childhood leads to greater vulnerability to substance abuse in adolescence and adulthood (38). Rape victims, particularly those with Post Traumatic Stress Disorder (PTSD) symptoms, are 20 times more likely to have subsequent substance abuse problems (165). Substance abuse rehabilitation programs report that as many as 60 to 70 percent of the female patients and 25 percent of the male patients have been sexually victimized, while 43 percent have been beaten (45,99,92). Victims of sexual or physical abuse often report wishing to avoid unpleasant memories, including flashbacks to the abuse (126). The use of substances may help some victims forget for awhile (see box 8-2).

### *Substance Abuse in the Family*

The biological children of alcoholics have a higher than average chance of abusing alcohol, even if they are reared away from their alcoholic parents (40,63). Thus, apart of the vulnerability to alcohol

## BOX 8-2: Janice

Janice, a 28-year-old, white, married female, was in outpatient treatment for bulimia nervosa, a binge-purge pattern of eating that began when she was 18 years old. She also had an intermittent history of alcohol abuse dating from midadolescence. Janice appeared to be well-motivated in treatment. She used the psychoeducational approach taught by her therapist to increase her knowledge of how her binge-eating and moodiness were related to her restricted daily caloric intake. She made progress quickly, using cognitive behavioral techniques to challenge her distortions and understand her behavior; she began to eat consistent meals in adequate amounts. These changes led to a decrease in her binge-eating and self-induced vomiting. However, along with this progress she became increasingly anxious, fearful, and agitated about weight gain (despite the fact that little or none had occurred). At the same time, she became overwhelmed by the intensity of the feelings she experienced, was having bad dreams, and withdrew from her support system in ways that angered her friends. She once more resorted to inconsistent meal patterns, dieting, poor nutrition, and—invariably—binge-eating and vomiting. Her alcohol use increased.

Janice's symptomatology shifted once she significantly decreased her bulimic behavior. Instead of dealing with everyday feelings, behavior, and thoughts, she began to relive memories from her unresolved traumatic past. These memories started with vague feelings of uneasiness, which grew more intense as she binged less. She then began to remember her dreams, which, as they came into clearer focus, caused her to be suspicious of her friends, and particularly of the men around her. Janice reported feeling fine one minute and then very frightened the next. Whereas she used to be flattered by any male attention, she now felt fearful when men looked at her. She started to remember multiple sexual assaults in her past, both by persons known to her and by strangers. She felt increasing urges to suicide, and observed the reality of her internal suffering as being "too awful." As she said, "If this is what recovery is all about, I don't think it's worth it, I'll take my chances and struggle with addictions. If I can't stand that, there's always suicide."

SOURCE: M. P. Root, "Treatment Failures: The Role of Sexual Victimization in Women's Addictive Behavior," *American Journal of Orthopsychiatry*, 59(4), 543, 1989.

abuse, at least for some, may be inherited. Children of alcoholics, for example, may experience more positive effects or fewer negative effects from the use of alcohol. Either of these responses could result from individual differences in experienced pharmacological effects of drugs (135) or differences in temperament that can be modified by the use of alcohol and other drugs (154).

In addition to friends and acquaintances, relatives are a common source of alcohol and other drugs for teens. Family members and other relatives can be very persuasive when they offer such substances to teens. One study, that included both abstainers and heavy users, found that young people refused available substances, mainly alcohol, 46 percent of the time when friends offered them, but only 18 percent of the time when rela-

tives outside the family offered them. When their own parents offered such substances, the young people never refused (9). Family members who use substances can also inadvertently make them available to teens by leaving family cabinets containing alcohol or pills unlocked (35).

Family members can learn how to use alcohol and other drugs by watching and listening to abusing family members; they can also adopt the abusing members' expectations about the effects of these substances. For example, children of alcoholics are more likely to think that the purpose of drinking is to get drunk (107). They also have greater expectations for the use of alcohol (143), and sometimes believe they can do things better after a few drinks.

Families with a substance abusing parent experience significant disruptions in many aspects of their lives, including child rearing (160). Substance abusing parents and spouses often have difficulties guiding their children, especially away from substances, because of inconsistent nurturing, monitoring, and disciplinary practices (36,47). Their abuse of substances can also rob children of stability in life and of competent adult role models. Even a nondrinking spouse can become so involved with the drinking spouse and so depressed and isolated from social support that children feel neglected (13). Marital quality can be affected (160), and the level of conflict and verbal and physical aggression can be high (151). In addition, adolescent and adult children of substance abusers are less influenced by their parents and have lower parental attachment, less involvement with other people, more difficulty getting along with other people (84), lower self-esteem, lower academic achievement, higher depression (128), and a greater number of other psychiatric symptoms (143).

### **Major Negative Life Events**

Substance use and abuse often increase as children experience more negative events (106, 174) (see table 8-1). Adult alcoholics report a significantly higher number of severe life events just before their alcohol dependency begins (65), with seven out of eight of them reporting disruptions in important personal relationships, such as with friends, lovers, or spouses. Among the elderly, late-onset alcoholism is reportedly preceded by new feelings of loneliness and depression, perhaps also due to recent losses of important relationships (120,134).

Such negative life events may heighten vulnerability to substance abuse by increasing depression (174). For instance, one study found that children who had lost a parent to death had a 7.5 times greater risk of developing a depression than other children (60). Negative life events may also occasion perceptions of helplessness and decreased personal control; these too can be offset, at least for awhile, by some drugs (91).

**TABLE 8-1: Ranking and Weighting of Major Negative Life Events of Children**

Event	Weight <sup>a</sup>
Death of a parent	91
Divorce of parent	84
Marital separation of parents	78
Child acquired a visible deformity	69
Death of a brother or sister	68
Serious illness or accident requiring hospitalization of child	62
Serious illness or accident requiring hospitalization of parent	55
Death of child's close friend	53
Increase in arguments between parents	51
Change in father's occupation requiring increased absence from home	45
One parent arrested or in serious difficulty with the law	44
Serious illness requiring hospitalization of brother or sister	41
Death of a grandparent	38
Loss of job by parent	38
Brother or sister have serious trouble	36

<sup>a</sup>Readjustment weights derived from Coddington, 1972a

SOURCE | Sandier, & M Block, "Life stress and maladaptation of children," *American Journal of Community Psychology* 7(4), 425-440 1979

Families are likely to have the greatest difficulty preventing substance abuse if friends abuse substances (86, 109) or if substance use is rampant in the neighborhood (39,44,51, 124). Such conditions encourage substance use and reduce the barriers against use by making drugs continuously available and socially acceptable (even appealing) and by providing temporary escape from the frequent hassles and tragedies of life among highly transient and troubled (rather than stable and helpful) neighbors (146).

### **Programs To Enhance Protective Factors**

This section discusses some of the numerous programs that have been developed for families with infants, school-aged children, and young adults. **Few of these programs specifically target sub-**

**stance abuse and addiction, but many have been found to enhance family-based protective factors and/or reduce risk factors that can be associated with drug abuse. Unlike some school-based programs, methodologically rigorous studies correlating the efficacy of these programs to the level of substance abuse and addiction have yet to be done.**

### ***Families With Infants***

Parent education, prenatal and infant care, and social support programs help strengthen involved and responsive parenting (4), which in turn can significantly reduce substance abuse risk factors such as child abuse and neglect and childhood accidents.

Parents who had participated in such programs attained more education, had fewer other children, and were less likely to be on welfare by the time their children were 10 years old, than parents who had not participated in such programs. Participating parents reported less stress and more confidence in their parenting ( 175). Most importantly, children were dramatically less likely to experience attendance, behavior, or academic problems in school (112,138,139),

These programs can take many forms:

- a neighborhood house where parents and their infants can come during the day for companionship, child care advice, social services, and health care from a stable professional staff (139);
- twice-a-week home visits by the same nurse, from pregnancy until the child is 2 years old (112);
- home visits, with child development advice, help in acquiring other services, and time-limited family counseling to lower conflict and increase support from the extended family;
- a public school dedicated to pregnant teens and new mothers and that provides health and child care education, social services, and intensive high school education (138); and
- parent meetings in the hospital where the baby was born (175).

### ***Families With School-Age Children***

Parent training and support programs can help parents of school-aged children motivate their children to more willingly pay attention to and accept parental guidance and to develop skills for success outside the family. A parent training program called WINNING, provided through a Texas school system, increased positive and corrective feedback from parents to children, increased parent-child interactions, and decreased the attention parents gave to inappropriate child behavior. Concomitantly, the portion of their children’s behavior that was inappropriate decreased (43).

Another parent training and support program, “How to Help Your Child Succeed in School,” was offered through Seattle, Washington schools to increase protective factors and reduce risk factors for substance use and abuse. After the program, parents spent more time reading with their children and provided more consistent positive and negative consequences for behavior (70,71,72,73,74).

Involving parents more in schools can further support parenting and prevent it from being undermined by peers and by school environments. In the School Development Program in New Haven, Connecticut, for example, parents serve as members of the School Advisory Council and as employees or volunteers in classrooms. Significant improvements have been seen in student attendance, language skills, math scores, and social competence, and virtually all classroom behavior problems have been eliminated (34,41 ).

A community grassroots effort to provide these and other resources for parents began 17 years ago in the Ravendale section of Detroit, Michigan. The “Joy of Jesus” programs now support families living in more than 30 contiguous blocks. Every day after school about 250 youth of all ages participate in scheduled activities such as tutoring, music, dance, gym, writing, teen sex education, cultural field trips, university tours, and an entrepreneur’s club (for 30 teens who are starting their own businesses). This program provides several substance abuse protective factors and prevents the risk factor of school failure, by monitoring re-



port cards and enrolling students in an individualized after-school motivational learning program, if necessary.

In Los Angeles, California, an after-school tutoring and activities program has been developed in a for profit apartment building. The program, called EEXCEL, provides a room in the building and live-in counselors and tutors who offer children a “sanctuary for education [and] ...incentives for learning.” When report cards come out, good grades are recognized at parties. Only those families that want this resource for their children are accepted as tenants in the building ( 108).

Atlanta, Georgia-based Inner-City Families in Action has been presenting comprehensive information in a series of 2-hour sessions about how specific drugs, such as alcohol or crack, affect every system in the body, to residents in two Atlanta housing projects. The curriculum is called “You Have the Right to Know.” After 2 years of using the curriculum in many locations, the narcotics arrests in both housing projects are down (52).

Through flyers, personal invitations from schools, and a 1-hour television special, parents were recruited to 87 local sites around Seattle, Washington, for workshops on “Preparing for the Drug (Free) Years,” led by trained parents. Surveys showed that parents’ attitudes and behaviors were changed in the direction of providing protective factors. Parents also rated highly the workshops’ content, process, and leaders (71 ).

The Midwestern Prevention Project (Project STAR) in Kansas City, Missouri, used the local media to recruit parents to become involved in a school and parent substance abuse education course and to repeat the messages for more than one year. This intensive effort reduced the rate of increase in initiation of alcohol, tobacco, and marijuana use among seventh and eighth graders who had participated in the program, as compared to those who had not participated (11 6).

### ***Families With Young Adults***

Job Corps, Peace Corps/VISTA programs, American Conservation and Youth Service Corps, National and Community Service Programs, universities, and the military all provide young people sheltered work experiences, educational training if necessary, and opportunities to live away from home with other young people in structured environments. Research shows that such experiences enhance the confidence of participants in their ability to work hard (48).

### **■ Programs To Reduce Risk Factors**

#### ***Reducing Drug-Trafficking and Substance-Using Peers***

Operation Clean Sweep, now being run by the Chicago, Illinois, Housing Authority, is designed to reduce drug dealing and other crimes in housing projects. Staff approach one high-rise building at a time, spending at least a whole day at the building. State and local law enforcement officers and housing authority security officers search apartment units (if there is reasonable cause) for illegal weapons and unauthorized residents. Authorized residents are given photo I.D. cards, while others are put on the lease, given a 2-week pass, or asked to leave. The maintenance staff makes repairs, cleans graffiti, encloses lobbies, and builds a security station for 24-hour-a-day surveillance and review of photo I.D. ’s and passes for admittance. The program is being replicated in cities across the nation, with funding and technical assistance from the U.S. Department of Housing and Urban Development (HUD).

#### ***Reducing Physical and Sexual Abuse***

Physical and psychological security is important for the emotional well-being of children (30) and may well reduce their risk of later substance abuse. Mandatory arrest and brief incarceration for physical and sexual abuse of children or mothers has been shown to deter more repeat offenses than do warnings or counseling alone ( 144), and

court-mandated treatment for convicted offenders seems to reduce later abuse even further (50). Since 40 to 87 percent of adult sexual or physical abusers also report alcohol or drug abuse, individuals treated for family violence should perhaps also be screened and, if appropriate, treated for substance abuse (176).

### ***Reducing Substance Abuse in the Family***

Substance abuse treatment for the family can reduce substance abuse in the short-term and maintain those reductions in the long-term (27,75, 101,147,149, 153.). Substance abuse treatment for married adults is more effective when both spouses are involved (96), and especially with a behavioral approach to marital problems (1 10). Clearly, families can help rehabilitate substance abusers, thereby reducing the risk of substance abuse for other family members.

### ***Reducing Impact of Negative Life Events***

Linking people with modest community supports during crises or adjustments can reduce risk factors and enhance protective factors. For example, when widows were contacted individually by trained, previously widowed persons to discuss grief and decisions to be made, 61 percent accepted the widow-aide services ( 145) and one month after bereavement were less depressed and less preoccupied with the past than widows who had received no intervention. One year later, the intervention group was significantly more resocialized in their roles as singles; two years later, the health of the intervention group members was significantly better than that of control group members (168).

Also, a 6-month program for newly separated or divorced people in Colorado (which included both one-to-one counseling by trained volunteers and group meetings about practical problems, such as career planning and child-rearing) significantly reduced the participants' problems and their anxiety, nervousness, and fatigue. It also improved their psychological adjustment (less guilt and self-blame, more competence), as compared with a randomly selected control group ( 18). More

indirect approaches have also been tried. For example, socially isolated and lonely individuals, who were provided a free blood pressure station in the lobby of their innercity single room occupancy hotel, were introduced to each other by the nurse and later formed a "Senior Activities Club." In another example, a surplus food distribution service, that required individuals to work together to get their food, produced new friendships (1 17).

### ***Reducing Parental Neglect***

Parents whose children failed to maintain gains after parent education or family therapy are often socially isolated and subject to seemingly insurmountable daily problems (49). An experimental program—with weekly follow-up sessions with isolated parents, to discuss environmental problems that affected how parents saw their children's behavior—reduced maternal criticisms of children, negative responses by children to mothers, and child problem behaviors (170). When the weekly discussions stopped, however, the negative interactions resumed.

In a more comprehensive program for low SES parents believed by Child Protective Services to be at high risk for child abuse or neglect, Project 12-Ways held meetings with parents in their homes (95). Treatment goals were developed and, as needed, behavioral training was provided in stress reduction, assertiveness, self-control, leisure time planning, marital counseling, and job finding. Social support groups, alcohol treatment referral, homemakers, physicians, and mental health workers were also involved. Parent compliance and involvement in this 5- to 6-month program were high. Twenty months after treatment, only 2 percent of Project 12-Ways parents abused or neglected their children, while 10 percent of a nonprogram comparison group did.

Families on the verge of having children placed in foster-care, group homes, or psychiatric hospitals can benefit from family preservation programs. Children have fewer behavioral and academic problems when they are raised by birth-parents in safe homes ( 130). Thus, the goal of a family preservation counselor is to help the family

## BOX 8-3: Dara

Dara (20) was the natural mother of Christina (9 months) Christina was in danger of placement in foster care due to the cocaine addiction of her mother Her father, Matt, was serving time in jail on a drug charge Christina's older brother, Jason, was placed in foster care prior to Homebuilder involvement Dara's addiction prevented her from properly caring for herself and the children Dara rented the upstairs apartment in her parent's home Her 19-year-old boyfriend, Brian, spent a great deal of time with her and Christina

I helped Dara find out about drug treatment centers and a schedule for Narcotic Anonymous (N A ) She missed her first drug evaluation because of having an abortion She and Brian went to one N A meeting and then missed many days The CPS caseworker met with me and Dara and stressed the importance of her drug recovery Dara agreed to complete the evaluation as well as attend N A meetings Initially I accompanied her to the N A meetings for moral support Sometimes Brian would go and the rest of the time her mother would accompany her Dara successfully completed her drug evaluation and attended regular counseling sessions with a drug counselor She volunteered for urinalysis, "just to keep her honest " Dara got involved with other young adults in N A They went to eat together and went out to dances and movies She began associating with a new peer group The CPS caseworker authorized maximum day-care to be paid for so she could attend her meetings and counseling Dara's mother volunteered to baby-sit Christina if Dara was with her friends from N A

Dara's husband got out of jail and wanted a divorce He filed for custody of both of their children I helped Dara arrange for legal aid She said she was more determined than ever to "stay straight so she would look good in court" over the custody of the children

Dara asked her boyfriend to move out so she could live by herself She and Brian continue to stay in contact from time to time Dara retained custody of Christina She and Matt agreed on joint custody of their son, Jason, and Dara saw him every other weekend. She continued drug counseling and attending N A Her urinalysis always tested negative

SOURCE J Kinney, D Haapala and C Booth, *Keeping Families Together*, (pp 22-23) (New York Aldine De Gruyter, 1991)

out of the crisis and learn how to retain the child safely at home. The interventions are typically intensive and brief—for example, a counselor is available for meetings in the home 24 hours a day, 7 days a week, for about 6 weeks. The counselor deals with any relevant problems, helping the family clarify values, set goals, and solve problems, and helps connect family members with community resources (see box 8-3).

Many families, especially those with substance abuse problems, need more prolonged help. A family support program that provides such longer term support is Camden House, in the Ravendale section of Detroit, Michigan. A rundown house was purchased, renovated, and made the center of an outreach and drop-in program for about 1010-cal families with multiple problems that included substance abuse, lack of skills, chronic unemploy-

ment, early pregnancy, and crime. After staff had worked with the families for one to two years, taking one problem at a time and actively mentoring the parents, six out of 10 of the original parents were out of the Camden House program, drug-free, trained and employed, and safely and responsibly raising their children.

## SCHOOLS AND PEERS

Millions of school-age youth in the United States experiment with alcohol, tobacco, and other drugs annually, often (especially with alcohol) in ways that can cause overdose deaths, accidental injuries or deaths, and permanent impairments. Many school-age youth continue to use substances and later develop long-term addictions. To address these substance abuse problems, schools provide

# WHAT IS YOUR CHILD TAKING IN SCHOOL THIS YEAR?



Your child isn't just learning about History and English in school. He's also learning about amphetamines, barbiturates and marijuana.

Drugs are rampant in our schools today.

Kids are taking them before school. They're taking them between classes, School has even become one of the more convenient places to buy drugs.

The sad part is that all this doesn't just affect those kids who are taking the drugs. It affects all the kids. Drugs keep

everyone from learning.

Our schools need our help.

As a parent, you can do your part. Talk with your child. Find out how bad the problem is at his school.

Then talk to other parents. And decide what you as a group can do to get drugs out of the classroom.

Also, contact your local agency on drug abuse. They can provide you with valuable information as well as sound advice.

School is your child's best chance to get ahead in life. Don't let drugs take that chance away.

the most important settings for reaching young people with standardized, broadly applied educational and preventive messages.

Because school-age youth are especially likely to initiate the use of alcohol and other drugs, much of the research has focused on use, rather than on abuse and dependency. Such research is nevertheless relevant to an understanding of abuse and dependency, since use is a precondition and contributor to abuse and dependency and even experimental use can be harmful. For example, nearly half of all youth who experiment with cigarettes develop long-term smoking habits, and alcohol and marijuana use by youth with no chronic problems still contributes to highway deaths, crime, and violence. This section summarizes results from an analysis of survey research on the causes of school-age substance use and discusses school-based prevention programming.

### ■ Analysis of Survey Research on Causes of School-Age Substance Use

OTA commissioned a review of the survey research literature on school-aged substance use that compiled, classified, and examined 9,930 statistical analyses from 242 separate studies. This is by far the most extensive systematic examination of this body of research conducted so far. Most of the studies dealt with school-based populations, but some focused on school-age army recruits, dropouts, children of alcoholics, and individuals involved in clinics. The studies reported statistical relationships between substance use and its postulated causes. Statistical findings from the study reports were sorted into 11 major categories and 50 subcategories (see table 8-2), and then analyzed to identify strong, moderate, and weak statistical relationships, as well as those that had been insufficiently studied.

#### *Characteristics of Database*

The studies tended to focus on so-called gateway substances, with tobacco, alcohol, and marijuana analyses accounting for 82 percent of the completed analyses (see figure 8-1). Cocaine, inhalants, heroin, and prescription drugs, which have

recently received extensive social attention, have been relatively ignored by quantitative researchers to date; none of these latter categories of substance use accounted for more than 5 percent of the analyses in the research reports examined. Gateway drugs are indeed important, since they may lead some individuals to later abuse. Nevertheless, the literature has gaps. Inhalants, for instance, may well be one of the most commonly used and abused substances among some youth, but they have received almost no attention from survey researchers.

Although the primary measures were of use, not abuse, the database included some measures of alcohol abuse (e.g., drunk driving and impairment from alcohol use). Abuse of cocaine, heroin, and analgesics was not measured. The percentages of analyses in the database for each of the 11 major types of independent variables is displayed (see figure 8-2). The types of independent variables most studied were personality, use by others, and cognitive factors (including attitudes, beliefs, and values).

#### *Results of Analysis*

After being sorted into the 11 major categories and 50 subcategories, the average of all the correlations in each subcategory was calculated. Then, each subcategory was ranked by its average correlation and the rankings were divided into three groups, defined by ranges of correlations: primary (with correlations over .30), secondary (with correlations between about .20 and .30), and tertiary (with correlations under about .20) (see figure 8-3).

#### **Primary correlates**

The four variables that dominate as correlates of and possible contributors to substance use are: 1) prior and concurrent use of substances, 2) substance use by peers and friends, 3) perceived peer attitudes about substance use, and 4) offers to use substances. The prominence of prior and concurrent use is consistent with the reinforcing nature of substance use itself. The prominence of the other three variables emphasizes the importance of

TABLE 8-2: Factors in School-Aged Database Associated With Substance Use

<ul style="list-style-type: none"> <li>▪ <b>Prior Use</b></li> <li>▪ <b>Drug Use by Others</b> <ul style="list-style-type: none"> <li>Peer/friend use</li> <li>Use and deviant behavior by a relative</li> <li>Sibling use</li> <li>Availability</li> <li>Parental use</li> </ul> </li> <li>▪ <b>Intentions</b></li> <li>▪ <b>Overt and Normative Pressures</b> <ul style="list-style-type: none"> <li>Peer/friend attitudes about drug use</li> <li>Offers to use</li> <li>Others' attitudes about use</li> <li>Motivation to comply with pressure</li> <li>Media influences</li> <li>Others' attitudes about other issues</li> </ul> </li> <li>▪ <b>Cognitive Factors</b> <ul style="list-style-type: none"> <li>Attitudes</li> <li>Beliefs about psychological consequences</li> <li>Value of achievement</li> <li>Religious values</li> <li>General values</li> <li>Beliefs about health consequences</li> </ul> </li> <li>▪ <b>Demographic Factors</b> <ul style="list-style-type: none"> <li>Age/grade</li> <li>Race</li> <li>Geographic identifiers</li> <li>Gender</li> </ul> </li> <li>▪ <b>Personality Characteristics</b> <ul style="list-style-type: none"> <li>Deviance</li> <li>Independence</li> <li>Affect</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Personality traits</li> <li>Social personality traits</li> <li>Self-esteem</li> <li>Locus of control</li> <li>• <b>Peer Factors</b> <ul style="list-style-type: none"> <li>Intimacy</li> <li>Peer group characteristics</li> <li>Peer bonding</li> <li>Peer-parent relations</li> </ul> </li> <li>▪ <b>Competence</b> <ul style="list-style-type: none"> <li>Self-efficacy</li> <li>Stress management skills</li> <li>School performance</li> <li>Self-management skills</li> <li>Intelligence</li> </ul> </li> <li>▪ <b>Institutional Influences</b> <ul style="list-style-type: none"> <li>School bonding</li> <li>Participation in nonstructured activities</li> <li>Religious affiliation</li> <li>Moral codes</li> <li>Church attendance</li> <li>Participation in structured activities</li> <li>Academic expectations</li> </ul> </li> <li>▪ <b>Home Factors</b> <ul style="list-style-type: none"> <li>Socioeconomic status</li> <li>Parental relations</li> <li>Parents' psychological traits</li> <li>Parents' marriage</li> <li>Parents' education</li> <li>Family composition</li> </ul> </li> </ul>
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SOURCE Office of Technology Assessment, 1994

the social environment in contributing to and reinforcing substance use among school-age youth.

**Secondary correlates**

Of the 15 variables judged to be of secondary importance, seven are social variables: 1) susceptibility to peer pressure, 2) resistance skills, 3) perception of social pressure to use substances, 4) beliefs that such pressure can be effectively handled, 5) beliefs about social consequences of use, 6) bondedness (especially to school), and 7) peer group characteristics. With the exception of parent attitudes about substance use, other parental variables—such as parental supervision, monitoring, and relations—are notably missing as primary or secondary correlates.

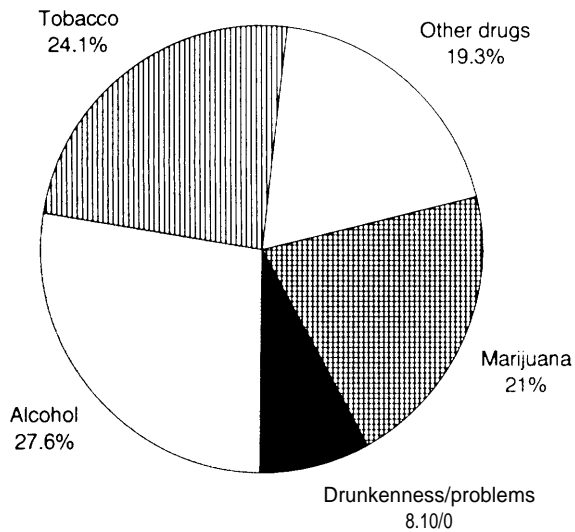
**Tertiary correlates**

Of the 38 variables found to have no more than a minor role in substance use, 10 were included in at least 100 of the correlational analyses in the database for this review. They are: 1) substance use by parents, 2) personality traits, 3) intelligence, 4) social personality traits, 5) parental relations, 6) affect, 7) participation in structured activities, 8) bonding with the peer group, 9) beliefs about health consequences of using substances, and 10) self-esteem.

**Variables requiring further study**

Several of the secondary and tertiary variables in the studies reviewed here were insufficiently examined to allow general conclusions to be drawn.

**FIGURE 8-1: Distribution of Drug Categories Used for Dependent Variables in Included Analyses**



SOURCE: Office of Technology Assessment, 1994

However, they may later prove to be useful to the field. For example, religious affiliation and the development of substance use-specific values, while not extensively studied as separate variables, both address issues related to social norms and influences that have often been found to be associated with substance use; thus, an association between these two variables and the onset of substance use might be expected. Also, availability may prove to be important, especially if it is defined in future studies more broadly (e.g., as physical and social availability, as discussed in ch. 5) rather than as potential availability (that is, how easy it appears to be to get a substance, if motivated), as many current surveys define it,

### ***Preventive Interventions***

Schools can seek to prevent substance use and abuse through curriculum-based drug prevention programs and through other, more novel approaches, such as school-based clinics, student assistance programs, and holistic environmental interventions. School-based prevention efforts have been hampered, however, by a lack of good evaluation data on the most widely marketed pro-

grams and by insufficient information about and dissemination of the more promising programs.

Numerous studies of the effectiveness of curriculum-based drug prevention programs have been completed and reviewed (67). Studies of prevention programs focusing on tobacco have been extensively reviewed (16,20,54,58,94,132,155) and alcohol studies have been reviewed several times (62,64,102). Reviews of school-based prevention curricula that specifically target marijuana or cocaine do not exist. However, several reviews have examined studies of programs designed to prevent the use of multiple substances (7,25,102,131,156). Even these reviews, however, typically focus primarily on tobacco and alcohol.

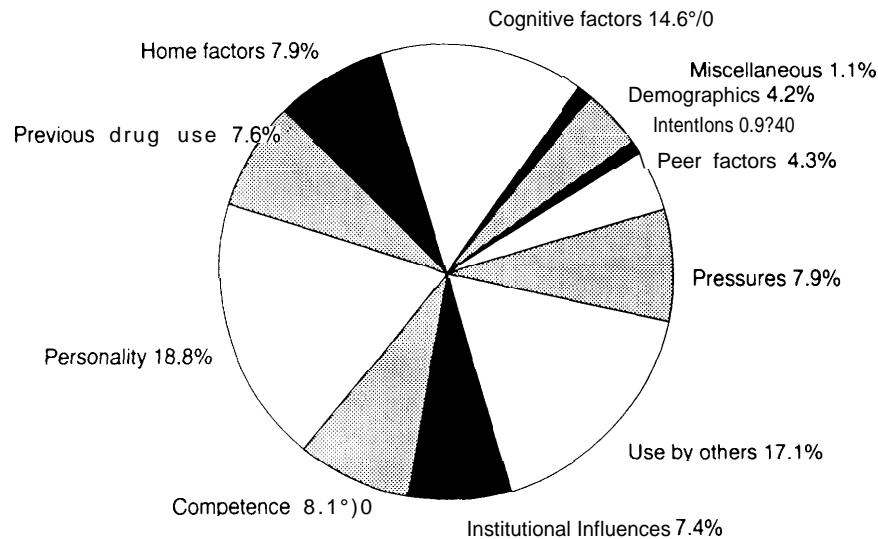
### ***Effectiveness of Drug Abuse Resistance Education Program***

Three merchandised curriculum programs have captured a sizable share of the prevention program market: DARE (Drug Abuse Resistance Education); Quest: Skills for Living; and Here's Looking at You 2000. Of these, evaluations only of DARE have been reported in sufficient numbers to allow conclusions to be drawn.

The DARE program is delivered in schools by uniformed police officers who have been trained in any of five regional training centers. It was designed by the Los Angeles, California, Unified School District, which borrowed from research-based programs developed in the early 1980s. DARE is delivered annually to about 5 million students in all 50 States, at a total cost of about \$50 million (an average annual cost of about \$10 per student) (93). DARE is thus one of the better funded drug prevention programs in schools.

One research team examined 17 published and unpublished evaluations of DARE (53). For the 11 studies that met minimal standards of methodological rigor, the average reductions in substance use were very small. Use among control schools and DARE schools was roughly equal. The few studies that were longitudinal found neither short-term nor long-term reductions.

FIGURE 8-2: Distribution of Analyses of Major Independent Variables Studied in Included Research



SOURCE: Office of Technology Assessment, 1994.

DARE has important strengths, including favorable reactions among students who have participated in DARE programs, widespread political support, substantial funding, uniformly reported improvements in school-police relations, high quality of program implementation, and expert marketing. However, these strengths have not guaranteed that DARE is always effective as a drug prevention program. A scientific advisory group has been established to review research and evaluation of the DARE program and to consider changes in the curriculum.

The General Accounting Office (GAO) estimated that about one-fourth of the funds given to the States and local schools under the Drug-Free School and Communities Act went toward purchasing and delivering school curricula (163). However, widely adopted curriculum packages (such as Quest: Skills for Living; Here's Looking at You 2000; Project Adventure; BABES; Project CHARLIE; and Children Are People) have presented no adequate evaluation results that allow program effectiveness to be judged. Evaluations conducted to date have been primarily short-term

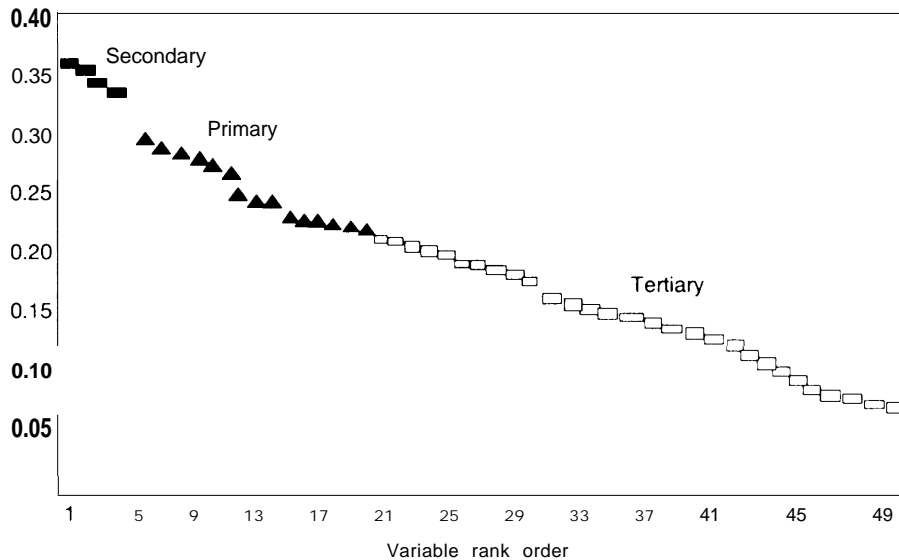
reviews for dissertations and theses, and they lack interpretable behavioral end-points. Given the widespread dissemination of these curricula, quality evaluation studies would be important.

### ***Conclusions About Curriculum-Based Prevention in Schools***

Curriculum-based drug prevention efforts to date can be characterized as showing promise (67,156), but critics point out that the effectiveness of these programs, especially those that are being commercially marketed, has not yet been proven and that significant difficulties remain (102). Some of these are methodological difficulties intrinsic to all field trial research, while others relate to the possibly intrinsic limitations of curriculum approaches when used alone. Individual studies suggest that curriculum-based prevention programs in the schools may ultimately be proven to be effective for preventing substance use among some youth, especially when used as components in more comprehensive substance use prevention efforts. However, school-based pre-



FIGURE 8-3: The Rank of Average Correlation Coefficient



SOURCE: Office of Technology Assessment, 1994.

vention technologies currently in use have not been refined and tested enough to demonstrate their effectiveness for reducing substance use for students in general, and especially not for multi-problem youth, who are at higher risk of substance abuse. Clearly, for DARE and for the other major school-based curriculum prevention programs, resources must be set aside to properly evaluate program results.

### ***Noncurricular Approaches to School-Based Prevention***

Curriculum-based efforts have dominated the field, largely because they are relatively simple to understand, implement, and replicate, and because methods to evaluate them have become standardized. However, curriculum-based prevention programs have not been demonstrated to be effective, and several noncurricular approaches have recently emerged, including student assistance programs, school-based clinics, and more holistic school-community collaborations and alterations of psychosocial environments in schools. These approaches have been evaluated

only rarely, but interest in them has been growing. For example, although student assistance programs remain largely unevaluated, they accounted for about half of the spending, under the Drug-Free Schools and Communities Act, in six recently evaluated urban school districts (163).

Student assistance programs try to identify substance-using students early on and then provide social support, build skills for dealing with life problems, or refer to treatment, as appropriate. Peers often help as crisis managers, small group facilitators, and referral agents, while adults often act as program facilitators and counselors. Programs typically counsel students who are children of alcoholics, who use alcohol or drugs abusively, and who are performing poorly at school. Programs can also help parents address their children's needs.

Only three evaluations of student assistance programs were found by OTA for this review. Two focused on process issues only (89,118), while one addressed program outcomes (90). The outcome study focused on interventions for students in six residential facilities, including a locked

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correctional facility. Although the sites are atypical for student assistance programs, the program otherwise resembled student assistance programs in schools.

The outcome study found that marijuana and tobacco use declined among program participants in five of the six facilities. Alcohol use declined in half of the sites, while alcohol use in two sites remained unchanged and in one site rose slightly. The declines in use were observed at about nine and 15 months after participation in the program. Although these results are promising, one study (especially a study conducted in nonschool settings) cannot support general conclusions about the effectiveness of student assistance programs in schools.

Many schools, either directly or through community agencies, are bringing services into schools to help deal with social and health problems that are often interrelated, such as depression, violence, substance use, and sexually transmitted diseases. School-based clinics and youth service centers are being set up to provide comprehensive and integrated health and social services. This new wave of programming has been supported by State governments, local school districts, and private foundations.

School-based clinics have been developing in response to growing poverty, widespread lack of insurance, and increases in health and social problems among youth. One study indicates that the percent of adolescents defined as living in poverty increased from 15 percent in 1979 to 19 percent in 1986 (22). Not all youth living in poverty are covered by Medicaid or other health insurance, and millions of other youth (e.g., in near-poor or recently unemployed families) also lack health insurance. Violence, teen pregnancy, and substance use and abuse remain high or are increasing in many communities, and these problems often require direct one-on-one medical or social interventions, if they are to have a chance of being resolved.

Self-referral and other data suggest that school-based clinics are providing health care and social support. For example, a survey of 306 such clinics in 33 States and Puerto Rico (22) found that about

half the visits were for medical problems, such as injuries and illnesses, with 40 percent of the visits for counseling and 10 percent for birth control supplies or counseling about reproductive issues more generally. No evaluations seem yet to have focused on the effectiveness of school-based clinics for assisting with the treatment and prevention of substance use and abuse. School-based clinics perhaps should not focus primarily on these problems, but as clinics expand in numbers questions will naturally and more frequently arise about their role in addressing substance use and related problems.

Several notable collaborations between schools and other community agencies and resources have been supported and, at least in part, studied. For example, the Community Partnership Program, administered by the Center for Substance Abuse Prevention, has supported more than 250 local partnerships for the prevention of substance use and abuse, with over 60 percent actively involving schools as coalition members. Each site must have a local evaluator that will monitor primarily program activities, and a national evaluation to monitor program activities and outcomes has begun. The local evaluations are expected to vary widely, in part because uniform, accepted standards for community-wide program evaluation have yet to be developed. Outcome findings are expected by 1997.

The Midwest Prevention Project (16) provides and studies school-based interventions in the greater Kansas City, Missouri, metropolitan area and in Marion County (Indianapolis), Indiana. Due to constraints in the study design, the evaluation results to date speak directly only to the impact of the school-based curricular interventions; the impact of community organization, parental, and media components cannot be evaluated. Nonetheless, this approach suggests the potential for communities to support school-based prevention efforts.

Cities-in-Schools is a national nonprofit organization devoted to preventing students from dropping out, through partnerships among schools, local governments, and businesses. Cities-in-Schools operates in 122 communities in

21 states with 384 schools participating in the program. The national organization strives to bring health, social, and employment services into schools across the nation, to help youth find jobs, tutors, and counseling and to motivate them to stay in school. A national staff assists local boards. A prominent person in business presides over each local program, directs fund-raising, and organizes a team of professionals to help potential dropouts. In most programs, a case manager is assigned to each high-risk child. Beyond these basics, programs vary greatly, focusing on a diversity of prevention and intervention strategies. Several Cities-in-Schools sites have achieved national attention. Although little concrete evaluation data are available about the effects of these programs in general or on substance use, the model appears promising and warrants further study.

Changing the social or physical climate in schools may also help reduce substance use and abuse. Future research and evaluation studies could focus on the impacts on substance use and abuse of this and other holistic models, such as open versus closed campuses, alternative schools, and after-school care programs. These models may be especially promising for high risk youth suffering from multiple risk factors and limited protective factors, many of which are rooted in problematic (often substance using and abusing) homes, neighborhoods, peer groups, and other subcultures, which cannot easily be influenced by more limited school-based prevention approaches alone.

## WORKPLACES

Workplaces can also contribute to and protect against alcohol and drug abuse. This section reviews literature on factors and interventions associated with substance abuse in the workplace, with a special focus on the role of workplace settings themselves. Researchers have investigated the causes of substance abuse among workers for nearly four decades, and U.S. management and labor have been concerned about workplace substance abuse for over a century ( 150,158, 159).

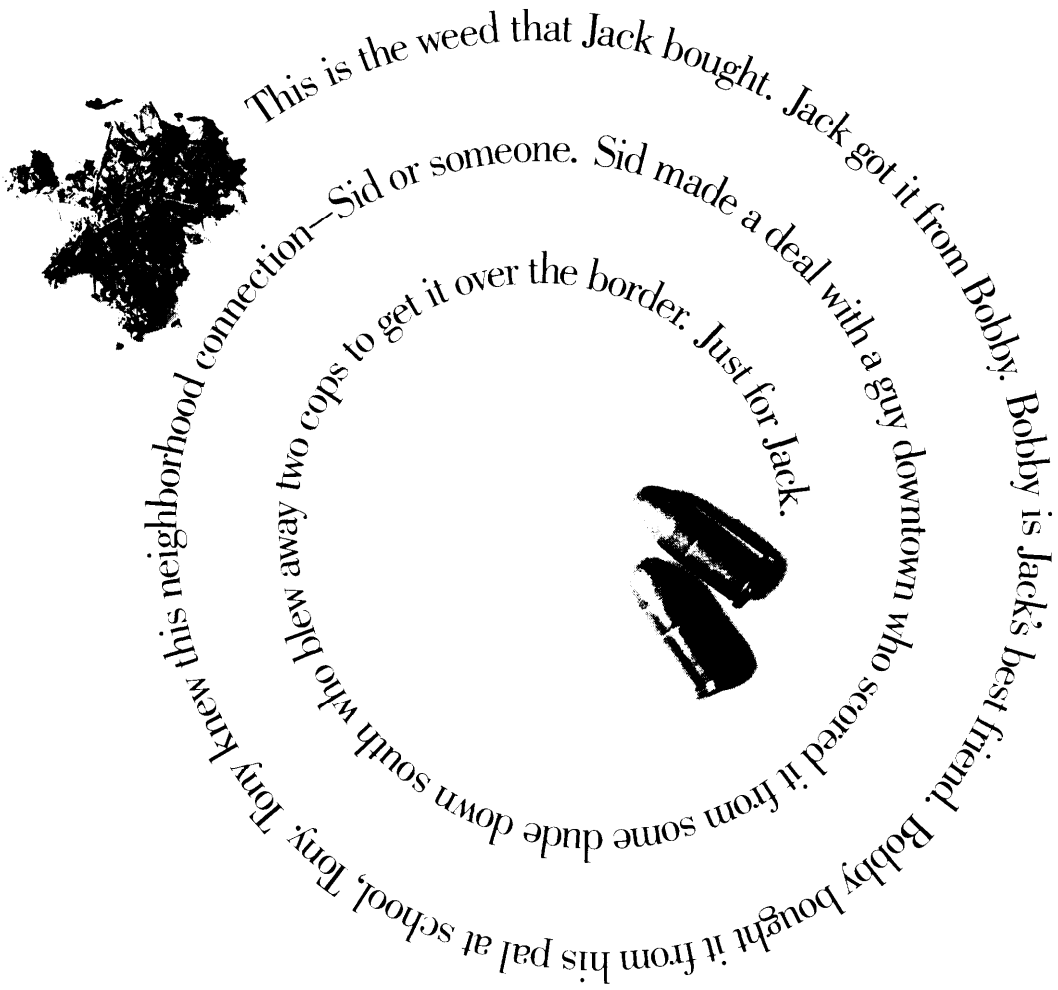
Alcohol has been the drug most studied in workplaces and appears to be the drug most commonly used.

### ■ Magnitude of Problem

The prevalence of substance abuse among the employed remains inadequately documented, based on a small number of flawed studies. For American workers more information exists on the extent of alcohol use and dependence (although gaps remain) than on the use and abuse of illegal substances (57, 68, 114).

The 1988 National Health Interview Survey found that about 13 percent of employed men and 6 percent of employed women were alcohol dependent (68). This nationwide household survey of almost 27,000 individuals found that, for both men and women, the percentage of white-collar workers who drank was greater than the percentage of blue-collar workers who drank. However, among those who drank, blue-collar workers drank more than white-collar workers. Consistent with an earlier survey in Detroit, Michigan, alcohol-related disorders were also found to be greater among blue-collar workers, with the rates highest for men who were craftsmen, laborers, and service workers, and for women who were machine operators, laborers, and service workers (114). Another investigator has reported that the rate of on-the-job substance use among young men in the 6 months prior to the study was about 28 percent (105).

Substance abuse contributes to workplace problems, such as accidents, injuries, absenteeism, turnover, lost productivity, compensation claims, and insurance costs (11). The total cost to the American economy related to substance abuse has been estimated to be more than \$144 billion a year, with about 60 percent due to alcohol abuse and 40 percent due to the abuse of other drugs (121). Costs to the economy include costs due to medical care, prevention, law enforcement, and lost productivity. The 1985 National Household Survey on Drug Abuse found that substance-using employees were 3.6 times more likely to have accidents than nonusing employees. They had 2.5



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times more absences of 8 days or more. They were three times more likely to be tardy than nonusing employees and were 2.2 times more likely to ask for early dismissal. They requested sick leave three times as much as non using employees. They were five times as likely to file for worker compensation. The total cost of lost productivity due to alcohol and other drug abuse has been estimated at more than \$33 billion in 1985 and a little more than \$43 billion in 1988 (1 22).

### ■ Factors Affecting Individuals in Workplaces

Substance abuse in workplaces can be affected by nonworkplace factors and workplace factors.

#### *Nonworkplace Factors*

Early research attributed drinking and other drug problems on the job to factors outside the workplace. Substance abuse was seen as a problem brought to the workplace but not caused by the workplace, and some believed that substance abusers selected workplaces where they could conceal their problems. This view assumed that substance abusers had the knowledge and freedom to choose jobs on this basis, an assumption unlikely to apply to all, given the limits of education and work experience among many substance abusers, especially blue-collar workers (11 3). In any case, family and community experiences interact with workplace experiences (2), and workers from families and other subgroups that drink may find that drinking influences their work lives as well.

As noted earlier, drinking problems are more common among those with lower SES, although drinking occurs more frequently among higher SES individuals (31). Workplaces that employ more lower SES employees may therefore be expected to have more alcohol abusers (157).

The acceptance of alcohol and other drugs in the larger society outside the workplace can also influence substance use and abuse in the workplace. This can be seen in the new attitudes in American society toward smoking. Consumers used to be assailed constantly by advertisements presenting smoking in a positive light, but are now

more informed about its negative effects on health. As a result, smoking has been banned from many airplane flights, restaurants, stores, and public and private workplaces.

The availability of alcohol in the local community from which a work organization derives its employees can also influence workplace drinking (157). Higher rates of drinking problems exist in communities where alcohol is cheaply and widely available and alcohol outlets remain open for long hours.

#### *Workplace Environment Factors*

Several decades ago, researchers distinguished four categories of workplace factors that place employees at risk for excessive drinking ( 127). They are:

- lack of work visibility,
- absence of job structure,
- lack of social controls that discourage alcohol use, and
- job stress.

A more recent review ( 157) of risk factors internal to workplace environments identified the following elements:

- alienation and powerlessness,
- work stress,
- structural features of the workplace,
- influence of administrative subcultures,
- poorly implemented intervention programs, and
- union-management conflict.

It has also been suggested that individual factors and perceived work situations may be more important for alcohol use than objective work situations (136). Those with boring and routine jobs, or jobs over which they have little control, may be more likely to drink (3,76). For example, a study of auto factory assembly line workers found that 40 percent drank alcohol at work (129), Other research found a consistent relationship between powerlessness and alcohol use, and no evidence that work experience or social support moderated alcohol use (137).

Workplace subcultures, whether administrative or occupational, may also encourage drinking or the use of other drugs at work. Administrative support for heavy drinking can exist throughout the work organization or can be limited to specific sites or occasions. Subcultures that can support the heavy use of alcohol, but strongly discourage the use of illicit drugs, are found in the military (28, 119). Anecdotal reports suggest that other occupational settings have encouraged the use of cocaine (e.g., entertainment industry). Although available research does not support the conclusion that workplace subcultures are the primary cause of substance abuse, there is evidence that at least alcohol problems vary widely according to occupation (148).

Workplaces can offer protective factors as well. For some, the fact of being employed, with the income and stability and status that employment can convey, may offer protection against substance use and abuse. If unemployment and underemployment are viewed as risk factors, then employment by itself, at a decent wage in a decent job, may offer protection. In addition, the specific characteristics of a workplace can be protective. For example, the risk factors listed above could be viewed as the extremes on a continuum, the other end of which could be expected to offer protection. Thus, work visibility, job structure, manageable stress, worker involvement and empowerment, supportive administrators, well implemented treatment and prevention programs, and union-management harmony could be expected to be protective factors.

## ■ Interventions

Two primary ways of dealing with employee substance abuse and health have emerged: traditional employee assistance programs (EAPs), which seek to help employees with identified problems, and health promotion programs, which seek to prevent illness and promote health (56).

### *Employee Assistance Programs*

EAPs help employees with personal problems at the employer's expense, by providing services directly (through the work organization) or indirectly (through a provider in the community) (140). In some workplaces, for example, EAPs are located in medical departments, which generally provide emergency medical care and may also provide preventive or rehabilitative care. Medical departments, however, appear to be declining as sites for EAPs (141).

EAPs rely on a strategy of constructive confrontation, which assumes that supervisors or co-workers of substance abusers will help refer them to the EAPs. In addition, workers are encouraged to refer themselves to EAPs for assistance.

A review of what works in fighting substance abuse in the workplace stresses that an employee assistance program is a key to a good workplace program (167). It also recommends a written drug-free workplace policy, management and supervisory training, drug testing in workplaces where appropriate (one example of which is when substance abuse may be dangerous to self or others), and employee education programs focused on substance abuse. Testing may well prevent substance use and abuse in workplaces.

Some studies suggest that EAPs can be cost-effective for business. The Department of Labor has reported that employers generally find that for every dollar invested in an EAP, savings of from \$5 to \$16 are achieved (167). Other reviews of the limited evaluations of the economic and other benefits of EAPs have found that health care costs and absenteeism, for example, decline after employees have been served by EAPs (178).

However, EAPs have also been criticized in some cases, for their inability to reach those at greatest risk, their incomplete coverage of lower status employees, their failures to identify problem drinkers early enough, their inadequate handling of situation-dependent drinking problems,

and their uncertain effectiveness in rehabilitating problem drinkers (140). The relative lack of EAPs in medium and small workplaces is an important constraint on the ability of EAPs to offer more widespread protection to the employed.

### ***Health Promotion Programs***

Health promotion programs seek to prevent illness and promote wellness through behavior change. For example, they provide information and support activities to help individuals increase exercise, quit smoking, change diets, and manage stress and hypertension. There are several advantages to using such general workplace health promotion programs to prevent substance abuse in the context of promoting positive life-style changes for all employees. These include:

- little or no stigma;
- the use of positive, optimistic approaches;
- ease in selling to employees and generating enthusiasm; and,
- generous corporate financing of health promotion programs (103).

The use of health promotion programs to prevent substance abuse can also present problems, however. For example, prevention historically has been one of the lowest priorities for Federal funding (104). When implemented by businesses, health promotion programs may inadequately deal with the needs of a particular work organization's employees, since the programs often come from outside and have not been tailored to fit the needs of a particular group of employees. Decision makers within a workplace may decide on the basis of intuition, whim, or trendiness to buy a health promotion program from the increasing number of purveyors of programs (140). Furthermore, many of the proponents of marketed health promotion programs have failed to adequately evaluate their programs. Unfortunately, this has been particularly true of activities intended to prevent substance abuse.

### ***Environment-Oriented Approaches to Substance Abuse Prevention***

A third approach, often associated with Scandinavia, focuses less on changing employee behaviors and more on altering workplace factors that influence worker health. The Swedish Work Environment Fund, established in 1972, supports research, workplace innovations, information dissemination, and training to achieve better working environments. Grants that support occupational health centers and research programs in Sweden are financed through a combination of employer fees, payroll taxes, and government financial assistance.

By contrast, the goal of alcohol policy in the workplace in the United States has for centuries been to change individual drinking behavior (1). Researchers have recently begun to focus on how the workplace environment influences problem drinking. The Harvard School of Public Health, jointly funded by the National Institute on Alcohol Abuse and Alcoholism and the Robert Wood Johnson Foundation, is surveying thousands of managers and work groups in up to 10 large multinational corporations (171). The study will determine corporate and work site patterns of drinking, levels of work site drinking problems as they relate to attitudes and practices of management, how corporate culture affects managerial behavior and drinking problems in the workplace, and what role the work group plays in promoting or preventing problem drinking.

## **RECREATIONAL SETTINGS**

Recreational and other developmental activities and settings may also contribute to the prevention of substance use and abuse, or by their absence increase the risk. Examples of such recreational and other developmental activities and settings include Boys and Girls Clubs, Boy and Girl Scouts, organized sports, cultural activities, and local park and recreation department programs.

# HIGH ON THE CORPORATE LADDER

**Coping with the pressure of corporate life often means turning to illegal drugs. Just because people wear white collars doesn't mean that they're immune to the lure of the likes of heroin or cocaine.**

**Whether they're high on the corporate ladder or somewhere near the bottom, drug abusers need your help now, before it's too late. Look. Listen. Drug abuse is everywhere,**





## ■ Organized Activities and Drug Abuse

Research on the impact of organized youth activities on substance use and abuse is limited, and only a few studies have addressed the issue directly, while others have addressed it more indirectly.

One study (which relied extensively on reports from employees of Boys and Girls Clubs) found that public housing developments served by Clubs had 22 percent less drug activity than developments not served by Clubs. The presence of crack in particular was 25 percent lower, and even lower in developments served by new Clubs with SMART Moves, a substance abuse prevention program (133).

A more extensive investigation has been conducted by the Search Institute, which has surveyed 180,000 6th through 12th grade youth in 430 school districts since 1988. Analysis of the data found that as developmental assets increased (including involvement in music, school team sports, nonsport school-based cocurricular activities, nonschool clubs or organizations, and churches) at-risk behaviors decreased, including the use of alcohol, tobacco, and illicit drugs (12). Specifically, the correlations:

- tend to be small;
- are strongest for tobacco use and weakest for alcohol use; and,
- are slightly higher for church involvement than for other activities.

Involvement in youth programs and activities has been found to be associated with fewer at-risk behaviors among youth. One study found that higher levels of four youth assets (perceived positive school climate, family support, involvement in structured youth activities, and involvement in church or synagogue) were associated with lower levels of 20 at-risk indicators, contained mainly in eight at-risk domains (alcohol, tobacco, illicit drugs, sexuality, depression/suicide, antisocial behavior, school, and vehicle safety) (12). High school students who listed no assets, for example, reported an average of 5.6 at-risk indicators, while

students listing all 4 assets reported only 1.7 at-risk indicators.

A study of different communities found that 55 percent of the youth in the healthier communities (defined by fewer at-risk behaviors among youth) were involved in structured activities, whereas only 39 percent of the youth in the least healthy communities were involved in such activities (19).

Qualitative assessments across prevention disciplines support these findings. For example, although a review and analysis of delinquency, adolescent pregnancy, substance abuse, and school failure and dropout prevention programs did not directly investigate connections between youth development programs and substance abuse prevention, its authors concluded that the elements in youth development organizations can play a critical role in preventing each of these problem behaviors (48).

The Carnegie Council on Adolescent Development has identified several successful prevention efforts launched by national youth-serving organizations, including the adolescent pregnancy efforts of the Association of Junior Leagues and of Girls, Inc., and found that participation in such programs was associated with fewer at-risk behaviors (32). The Carnegie Council's Task Force on Youth Development and Community Programs concluded that, taken together, current social science theory and field evaluations provide a solid rationale for strengthening and expanding the role of community-based programs in promoting healthy adolescent development, since unsupervised after-school hours represent a period of significant risk, with young adolescents standing a greater chance of engaging in substance abuse.

Another study tested whether inactivity or boredom was associated with substance abuse. It compared adolescents who had been clinically diagnosed as substance abusers with a comparison group of nonsubstance abusers, and found that the substance abusers experienced their leisure activities as more boring, even though they had partici-

pated in more leisure activities (including such activities as going to concerts and going for a drive). Available leisure activities may, for some youth, fail to satisfy “their need for optimal arousal,” leaving them more vulnerable to the appeal of drugs (78).

Thus, being active does not by itself protect against substance abuse. Some activities, such as those that are unstructured and unsupervised, may even increase the risks of substance use and abuse through association with a wider range of peers, some of whom are using substances. In addition, activities perceived as boring may not protect against substance use and abuse. More research is needed, to clarify the aspects of recreational and other leisure activities that may protect against substance use and abuse. Research might profitably focus on whether activities that are supervised, structured, drug-free, empowering, skills-building, self-esteem-promoting, active, shared, and nonboring (or some combination of those) are associated with lower levels of substance use and abuse.

### ■ Elements of Notable Programs

Several of the most important elements of notable substance abuse prevention programs are provided by youth development programs as well. These include:

- **Promoting social and life skills.** Programs that rely exclusively on transmitting information about the health, legal, and social risks of substance use and abuse are generally ineffective (79). If, as the author of a recent longitudinal study contends, substance use is a symptom rather than a cause of personal and social maladjustment, promoting social and psychological well-being may help prevent substance abuse (66). Many alcohol and other drug prevention programs focus on the development of social and life skills, as a way to help youth understand their emotions, control their anger, curb aggressiveness, and presumably reduce their inclination to turn to substances (66,166).
- **Strengthening families.** Increasingly, alcohol and other drug prevention programs are recog-

nizing and addressing family factors. Youth development organizations afford opportunities for involving parents in recreational and other nonschool, nonfamily activities.

- **Promoting healthy peer interactions.** Several studies have shown the value of using peers as role models in prevention programs. One study conducted a meta-analysis of 143 adolescent drug prevention programs and collapsed prevention programs into 5 strategies or types: knowledge only, affective (i.e., addressing feelings) only, peer programs, knowledge plus affective, and alternatives. Peer programs that highlight peer influences and emphasize skill building were found to be the most successful (156). Peers are often the best positioned to help others build resistance skills and bring about significant results in reducing substance use, as compared to teachers or other adults. Peer counseling and student assistance programs, for example, offer unique opportunities for youth to cope with difficult issues and develop skills to resist peer pressure (33).
- **Indirect and participatory approaches to substance use.** Substance prevention programs are more likely to be effective if they develop creative ways to reach and connect with their participants. Many programs incorporate lessons concerning substance use into activities such as games, theatrical performances, creative arts, and sports. Some programs avoid stating in their names that they are focusing on substance use prevention, and in this way often attract more youth and preclude them from feeling stigmatized (161). Because youth spend so much time in school, where didactic, lecturing approaches so often predominate, these approaches may well be less effective in nonschool activities. GAO has recommended that programs engage youth in activities that are more motivational and participatory, such as support groups, dramatic productions, leadership training, and role-playing (161).
- **Alternative activities.** Communities are beginning to create healthy, substance-free alternative activities, such as teen centers or drug-free parties, for youth who may feel there

is nothing else to do. This alternatives approach grows from the idea that youth who turn to substances to meet certain social and psychological needs can meet those needs in more positive and healthy ways without chemicals. In its guide book, *Prevention Plus III*, CSAP stresses the importance of incentives for youth to participate in such alternative activities. At a minimum, activities should reflect the interests and preferences of the youth involved. A 10-year study with over 500 subjects found that the largest percentage (67 percent) of assuredly recovered substance abusers, defined as those who have been clean for five years, used alternative activities to cope with or improve their moods (169). However, although it remains a promising strategy, many agree that more substantial research is needed.

The elements of notable programs suggest that youth development organizations may be able to play a greater role in the prevention of substance abuse. First, they can provide specific information about substances and training in refusal skills. Second, they can address life skills development, emotional issues, and academic remediation. Further, they can involve both youth and their families, as well as peers, in settings for collaborative, substance-free interactions. Research has shown the importance of building supportive communities through such networks of social support that can diminish substance use and abuse and promote healthy youth development (14,19,133).

### **PLANNING, IMPLEMENTING, AND EVALUATING COMMUNITY-WIDE PROGRAMS**

If substance abuse and addiction problems in a particular community affect individuals via multiple risk and protective factors interacting in multiple settings, then efforts to prevent these problems may require multipronged efforts involving schools, parents, media messages, and other community resources (116). While it is possible that an assessment of problems may be carried out by relatively few individuals, it is extremely unlikely

that the planning, implementation, and evaluation of community-wide efforts can be achieved without participation of residents and leaders throughout the community. Widespread coordination and cooperation are intrinsic to community-wide efforts. To help achieve such community-wide coordination and cooperation, several different types of community coalitions have been created.

The CSAP has studied the ability of 7 pilot test communities, under Community Partnership grants, to gather information on 15 community-wide indicators of alcohol and other drug abuse (see table 8-3). Some of these indicators are directly related to and measure the extent of substance abuse and addiction among subpopulations in a community (e. g., number of drug positive urine samples from pregnant women at time of delivery). Some of the indicators measure the extent of behaviors or outcomes that maybe directly related to substance abuse (e.g., number of single vehicle nighttime accidents and number of deaths due to alcohol and other drugs). Some of the CSAP indicators relate to community activity settings, such as workplaces and schools.

CSAP has recently supported, through the Community Partnership program and the High-Risk Youth program, the use of nonquantitative techniques to gain insights into substance abuse and addiction and related problems in communities. This information can be garnered by ethnographers and citizen informants, who can report on the values, attitudes, purposes, behaviors, and experiences of individuals in the subcultures of communities.

The Robert Wood Johnson Foundation has funded 13 community coalitions in its “\*Fighting Back” program to reduce substance abuse and addiction. About 600 coalitions now belong to a national organization, Community Anti-Drug Coalitions of America (CADCA). Some coalitions have been formed to address other health and social issues, including the ASSIST and COMMIT community tobacco control programs, funded by the National Institutes of Health, and the Planned Approach to Community Health (PATCH) program, funded by the Centers for Dis-

**TABLE 8-3: Community-Wide Indicators of Alcohol and Other Drug Abuse for Pilot Testing in Community Partnerships Funded by CSAP**

**Public Safety**

1. Number of single vehicle nighttime accidents,
2. Number of drug positive from urine samples of arrestees (e.g., based on Drug Use Forecasting (DUF) System),
3. Number of arrests for drug possession,
4. Cost and purity of illegal street drugs.

**Physical and Mental Health**

5. Number of drug positives from urine samples of pregnant women at time of delivery.
6. Number of alcohol- and other drug-related emergency room episodes (e.g., based on Drug Abuse Warning Network (DAWN)).
7. Number of alcohol- and other drug-related deaths (e.g., based on DAWN),
8. Number of individuals on waiting lists for and admissions to inpatient and outpatient alcohol and other drug program services,
9. Number of referrals and admissions to mental health centers for alcohol and other drug problems.
10. Incidence of alcohol- and other drug-related outcomes (e.g., fetal alcohol syndrome, positive drug toxicology).
11. Incidence of drug-related sexually transmitted diseases, including HIV transmission of AIDS cases.
12. Number of alcohol- and other drug-related medical conditions (e.g., cirrhosis of the liver, hepatitis),

**Workplace**

13. Number of drug positives from urine samples of job applicants and employees

**Consumption**

14. Aggregate per capita consumption of alcohol, based on alcohol tax revenue data,

**Education**

15. Existing school surveys of alcohol and other drug use and attitudes.

SOURCE: Community Partnership Prevention Program National Evaluation, Community-Wide Indicators of Alcohol and Other Drug Abuse Pilot Test Report (Draft), Center for Substance Abuse Prevention, 1992

ease Control and Prevention to encourage local coalitions for community health planning and implementation (29). HUD now has funds to support Community Coalitions Against Crime, which also address substance abuse and addiction. And

CSAP has supported numerous activities conducted by approximately 250 coalitions through its Community Partnership program (see table 8-4).

A recent review of some of the Community Partnerships revealed the wide range of activities they have so far implemented, including general prevention programs, public education, alternative activities, community organizing and empowerment, advocacy for policy change, and other community activities.

Although coalitions have not been extensively evaluated as yet, and although the evaluations that are now in process will not produce outcome results for several years, there is reason to believe that community coalitions offer promise for community-wide efforts to prevent substance abuse and addiction. First, as documented by this report, the factors contributing to substance abuse and addiction are multiple and interactive. Second, these factors interact in subcultures and community activity settings that can encourage or inhibit substance abuse and addiction and are widely dispersed. Thus, especially in communities severely impacted by these problems, multiple efforts addressing multiple factors in multiple settings may be required. A recent report from the General Accounting Office concluded that "preliminary research results indicated that a community-based approach may hold promise in preventing drug use," and went on to emphasize the need for comprehensive evaluations of such efforts (162).

Community coalitions could make use of the framework in this report to develop plans for preventive interventions addressing targeted populations in selected community activity settings. Building on a systematic quantitative and non-quantitative assessment of needs, a coalition could identify optional preventive interventions that address selected populations and settings, and then phase them in as resources permit. However, some community coalitions may need additional support and technical assistance to help them resolve conflicts, form consensus on goals and plans, and sustain cooperative, coordinated efforts

TABLE 8-4: Selected Community Partnership Activities, 1992

**Prevention Programs**

Program for at-risk youth of single parents  
 Parent courses  
 Youth retreat  
 Employee assistance programs for local businesses  
 School-based prevention program  
 Street-based prevention program

**Public Education**

Radio talk show  
 Prevention library  
 Newspaper articles  
 Anti-drug media campaigns  
 Presentations to businesses  
 Information booth at car show  
 Prevention program guide  
 Brochures  
 Education for health care professionals  
 Public awareness days  
 Television forum  
 Computerized database of prevention materials  
 Resource center  
 Newsletter  
 Metrobus poster campaign

**Alternative Activities**

Family oriented sports  
 Alcohol-free fiesta  
 Youth centers  
 Basketball program  
 Drug-free dance  
 Drug-free cultural activities  
 Boxing and karate lessons  
 Drug-free concerts  
 Drug-free clubs for youth  
 Drug-free graduation night for youth  
 Drug-free New Year's Eve party for youth

**Community Organizing and Empowerment**

**Community center fund-raising**  
**Community conferences**  
**Blueprint for community action**  
**Technical assistance to develop community association**  
**Neighborhood cleanups**  
**Empowering senior** citizens to work with community  
 Community days  
 Youth council  
 Town meeting  
 Pot luck dinner for community

**Advocacy for Policy change**

**Working with other Partnerships to lobby State legislature**  
**Briefings to politicians on substance abuse issues and programs**  
 Position paper opposing drug legalization

**Other Community Activities**

**Workshop on farm issues and stress**  
**Program** to employ unemployed unskilled adults  
 Inmate treatment program  
 Youth mediation training for nonviolence in schools  
 HIV training in school  
 Rites of Passage Program for black youth  
 Master Program to employ seniors  
 Workshop for pregnant women and teens  
 Youth mentor program

SOURCE National Evaluation of the Community Partnership Demonstration Program, Second Annual Report, Center for Substance Abuse Prevention, 1992

that are subject to more rigorous evaluations and midcourse corrections. Each community coalition needs to take a critical look at what works and what does not work, and needs to be flexible enough to try promising and proven analytical and programmatic technologies, even if they are somewhat new to the coalition.

**SUMMARY**

This chapter has reviewed research on factors and interventions relevant to the onset and prevention

of substance use, abuse, and addiction in the four principal community activity settings—homes and families, schools and peers, workplaces, and recreational and other community settings.

Research indicates that families may influence whether family members, especially (but not limited to) the young, initiate substance use and progress to abuse and dependency, and can be the target of a wide range of increasingly tested preventive interventions that can help family members resist the use of substances. Similarly, schools, especial-

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ly through peer group norms and behaviors related to substance use, can also be important locations for the onset of substance use (including alcohol use) and for preventive interventions, especially those that focus on social influences, including peers. Factors in workplaces, although less studied, can also contribute to and protect against substance use and abuse, and workplace interven-

tions that focus on individuals and environments provide opportunities for prevention. Finally, an emerging literature on the role of recreational settings and activities, especially for youth, suggests that the availability of attractive and compelling substance-free activities can play a role in dissuading youth from becoming heavily involved in the use and abuse of substances.