



# Promising Strategies to Reduce Substance Abuse



AN  
**OJP**  
ISSUES &  
PRACTICES  
REPORT

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# **Promising Strategies to Reduce Substance Abuse**



Office of Justice Programs

September 2000

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# Foreword

Drug and alcohol abuse, drug trafficking, and related criminal activity remain serious problems that affect the lives of most Americans. Under the leadership of President Clinton and in cooperation with the Office of National Drug Control Policy, the U.S. Department of Justice has promoted and pursued an approach that combines prevention, treatment, and enforcement to break the cycle of substance abuse and crime.

*Promising Strategies to Reduce Substance Abuse* illustrates this approach through examples of programs that have been adopted successfully by communities across the country. We see this volume as a “toolbox” for elected state and local officials, law enforcement, prosecutors, judges, community organizers, and other policymakers. It contains practical information about a range of proven and promising strategies to reduce substance abuse.

Several themes emerge from the profiled programs that match the themes found in the companion volume, *Promising Strategies to Reduce Gun Violence*, published in 1999 by the Office of Juvenile Justice and Delinquency Prevention. One is that the criminal justice system can and should be used to improve public health as well as public safety. Another is that providing treatment for drug abuse is a cost-effective means of reducing the heavy burden that both drug abuse and incarceration impose on society. If the proximate cause of much criminal activity is the desperate need to feed a drug habit, if criminal activity is frequently committed under the influence of drugs and alcohol, if the psychoactive effects of drug abuse lead people to violent and antisocial conduct, then using the criminal justice system to hold people accountable for their deeds but also to enable them to change their behavior can lead to reduced recidivism, safer communities, and healthier and more productive citizens.

It has long been my goal to develop a continuum of interventions for substance abuse offenders. Incarceration is just punishment for those who commit acts of drug trafficking, for those who do violence to innocent victims, and for those who repeatedly behave in a manner that endangers our safety. Many times, however, the primary victims of substance abuse are the defendants themselves who need help turning their lives around. Drug court programs, for example, are especially effective in dealing with substance-abusing defendants. The prevention, treatment, and law enforcement strategies described in the following pages embody this continuum of accountability.

These programs also demonstrate how crucial broad collaboration is in forging sound and effective strategies. This collaboration has different components: federal, state, and local governments pooling their resources; education, health, and police officials sharing ideas and data; and government, business, and nonprofit sectors building coalitions, all in service of the common goal of combating substance abuse. The problems touch us all, and we all need to be part of the solutions. I am sure that every community can find in these pages an example of a program that will work for it. I hope everyone who reads this will be inspired to dedicate time and energy to support the appropriate organizations, or to create new ones, to implement these tested and promising strategies to reduce substance abuse.

Janet Reno  
*Attorney General*  
U.S. Department of Justice



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# Executive Summary

Substance abuse is one of the most pervasive problems facing our nation, costing over \$275 billion in health care costs, lost productivity, related crime, and other social costs, and contributing to over 130,000 deaths each year. To help communities address the devastating effects of illicit drug and alcohol abuse, *Promising Strategies to Reduce Substance Abuse* has been developed to highlight best practices in prevention, treatment, and law enforcement.

Prevention, treatment, and law enforcement strategies, discussed in separate chapters, act in concert with one another, comprehensively addressing substance abuse in various contexts. Collaboration among law enforcement, health, and social service agencies can help reduce demand, which fuels drug trafficking activities, often involving violence and crime. Treating addicts and preventing the onset of drug use can complement law enforcement efforts to reduce supply.

Expanded research in drug abuse prevention over the last two decades has identified key elements of successful programming, discussed in the Prevention chapter. Recognizing risk and protective factors is an essential component of successful prevention programs.

Treatment for alcohol and other drug abuse continues to evolve as more is learned about tailoring treatment to specific populations. Advances have been made in pharmacological treatments and in treatment for women, adolescents, and other specific populations. Creating a continuum of care from prison into the community, incorporating HIV prevention in treatment, and delivering essential support services, such as job counseling and child care, are elements of the new approaches to substance abuse.

Criminal justice can have significant impact in reducing illicit drug and alcohol abuse. Law enforcement initiatives addressing substance abuse and related crime are now working more intimately with communities to solve local problems. Local law enforcement also collaborates effectively with federal anti-drug agencies, forming task forces to combat high rates of drug-related crime.

*Promising Strategies to Reduce Substance Abuse* is intended to serve as a guide to communities by identifying the core elements of promising strategies and providing examples of programs that are making a difference locally.

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# Overview

*Promising Strategies to Reduce Substance Abuse* is an assessment of the most effective strategies used nationwide to reduce illicit drug and alcohol abuse and related crime. The report is intended to serve as a guide to communities by identifying the core elements of promising strategies and illustrating these strategies with examples of programs that are making a difference locally. Programs were chosen to represent urban, suburban, and rural communities.

An important trend evident in many of the effective strategies and programs is a close coordination between law enforcement, treatment providers, and prevention professionals to address substance abuse and related problems. These partnerships are vital to the success of programming because they minimize redundancies, help to streamline service delivery, and improve access to expertise and financial resources. All types of initiatives in prevention, treatment, and enforcement seem to work better and have a greater impact if interagency collaboration is well-developed and well-orchestrated. Such collaborations are vital to providing a continuum of care that can effectively intervene at all stages of an individual's life, from birth to adulthood, and in all kinds of community institutions, from the school to the local jail.

The growing emphasis on “what works” among lawmakers and funders requires that communities learn from each other and implement program models with a track record of success. Using programs that are effective in other communities, tailoring those programs to the needs of the specific locality, and evaluating their success is critical to creating a sustainable approach.

Research in drug abuse prevention has flourished for more than two decades and has identified key elements of successful programming that are discussed in the Prevention chapter. Identifying risk and protective factors and focusing on the resiliency and strengths of youths and adults, for example, have become major focuses of prevention programs. The report outlines five basic prevention strategies: teaching prevention in schools, reaching youths outside school, targeting high-risk groups, building family bonds, and empowering communities.

Treatment for alcohol and other drug abuse continues to evolve as more is learned about what works with specific populations. Based on research to date, the National Institute on Drug Abuse recently developed 13 principles of effective treatment (these are discussed later in the report). Four strategies are discussed in the Treatment chapter: treating the family, rehabilitating criminal offenders, assessing and treating juveniles, and connecting with the community.

Criminal justice approaches, which often integrate prevention and treatment components, are critical in preventing crime and disorder associated with alcohol and other drug abuse. The changing nature of law enforcement responses to substance abuse and related crime is demonstrated in local department efforts to work within their communities to solve local problems. These trends are evident at the federal level; the Office of Community Oriented Policing Services (COPS) within the



Department of Justice, for example, directs substantial resources to local community policing initiatives. In addition, over the past decade alternatives to incarceration that combine sanctions, accountability, and treatment for offenders have become increasingly popular. The growth of drug courts exemplifies this trend. In 1989, the first drug court was established; in 2000, more than 400 courts exist nationwide, and nearly 300 are in the planning stages. The Law Enforcement chapter discusses five strategies: community policing, problem-oriented policing, reducing drug availability, alternatives to incarceration, and alcohol-related approaches.

Communities looking to implement promising anti-drug approaches should first assess the areas of greatest need. In some communities underage drinking may be the most prominent problem, in which case prevention, treatment, and enforcement activities should be enhanced. Other communities may face problems of violence linked to illicit drug trafficking requiring law enforcement activities to target “hot spots” of heightened drug activity. Determining the gaps in services currently provided by and for the community is an essential step. The local health department, police department, and other state and local agencies often track data and services that will help identify community needs.

Another consideration for communities is cost. The promising programs highlighted in this report provide information on the cost of implementing and operating the various activities. In addition to cost, other community resources, such as personnel and readiness, must be considered. Is there an existing agency that can incorporate an effective prevention curriculum into its programming? Does the police department have a strong track record of collaborating with social service agencies? The degree to which a community is galvanized around implementing new programs can have a profound effect on the success of those programs.

Most of the promising programs highlighted in the report have been in existence for at least three years, demonstrating their durability. All of the programs have been successful in meeting their goals. For each program the report provides information vital to community replication, broken down into the following categories:

- *Description*—outlines the goals and logistics of the program (i.e., who is served and program capacity, what services does the program provide to the community, how are these services provided, etc.);
- *Challenges*—describes the obstacles to implementing and/or operating the program, and in most cases how those obstacles were overcome or are currently being addressed. In doing this, communities can prepare for the common challenges of implementing the programs and begin to address them in the development stage;
- *Costs*—outlines either the annual budget of the program or the cost of serving an individual over the course of the program. Replication costs are available for many of the programs, as are various costs that communities should foresee when designing a similar program; and
- *Program Results*—details the effectiveness of the program in meeting goals and objectives. Some programs have been evaluated by external or internal investigators using rigorous research designs; however, this standard does not hold true for all of the promising approaches detailed in this report. Some programs

were assessed as promising based on improvement observed in the community, such as reductions in criminal activity and/or substance abuse. All programs detailed in the report have made positive impacts within their communities.

*Promising Strategies to Reduce Substance Abuse* aims to provide communities with valuable information on successful efforts to reduce substance abuse and related problems nationwide, and to assist them in selecting strategies and programs that will effectively address their specific needs.

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# Prevention

Effective prevention strategies are critically important in community efforts to combat substance abuse. Virtually everyone is susceptible to alcohol and other drug problems at different points in their lives. Some people, however, are at higher risk for developing serious addiction because of personal, family, or environmental circumstances. The impact of substance abuse often reaches beyond the abuser to family members, friends, co-workers, and society at large.

Extensive research during the past two decades has identified a number of prevention strategies that measurably reduce drug use, including by those at high risk. These strategies share a common goal: strengthening “protective factors,” such as well-developed social skills, strong family bonds, attachment to school, and active involvement in the community and religious organizations, while reducing “risk factors” that increase vulnerability to drug abuse. Recent research suggests that resilience is also an important factor; even in high risk, adverse circumstances, many people are able to resist drugs.<sup>1</sup>

While it is impossible to predict with certainty who will develop alcohol and other drug problems, research has uncovered a great deal about the factors which significantly increase risk for millions of children ages 10 to 17. Substance abuse by a parent, lack of parental guidance, or a disruptive, abusive family are very strong predictors, as are school failure, early experimentation with drugs, and living in a community where substance abuse and dealing are pervasive.<sup>2</sup> While these risk factors are all important predictors, the effect of any single factor can be mitigated by other circumstances. Research indicates that two risk factors produce four times the probability of problem behaviors. Children facing multiple risks are much more likely to move from experimentation to serious substance abuse by the time they are teenagers.<sup>3,4</sup>

Promising prevention strategies are often designed to address different levels of risk. *Universal* prevention efforts, like drug education, target all youth without identifying those at particularly high levels of risk. *Selective* interventions concentrate on those who are particularly vulnerable to drugs because of personal, family, and community risk factors. *Indicated* interventions are intensive efforts aimed at youth who are already experimenting with alcohol and other drugs or exhibit other risk-related behavior.<sup>5</sup> Effective prevention promotes the protective factors that reduce the potential for substance abuse and other closely linked behaviors, such as truancy, delinquency, and early pregnancy.

Successful prevention strategies also incorporate the cultural, gender, and age-specific needs of participants. Prevention efforts must address all stages of life; from infancy to adulthood, prevention can reduce both the use and abuse of alcohol and other drugs. Although individual programs differ widely, the federal Center for Substance Abuse Prevention (CSAP) has identified six basic approaches to prevention which are described in *Understanding Substance Abuse Prevention: Toward the 21st Century: A Primer on Effective Programs*<sup>6</sup>:

- *Information dissemination* is designed to increase knowledge and alter attitudes about issues related to alcohol, tobacco, and other drug use and abuse;
- *Prevention education* teaches participants critical personal and social skills that promote health and well-being among youths and help them avoid substance abuse;
- *Alternative* approaches assume that youth who participate in drug-free activities will have important developmental needs met through these activities rather than through drug-related activities;
- *Problem identification and referral* involves recognizing youths who have already tried drugs or developed substance use problems and referring them to appropriate treatment options. This is particularly important for high-risk youth;
- *Community-based process* enhances community resource involvement in substance abuse prevention, for example, by building interagency coalitions and training community members and agencies in substance abuse education and prevention; and
- *Environmental approaches* attempt to promote policies that reduce risk factors and/or increase protective factors related to substance abuse, such as community laws prohibiting alcohol and tobacco advertising in close proximity to schools.

This chapter discusses a wide range of promising approaches that involve schools, families, and communities in prevention efforts that use many of the elements identified by CSAP. The CSAP-identified key elements are not mutually exclusive, and most of the programs detailed in this report include more than one key element. Effective strategies include prevention education; mentoring and other supervised activities for after-school hours; special interventions for high-risk youth; strengthening families; and empowering communities. The programs described below are examples that can help communities tailor strategies to their specific needs.

## I. Teaching Prevention in Schools

Schools can play a powerful role in prevention as teachers and administrators often are the first to detect warning signs of possible drug problems, such as poor school attendance or declining academic performance.

Effective school programs teach young people to resist drugs by developing personal and social skills, such as decision making, stress management, communication, social interaction, conflict resolution, and assertiveness. In addition, these programs can enhance awareness and resistance skills. Students learn that most of their peers do not use drugs, and they learn to recognize social and peer influences on drug use. With this new awareness, youths are better able to resist the pressure to use drugs.<sup>7</sup>

Prevention efforts should begin early and continue through adolescence, when pressure to drink, smoke, and use other drugs greatly increases. Without reinforcing skills and anti-drug norms, behavioral results diminish. Programs enhanced with “booster sessions,” activities which follow up on the initial program, help prevent or delay the initiation of drinking, smoking, and using other drugs.<sup>8</sup> Delayed initiation is beneficial, giving children time to develop social competence and resistance skills. According to the National Institute on Alcohol Abuse and Alcoholism, each year that children avoid alcohol use significantly decreases their risk of future dependence.<sup>9</sup> The Department of Health and Human Services reports that any delay in beginning to smoke during the early teen years improves the future prognosis for quitting. Delayed onset of smoking is also associated with a lower incidence of disease and death.<sup>10</sup>

Prevention efforts in schools are designed to serve universal (the general population), selective (those identified as at risk), or indicated (those already exhibiting signs of problem behavior) groups of students. Depending on the targeted population, prevention messages range in intensity. For example, Life Skills Training, a *universal* program, teaches personal, social, and drug resistance skills in weekly 45-minute sessions. In contrast, Reconnecting Youth, designed for *indicated* high school students, involves participants in a daily class focused on reducing or controlling drug use.

According to *Making the Grade: A Guide to School Drug Prevention Programs*<sup>11</sup>, successful school-based drug prevention programs incorporate a variety of key elements:

- help students recognize internal pressures, like anxiety and stress, and external pressures, like peer attitudes and advertising, that influence them to use alcohol, tobacco, and other drugs;
- develop personal, social, and refusal skills to resist these pressures;
- teach that using alcohol, tobacco, and other drugs is not the norm among teenagers, even if students believe that “everyone is doing it”;
- provide developmentally-appropriate material and activities, including information about the short-term effects and long-term consequences of alcohol, tobacco, and other drugs;
- use interactive teaching techniques, such as role plays, discussions, brainstorming, and cooperative learning;
- cover necessary prevention elements in at least ten sessions a year (with a minimum of three to five booster sessions in two succeeding years);
- actively involve the family and the community; and
- include teacher training and support, and contain material that is easy for teachers to implement and culturally relevant for students.

School prevention efforts should also aim to reduce school disorder and improve children's attitudes about school. Research over the past two decades indicates that active involvement in school helps protect young people from many problem behaviors, including substance abuse.<sup>12</sup> A positive atmosphere helps engage students in school, giving them a sense of identity and reducing the likelihood that they will drop out or participate in delinquent behavior, two factors that can increase risk for later substance abuse problems.

Although school programs can demonstrate impressive results in prevention, families and communities shape the larger social context in which children

make decisions about alcohol, tobacco, and other drugs. According to the 1997 report of the National Longitudinal Study on Adolescent Health, close relationships with parents and teachers are powerful protective factors for teens. The closer teens are to their parents and the more connected they feel to school, the less likely they are to smoke, drink, or use other drugs.<sup>13</sup>

Prevention is most effective when school lessons are reinforced by a clear, consistent social message that teen alcohol, tobacco, and other drug use is harmful and unacceptable.<sup>14</sup> In many communities, police officers work as school resource officers (SRO) to monitor students, provide advice and prevention information, and link students to supervised recreational activities, mentoring, and other services.

The following programs demonstrate the effectiveness of these essential elements in building comprehensive school-based strategies to prevent alcohol, tobacco, and other drug use.

### **Child Development Project, Cupertino, California**

**Program Type:** Teaching Prevention in Schools.

**Target Audience:** Elementary school students, their parents and teachers.

**Years in Operation:** 1992-present.

**Program Goals:** To increase student attachment to school, thereby reducing risk factors that contribute to substance abuse and other high-risk behaviors.

**Contact Information:** Denise Wood, Developmental Studies Center, Oakland, CA, 800-666-7270.

**Description:** The Child Development Project (CDP) is a philosophical approach to interacting with elementary school students, their families, teachers, and school administrators. The program focuses on an entire school rather than targeting only high-risk students. Although CDP does not address substance abuse directly, its character building program is designed to reduce risk factors for alcohol and other drug use. Since 1992, CDP has expanded to approximately 100 schools in six states and is recognized by the Center for Substance Abuse Prevention as a promising High Risk Youth program and by the National Association of Elementary School Principals.

D.J. Sedgewick Elementary School in Cupertino, California, was one of the pilot schools to implement the program in 1992. Teachers at Sedgewick were unhappy with the school's antagonistic atmosphere and wanted a more effective way to discipline students. The same children were repeatedly getting into trouble, and there was no evidence that the existing forms of punishment were working. The staff chose CDP because it aims to create a school community in which students feel safe and cared for and are encouraged to develop their academic and practical skills. The program increases students' attachment to the school community and establishes a system of positive reinforcement which reduces risk factors and promotes protective factors.

CDP has four basic principles: build supportive relationships; attend to the social and ethical dimensions of learning; honor students' intrinsic motivation; and teach in ways that support students' learning styles. These principles are expressed through five program components. The first component is a reading and language arts curriculum which addresses social and ethical values. Culturally-appropriate books are selected according to the student group, and are read aloud to give students a shared experience. The second component of the program is collaborative classroom learning, which emphasizes working together and provides students with meaningful, challenging tasks. Component three, developmental discipline, is a classroom approach to creating caring relationships among all members of the classroom. Teachers use problem-solving techniques rather than reward and punishment to teach students responsibility and competence. The fourth component gets parents involved with their children's education by assigning homework tasks which the family must complete together. The final component is a school wide activities program that creates a sense of school community. One activity, the Buddies program, pairs young students with older partners for academic and social activities.

**Challenges:** CDP can only work if the principal, teachers, and staff members all commit to following the program design. The program requires a change in the overall atmosphere of the school and consistent implementation. For example, if one teacher continues to discipline students by sending them to the principal's office while another works with students to

solve problems, the program will not be fully effective. Sedgewick was fortunate to have the support of the entire school staff, and the school screens prospective teachers to ensure they are willing to follow the CDP philosophy.

**Costs and Funding Sources:** Instructional and curricular materials for the program cost approximately \$550 per classroom teacher. Training by CDP staff members costs approximately \$40,000 per year. Sedgewick receives approximately \$125,000 in grant money annually for initiatives aimed at improving literacy, including CDP.

**Program Results:** An internal evaluation of CDP conducted by researchers from the Developmental Studies Center in Oakland, California, showed decreased substance use among fifth and sixth graders in schools that fully implemented the program. The evaluation was conducted in six communities: Cupertino, Salinas, and San Francisco, California; Louisville, Kentucky; Dade County, Florida; and White Plains, New York. In each city, two control schools and two program schools were examined, and data were collected from classroom observation, student and teacher questionnaires, and student achievement scores. Over four years the following changes in drug use were observed:

- Alcohol use among students fell from 48 percent to 37 percent in program schools while rising from 36 percent to 38 percent in control schools;
- Cigarette use declined from 25 percent of students to 17 percent in program schools while declining from 17 percent to 14 percent in control schools; and
- Marijuana use declined from 7 percent of students to 5 percent in program schools while rising from 4 percent to 6 percent in control schools.

Students also reported that after the program was implemented they enjoyed school more, were more motivated to learn, were better skilled at resolving conflicts, and felt more socially competent.

Another accomplishment of the Child Development Project is that it changed the atmosphere at Sedgewick. Students are now more excited about



learning and feel more a part of the school community. Teachers report that parents have also commented on the change in the school.

## Life Skills Training, Garland, Texas

**Program Type:** Teaching Prevention in Schools.

**Target Audience:** Middle school students.

**Years in Operation:** 1997-present.

**Program Goals:** To teach alcohol and other drug prevention skills to all middle school students.

**Contact Information:** Janet Harrison, Chief Executive Officer, Greater Dallas Council on Alcohol and Drug Abuse, 214-522-8600; research information, Gilbert Botvin, Institute for Prevention Research, 212-746-1270; curriculum information, 800-636-3415, [www.lifeskillstraining.com](http://www.lifeskillstraining.com).

**Description:** Life Skills Training (LST) is one of the best-evaluated substance abuse prevention programs available, having been evaluated in 12 rigorous field trials over the past two decades. LST provides information on alcohol, tobacco, and marijuana and addresses substance use risk and protective factors. In 1997, Life Skills Training was implemented in 13 middle schools in the Garland Independent School District. In the 1999-2000 school year the program reached approximately 3,968 sixth graders, 3,789 seventh graders, and 3,851 eighth graders.

A universal approach designed for all students, the curriculum targets middle and junior high school students at the age when substance use increases most dramatically. The three-year curriculum consists of 15 sessions in the first year (sixth or seventh grade), ten sessions in the second year, and five to eight sessions in the third year. The curriculum uses a variety of interactive techniques, including discussions, brainstorming, role playing, and skill rehearsal. In many schools, teachers act as facilitators, presenting effective behaviors, coaching students, and providing positive feedback. In Garland, the Greater Dallas Council on Alcohol and Drug Abuse (GDCADA) runs LST and employs two full-time program staff (a Program Manager and LST Specialist) and approximately eight part-time LST instructors to teach the course to students.

The content of the program falls into three general categories. The first module contains information

about tobacco, alcohol, and marijuana use, including the immediate effects of these substances on the body, using a classroom exercise. Students learn, for example, that contrary to myth, smoking does not help people relax. Nicotine is a stimulant which causes hands to tremble and the heart to beat faster.

The second module develops personal or self-management skills. LST provides students with a variety of techniques for effectively managing anxiety, including deep breathing, mental rehearsal, and muscle relaxation. LST provides students with a formula for making competent decisions, provides training in goal setting and planning for the future, and involves students in semester-long projects that help them achieve individual goals.

The third module of the curriculum hones students' social skills. To help students feel comfortable in social situations and less vulnerable to peer pressure, LST provides training in general social techniques, such as conversational skills and cross-gender communication. In order to help students effectively resist peer pressure, the curriculum provides students with training to tactfully resist pressure to use tobacco, alcohol, or other drugs, as well as how to assert themselves and express their feelings directly.

**Challenges:** One of the challenges to implementing Life Skills Training in Garland and other sites is starting the program at the beginning of the school year, when class schedules and routines are often in flux. A related challenge is scheduling LST classes so that they do not interfere with state-mandated testing. In fact, many schools report that one of the major challenges to implementing the Life Skills Training Program is committing the time to complete the program. With many competing demands on class time, it can be difficult to secure the 15 class sessions needed to complete the program in the first year. However, studies have clearly shown that the success of LST depends on implementation of the program as designed.

**Costs and Funding Sources:** In Garland, LST is funded through the Texas Commission on Alcohol and Drug Abuse, which provides \$250,000 for the program in all 13 schools. This amount covers curriculum materials for program instructors and students, and instructor salaries and trainings. Schools using teachers to run the program do not have to hire



additional personnel, so costs are limited to curriculum materials and teacher training. The cost to provide LST to one class of 30 students for one year is \$250. Additional costs for training teachers is \$2,000 per day for a minimum of one to two days of training.

**Program Results:** The LST program has consistently been shown to reduce cigarette smoking, problem drinking, and marijuana use, with impact slightly diminished by the six-year follow-up. Moreover, the size of these reductions has been significant, with reductions in smoking, drinking, and marijuana use ranging from 50 percent to 75 percent in the participating schools, compared with nonparticipating control schools. The program has also been found to effectively decrease use of inhalants, narcotics, and hallucinogens and increase students' knowledge and attitudes about smoking, drinking, and marijuana use.

These effects have been observed in schools where the program was implemented by health professionals, older peer leaders, and regular classroom teachers. Other evaluation studies have demonstrated the effectiveness of the program in both urban and suburban schools, and among white, African-American, and Hispanic youth.

LST has received numerous professional awards and endorsements from professional groups, including the American Medical Association and the American Psychological Association. Most recently, LST was one of two programs highlighted by the Centers for Disease Control and Prevention as "Programs That Work."

## Reconnecting Youth, Midland, Texas

**Program Type:** Teaching Prevention in Schools

**Target Audience:** High-risk high school students.

**Years in Operation:** 1997-present.

**Program Goals:** To increase school performance and decrease drug use and emotional distress.

**Contact Information:** National, Nan Macy, Public Information Specialist, University of Washington School of Nursing, 206-685-4733. Texas, Lyn White-Giesler, 915-552-7455.

**Description:** Reconnecting Youth is a school-based drug prevention program targeting high-risk high school students; the program is designed to

reduce drug use and aggression, as well as academic failure and dropping out of school. The school districts of Midland and Odessa, Texas, implemented Reconnecting Youth in four schools in 1997; approximately 200 students participate each year.

Reconnecting Youth seeks to reduce risk, build resiliency, and provide training in communication skills, anger management, social problem solving, social resistance skills, and peace building. Reconnecting Youth targets students who fall behind their peers in school, have high absenteeism, experience a drop in grades, or drop out of school. Reconnecting Youth includes a semester-long course, school bonding activities, and a school system crisis response plan. The Reconnecting Youth class is taught for 55 minutes each day and includes four modules: Decision-Making, Personal Control, Self-Esteem Enhancement, and Interpersonal Communication. The program is taught by teachers, other school personnel, or outside specialists. In Texas, Reconnecting Youth is run by a program specialist rather than school personnel. The program requires a teacher-to-student ratio of 1:12, a selection process for both participants and facilitators, and proper facilitator training.

Reconnecting Youth has three primary goals: (1) increase academic performance by enhancing school bonding, school attendance, and grades, and increasing the number of pre-college courses taken; (2) decrease drug involvement by increasing control over drug use; and (3) decrease emotional distress by lessening risk factors, such as depression, and increasing protective factors, such as self-esteem.

**Challenges:** The most difficult part of implementing the program in Texas was obtaining the cooperation of the schools. School officials are often reluctant to release pretest information, including students' attendance records and grades, which is critical to evaluating. School officials were more cooperative after the Texas Education Association authorized that a half credit be given to students taking the course. Texas is the only state that gives academic credit for the course.

**Costs and Funding Sources:** Costs vary depending on how the program is implemented. If school staff teach the program, the only required costs are training, materials, and student incentives. The initial five-day training for facilitators costs \$500/day for six

people, plus trainer travel and expenses. A recommended one-day follow-up training every six months costs \$750/day plus trainer expenses. The curriculum alone costs \$139. In addition, the Texas program employs specialists to teach the program, four facilitators, and one director. The Texas Commission on Alcohol and Drug Abuse provides an annual grant of \$235,000 to operate Reconnecting Youth in four Midland and Odessa schools.

**Program Results:** Curriculum developers have conducted three studies using external evaluators that clearly demonstrate that the program results in improved academic performance; decreases drug use; reduces anger, depression, aggression, hopelessness, suicidal behaviors, and stress; decreases bonding to deviant peers; and improves self-esteem, self-control, bonding to school, and social support. Evaluations of the program have observed reduced use of cocaine, hallucinogens, opiates, depressants, tranquilizers, stimulants, and inhalants. Tobacco, alcohol, and marijuana use were not affected. The program also reduced drug use control problems (e.g., used more than intended) and adverse drug use consequences (e.g., feeling guilty or problems with friends or family as a result of substance use).

Reconnecting Youth received an “A” in Drug Strategies’ reports *Making the Grade: A Guide to School Drug Prevention Programs* and *Safe Schools Safe Students*. The program is also recommended by the U.S. Department of Education, was recognized by the National Institute on Drug Abuse as one of the year’s top three prevention programs in 1996, and is considered a model program by the Center for Substance Abuse Prevention.

In Midland and Odessa, students in Reconnecting Youth report improved communication with their teachers. Teachers report that problem students have shown improved performance and control on how they behave and interact with others. At the end of the school year the students participate in a graduation ceremony attended by the school board and media.

## II. Reaching Youths Outside School

After-school hours are high-risk periods for alcohol and illicit drug use, unprotected sex, and violence among youths. Approximately one-third of all violent juvenile crimes occur between the hours of 3 p.m. and 7 p.m., when many children are unsupervised.<sup>15</sup> Targeted programs during these vulnerable hours can help prevent, reduce, or delay the onset of alcohol, tobacco, and other drug use. After-school programs can also reinforce social skills learned in school and at home.

Many communities are implementing after-school programs that include substance abuse prevention. Activities range from programs that offer alternative activities with a drug prevention message to programs for high-risk youth that involve more intense intervention, specifically addressing risk and protective factors for substance abuse.

Police departments have taken an active role in developing after-school programs to keep youths out of trouble. Recently, the police chief of Mountlake Terrace, Washington, won a National Crime Prevention Council award for his role in creating the Neutral Zone, a youth center which provides an array of youth services, including substance abuse counseling. Five years after creating the Neutral Zone, gang-related crime dropped more than 90 percent. The program has been replicated in numerous other cities in Washington state.

Millions of American children participate in elementary, middle, or high school sports programs, and many others join community teams, providing prime opportunities to reach large numbers of youth with prevention messages. Coaches and other supervisors can be trained to recognize warning signs of substance abuse and deal with at-risk athletes. For example, the Drug Enforcement Administration’s Team Up Anti-Drug Sports Program trains coaches and school administrators to take active roles in prevention and education in their schools.

Creating a safe place for youths to gather after school can help protect them from risk factors in the community, in peer groups, or at home. For example, the Safe Haven in Madison, Wisconsin, provides educational opportunities and supervised recreation for 150 at-risk elementary school children, teaching them conflict resolution and other behavioral skills, and involving their parents in the program. The program was developed through a partnership involving the city, the local school district, and a nonprofit community center.

Mentoring is an increasingly popular prevention/intervention strategy that helps youths deal with the risks they face in their daily lives. While informal mentoring occurs naturally for children who have positive adult influences, many young people have few positive adult role models. Formal mentoring programs assist these children by structuring one-to-one relationships with caring adults, that can reduce risk factors for substance abuse, such as social isolation and insufficient supervision. A positive adult role model also offers new perspectives to youths living in situations rife with substance abuse and violence.<sup>16</sup>

Well-developed and executed mentoring programs can effectively reduce drug use. A 1995 national evaluation of Big Brothers/Big Sisters of America, which connects middle class adults with disadvantaged youths, found that young people in the program were almost 50 percent less likely to begin using drugs than their peers not involved in the program. An even stronger effect was found for minority Little Brothers and Sisters, who were 70 percent less likely to initiate drug use than similar minority youths.<sup>17</sup> In response to the success of mentoring programs, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) developed the Juvenile Mentoring Project (JUMP) in 1994 to support mentoring programs for at-risk youths in communities across the country. OJJDP highlights several elements of effective mentoring programs:

- Creating collaboration between community-based providers and local education agencies to improve school performance and reduce school drop out rates and juvenile delinquency;
- Performing thorough background checks for all volunteer mentors to establish a safe environment for participating children;

- Assessing young participants carefully so appropriate matches can be established that maximize opportunities for success;
- Designing mentor and project activities that enrich and enhance youth opportunities and experiences; and
- Gathering and routinely reporting program data for evaluation purposes.

The U.S. Navy's Drug Demand Reduction Task Force (DDRTF) developed the Drug Education for Youth initiative (DEFY), a mentoring program that works with Weed and Seed neighborhoods. DEFY, targeting youths ages 9-12, improves youths' self-image, communication skills, and awareness of the dangers of alcohol and other drug use through weekend camping and continued mentoring. The first two DEFY programs began in 1993 in Pensacola, Florida, and Oakland, California, and there are now 65 DEFY/Weed and Seed sites.

Providing constructive and healthy activities for youths—coupled with substance abuse prevention—can offset the attraction to alcohol, tobacco, or other drugs. Community youth development programs, such as Boys and Girls Clubs, can integrate prevention education into traditional activities. A 1992 evaluation of such programs offered in public housing developments found greater reductions in drug use among participating youngsters than among youths not involved.<sup>18</sup>

The following programs are examples of how communities have used mentoring initiatives and youth development programs to prevent substance abuse by reaching youths after school.

### **Big Brothers & Sisters of Wichita, Kansas**

**Program Type:** Reaching Youths Outside School.

**Target Audience:** Children ages 5-17 at risk for substance abuse.

**Years in Operation:** 1969-present.

**Program Goals:** To prevent destructive behavior and promote positive attitudes and habits among youths.

**Contact Information:** In Wichita, Mike Keller, 316-263-3300; National office, Jerry Lapham, 215-567-7000; [national@bbbsa.org](mailto:national@bbbsa.org); [www.bbbsa.org](http://www.bbbsa.org).

**Description:** For nearly a century, Big Brothers and Big Sisters of America (BBBSA) has been providing adult support and friendship to children. Through a careful matching process, volunteers interact regularly with youngsters in one-to-one relationships. Of the 514 local BBBSA agencies nationwide, the Big Brothers & Sisters program in Wichita, Kansas, is the largest, with over 1,300 matches of adult mentors with area youths in 1999. Wichita, like the other local agencies, uses a case management approach developed by the national organization. Case managers screen children and volunteers, make and supervise matches, and handle match closures. In Wichita, each case manager handles 65 cases; monthly contacts with volunteers, children, and parents are made to ensure success.

Little Brothers and Sisters are referred by educators, social workers, counselors, parents, and others, and are considered at risk of substance abuse and other destructive behavior. The goal of the program is to prevent such problems and promote positive habits and attitudes through support, role-modeling, and exposure to healthy activities. Volunteers make a year-long, once-a-week commitment to their matches. Youngsters in the program range in age from 5-17; 83 percent of them come from single parent homes, 76 percent live at or below the poverty level, 54 percent have been abused or neglected, and 52 percent come from alcoholic and/or drug addicted families. Serving children of substance-abusing parents is crucial, since they are at high risk; children of alcoholics, for example, are four times more likely to develop alcoholism than other youths.

In addition to growing its core mentor numbers, the organization is expanding its programming to provide on-site mentoring in schools and at Boys and Girls Clubs. The agency is also planning to implement outreach programs targeting Hispanic mentors and youths, senior citizen mentors, and a program in collaboration with community organizations and the police department aimed specifically at alcohol, tobacco, and other drug prevention.

The success and popularity of Big Brothers and Big Sisters of America can be attributed to its rigorous published standards and required procedures, including mandatory volunteer orientation; volunteer screening, involving a background check, extensive interview, and home assessment; youth assessment,

which involves parent and child interviews and a home assessment; carefully considered matches; and ongoing supervision. The program was named a Model Program in *Blueprints for Violence Prevention* by the Center for the Study and Prevention of Violence at the University of Colorado.

**Challenges:** The biggest challenge in Wichita is recruiting volunteers. Currently, there are approximately 700 boys and girls awaiting matches. While the organization needs both male and female volunteers to meet demand, male volunteers are especially hard to get. Little Brothers wait an average of two years, while African American Little Brothers wait an average of three years. To address this challenge, the program has made strides in finding volunteers by working with local companies and universities to recruit mentors. Advertisements are also posted on billboard space donated to the organization. While the waiting list is still long, it has decreased significantly from previous years.

**Costs and Funding Sources:** The national average cost within the BBBSA system of making and supporting one adult and child match is \$1,000 a year, and includes recruitment and training of volunteers, administrative costs, employee salaries, and various activities. The annual budget in Wichita is \$2.5 million. Funding comes from three main sources: the United Way; in-kind and cash donations, including grants from private foundations and state, city, and county government; and revenue from an annual fundraiser, Bowl For Kids Sake, which raised over \$600,000 in 1999.

**Program Results:** An evaluation of eight local BBBSA agencies, including the one in Wichita, found volunteer mentors had the greatest impact preventing alcohol and other drug abuse when comparing participating youths with similar nonparticipating youths. In 1992 and 1993, nearly 1,000 boys and girls in eight cities (including Wichita), ages 10 through 16, entered into an evaluation study to determine the effectiveness of BBBSA. Half of the children were matched with a mentor, while the other half were assigned to a waiting list or control group. On average, the matched children met with their mentors about three times a month for at least one year. Researchers found that 18 months later, the Little Brothers and Little Sisters were:



- 46 percent less likely to begin using illicit drugs;
- 27 percent less likely to begin using alcohol; and
- 53 percent less likely to skip school.
- Minority youths were 70 percent less likely than their peers to initiate illicit drug use.

The evaluation was conducted by Public/Private Ventures, a national research organization based in Philadelphia. In addition to Wichita, evaluated programs were located in Phoenix, Arizona; Minneapolis, Minnesota; Rochester, New York; Columbus, Ohio; Philadelphia, Pennsylvania; and Houston and San Antonio, Texas.

A major accomplishment in Wichita was meeting the goal of 1,000 active matches by the year 2000, making the Wichita program (which was already the largest per capita BBBSA site) the largest overall site nationwide. The success of the program has prompted a state-funded initiative to create satellite Big Brothers and Sisters facilities in all 105 Kansas counties. According to local Wichita data:

- 0.5 percent of Little Sisters become pregnant, compared to 5.5 percent of area girls;
- 1 percent of participants are arrested, compared to 7.6 percent of local youths; and
- 60 percent of participants show improvement in grades, 57 percent in school attendance, and 61 percent in relationships with teachers.

## **Self-Expression Teen Theater, Toledo, Ohio**

**Program Type:** Reaching Youths Outside School.

**Target Audience:** High-risk minority adolescents.

**Years in Operation:** 1986-present.

**Program Goals:** To provide teenagers with information on substance use so they can make healthy decisions.

**Contact Information:** Charles Muhammad, Executive Director, 419-242-2255.

**Description:** Self-Expression Teen Theater (SETT) trains young people to educate their peers about the dangers of alcohol and other drug use, premature sexual activity, and other risky behaviors, and helps youths

explore positive alternative activities. The program was begun in 1986 in response to a needs assessment which revealed that Hispanics and African Americans in Toledo had high rates of alcohol and other drug use. Since it began, SETT has trained over 1,200 peer educators, given more than 500 performances, and conducted over 200 youth-led workshops focusing on substance abuse and its relation to violence.

SETT targets primarily Hispanic and African American youths ages 11-18 to be peer educators. Peer educators conceive, write, and perform skits on topics including substance abuse, teen pregnancy, suicide, violence, and academic failure. Performances illustrate the importance of communication between young people and adults, and provide youths in the audience with information on treatment and prevention services in their community where they can seek help. The troupe performs in schools, churches, public housing projects, and malls.

SETT performers receive 80 hours of training covering substance abuse, violence prevention, health education, community resources, communication, and performing arts. Ten hours of training are dedicated to culturally specific information. Peer educators are trained by experts in the community, such as certified alcohol, tobacco, and other drug abuse counselors.

Parents of SETT members are highly involved in the program. The Parent Advisory Board meets monthly to review group training and activities and explore ideas for further programming and development. Representatives from community organizations providing services for youths are often present at the board meetings, which allows parents to remain up-to-date on available community resources.

SETT's How-To-Training Manual and consultation services are available to communities and organizations interested in replicating the program.

**Challenges:** One of the implementation challenges for SETT was finding the most efficient and effective way to involve local agencies in the program and to take advantage of their expertise and knowledge. Local and state agencies and organizations were invited to make presentations during the 80 hour youth peer training, and now 14 organizations, including the police department and children's services agencies are regularly present at training sessions. An additional 73 organizations are involved in the

program in various ways. Another problem, which is ongoing, is the struggle to find and retain qualified employees willing to work in the inner city. As SETT's positive effects on the community become better known, more people have become interested in working in the program.

**Costs and Funding Sources:** The average annual program budget of \$138,472 covers all expenses, including a full-time project director, a full-time office manager, a part-time project coordinator, contract workers such as coaches and training assistants, evaluation, rent, and program materials, such as costumes. SETT receives funding from the Ohio Department of Alcohol and Drug Addiction Services (\$100,000), City of Toledo Department of Neighborhoods (\$30,000), and the Marshall Field Foundation (\$2,000). Additional funding comes from general donations received from performances.

**Program Results:** In the program's target area of Toledo, 60 percent of all students graduate from public high schools. However, 93 percent of SETT peer educators graduate from high school, and 87 percent are attending or have graduated from college.

The program is currently being evaluated by researchers at the Wright State University School of Medicine in Dayton, Ohio. Results of the evaluation should be available in fall 2000.

SETT won Most Outstanding Exemplary Program Award for Prevention from the Ohio Department of Alcohol and Drug Addiction Services in 1993 and 1999, and the Exemplary Program Award from the Center for Substance Abuse Prevention in 1993. The program has been replicated in Lima, Ohio, and Atlanta, Georgia.

### III. Reaching High-Risk Groups

Targeted prevention services can effectively reach people at high risk for drug problems who may be impervious to universal prevention efforts offered in schools and other community settings. High-risk populations include children of substance abusers, pregnant teens, and juvenile offenders. These efforts, which often involve home visits, counseling, and parent training, enhance resilience and promote individual strengths.<sup>19</sup> The federal Center for Substance

Abuse Prevention (CSAP) has identified seven factors contributing to resilience. These factors, described in *Understanding Substance Abuse Prevention: Toward the 21st century: A Primer on Effective Programs*<sup>20</sup>, include:

- A strong relationship with a parent or caring adult who provides a consistent nurturing environment;
- Feelings of success and self-respect;
- Strong internal and external resources, such as good physical health, self-esteem, a sense of humor, and a supportive network that includes family, school, and community;
- Social skills, including good communication and networking skills, and the ability to make good decisions;
- Problem-solving skills that help children overcome obstacles;
- Hope that adverse circumstances can be overcome with perseverance and hard work; and
- Surviving previous stressful situations.

Parental substance abuse is one of the strongest predictors for alcohol and other drug problems among youth. Children of alcoholics, for example, are four times more likely than others to develop alcoholism later in life.<sup>21</sup> Targeting prevention services to particularly vulnerable young people is crucial. Kids Connection, a prevention program in Cincinnati, Ohio, has won national awards for its programs that target children of alcoholics and other drug abusers. The program helps children understand addiction, teaches skills, and encourages youths to cope without alcohol or other drugs. Kids Connection works with local treatment facilities, teachers, and mental health professionals to identify children in need.

Some groups, such as juvenile offenders, are at greater risk to become substance abusers. Interventions designed for this population can work in various settings, including correctional facilities and residential treatment centers. Children with emotional and behavioral problems are also considered at high risk, as they are significantly more likely to have alcohol and other drug abuse problems than youths in general.<sup>22</sup> Youngsters involved in the foster care system are another target population for prevention services, since their families often have histories of substance

abuse.<sup>23</sup> Initiatives to assist foster families can be integrated into programs for abused, neglected, orphaned, or troubled adolescents.

As substance abuse and sexual activity often overlap, targeting prevention/intervention services to pregnant teens and young women can benefit both the women and their children. Home visits by nurses to teach young mothers healthy lifestyles is one effective approach. The national Prenatal and Infancy Home Visitation by Nurses Program conducts intensive and comprehensive home visits during a woman's pregnancy and during the first two years after childbirth. An evaluation of the program found significantly reduced substance abuse among mothers and children in the program compared with similar nonparticipants.<sup>24</sup> In-home visits are designed to ensure women's prenatal health and pregnancy outcomes; improve the care provided to infants and toddlers; and facilitate women's own personal development by helping them plan future pregnancies, continue their education, and participate in the work force.

The following examples demonstrate successful prevention programs that target high-risk individuals.

### **Prenatal and Infancy Home Visitation by Nurses, Oakland, California**

**Program Type:** Targeting High-risk Groups.

**Target Audience:** Low-income first-time mothers and their children under age two.

**Years in Operation:** 1997-present.

**Program Goals:** Improve the health of pregnant women and their babies.

**Contact Information:** Peggy Hill, of the Center for the Study and Prevention of Violence at the University of Colorado, 303-864-5207.

**Description:** The Prenatal and Infancy Home Visitation by Nurses program assists low-income, first-time mothers by helping them improve their prenatal health, and after childbirth provides care to infants and toddlers to ensure the children's health and development. The program also helps women plan future pregnancies, continue their education, and participate in the work force. Originally piloted in the early 1970s in Elmira, New York, the program is currently being replicated in 19 states. In Oakland, California, the program began in November 1997,

and the first group of 100 mothers will soon graduate. Prenatal and Infancy Home Visitation by Nurses has been identified as a Model Program in *Blueprints for Violence Prevention* by the Center for the Study and Prevention of Violence at the University of Colorado.

The program hires and trains registered nurses to conduct home visits with pregnant women before delivery and to continue visiting once or twice a week until the child is two. One reason for the program's success is that nurses have a caseload limited to 25 families, allowing them to bond with the mothers and children and give them individual attention. The program focuses on five aspects of development: health, parenting skills, environmental health (living conditions), life skills, and the creation of solid support networks. Women are encouraged to seek higher education, reduce their alcohol, tobacco, and other drug use, and cultivate other positive behaviors. Nurses involve family and friends in the program and refer mothers to other community health services when necessary. Detailed records are kept on each family—their needs, services provided, and the family's progress and outcomes. Mothers are referred mainly through area health organizations; much of the recruitment in Oakland is done through the Women, Infant and Child (WIC) program and through the county's health maintenance organization.

The program was evaluated at three sites with three different population groups: Elmira, New York, in the 1970s (primarily white women); Memphis, Tennessee, in the 1990s (primarily African American women); and Denver in 1994 (primarily Mexican-American women). While the three programs have ended, results in all of the studies were promising. Based on the success of the earlier programs, the Department of Justice began funding new program sites three years ago.

**Challenges:** The city of Oakland had no centralized tracking system for at-risk mothers, which made recruiting mothers a challenge. Program staff had to contact each agency working with the target population, inform them about the program, and set up a recruitment system. Recruiting is complicated because many mothers are not willing to let nurses into their homes on a weekly basis for two years. Although Oakland originally targeted 200 mothers for the program, only 112 agreed to participate. Staff have taken



these lessons into account, and today there is better coordination among agencies providing services to young mothers.

**Costs:** Program costs vary depending on local nurses' salaries. In Oakland the average salary of a registered nurse is \$65,000 plus benefits; the site employs four nurses. Other program costs include the salary for a part-time program coordinator, training, rent, computers, and medical supplies. Total cost for the first year of the program in Oakland was approximately \$400,000 (100 mothers) and about \$350,000 in the second year. The program costs approximately \$3,200 per family per year during the start-up phase and \$2,800 per family per year after the nurses have been trained and are working to full capacity.

**Program Results:** Studies have demonstrated that the program reduces neurological impairment in children by helping mothers improve their diet and reduce alcohol, tobacco, and other drug use, and also minimizes childhood abuse and neglect. A 15 year follow-up study of the program in Elmira, New York, by researchers from the University of Colorado, Cornell University, the University of Rochester, and the University of Denver compared participating mothers and infants with a control group receiving basic prenatal care. Mothers were randomly assigned to either the program or control group. The evaluation found that program participants had:

- 79 percent fewer reported cases of child abuse and neglect;
- fewer subsequent children (1.1 versus 1.6);
- longer intervals between the births of their first and second children (67 months versus 37 months);
- 30 fewer months on welfare (60 months versus 90 months);
- 44 percent fewer alcohol and other drug-related behavioral problems and 69 percent fewer arrests among mothers; and
- 56 percent fewer arrests and days of alcohol consumption among the 15 year old children.

Furthermore, the evaluation data showed that, given the fewer number of subsequent pregnancies and reduced dependence on government welfare programs, the costs of the program were recovered in

four years. A report from the RAND Corporation estimated that by the time the children reached the age of 15, the cost savings were four times greater than the original investment when reductions in welfare expenditures, crime, and health care costs are taken into account.

The Oakland program has produced some impressive changes among women in the program. Although it is too early for site-specific evaluation data, program staff say that there have been no reported incidents of child abuse, many women have reduced tobacco use, few premature babies were born, and approximately 95 percent of the women have received their GED, job training, or have entered college.

### **Residential Student Assistance Program, Westchester County, New York**

**Program Type:** Targeting High-risk Groups.

**Target Audience:** Adolescents in the juvenile justice system.

**Years in Operation:** 1988-present.

**Program Goals:** Delay the onset and reduce the use of alcohol and other drugs and improve youths' self-esteem and communication skills.

**Contact Information:** Ellen Morehouse, Student Assistance Services, 914-332-1300, sascorp@aol.com.

**Description:** The Residential Student Assistance Program (RSAP) is a substance abuse prevention/intervention program serving adolescents in the juvenile justice system in Westchester County, New York. Started in 1988 with a five-year demonstration grant from the Center for Substance Abuse Prevention, the program is based on successful Employee Assistance Programs (EAPs) used by business and industry to identify and aid employees affected by substance abuse. Goals of the program are to delay the onset of, or reduce, alcohol and other drug use; develop peer resistance skills; improve self-image and sense of self-worth; and enhance communication and interpersonal skills. In 1999, RSAP was selected as a national high-risk youth replication model by the Center for Substance Abuse Prevention.

RSAP targets youths between the ages of 14 and 17, most of whom are African American or Hispanic. The program is implemented in six Westchester County locations: a locked county correctional

facility; a nonsecure residential facility for juvenile offenders; a facility for adolescents with severe psychiatric problems; and three foster care facilities for abused, neglected, orphaned, and troubled youths. Highly trained Student Assistance Counselors (SACs) work with youths in the facilities. The SACs assess all new residents for substance abuse and provide drug users and children of drug users with individual and group counseling. The SACs also implement small (6-8 residents) discussion groups in which adolescents talk about their own substance abuse or that of a family member, other family problems, and stress. The discussion groups help the youths and counselors get acquainted and begin changing the participants' attitudes about alcohol and other drugs. The facility also hosts 12-Step meetings, and residents are referred for treatment outside the residential facility when necessary. The SACs assist residents in developing an Adolescent Resident Task Force which meets regularly and works to increase self-referral for prevention and treatment activities.

The Student Assistance Counselors also work with the staff of the residential facilities. They coordinate a Residential Facility Staff Task Force which includes employees of the youth residential facility. The group meets weekly to discuss policy and program issues that affect prevention. SACs train residential staff to implement drug prevention strategies, and an EAP is available to help those experiencing personal problems. The Westchester County program employs five full-time counselors (four work full-time in individual facilities and one splits time between two facilities) and one supervisor. Together, they serve approximately 600 adolescents per year.

RSAP is currently being replicated in Massachusetts, and similar programs in Alaska, Arizona, Connecticut, and Florida are in the planning stages of implementation.

**Challenges:** One of the major obstacles to implementing RSAP was recruiting, hiring, and retaining project staff qualified to work with program participants. Initially, staff were hired based solely on their experience in working with adolescents, but program developers soon learned staff also needed to be trained and experienced in substance abuse prevention to be successful. Changing the qualifications of the counseling staff helped ensure success. Another obstacle was building support among all staff working in the

residential facilities where the program was being implemented. RSAP encouraged facilities to implement EAPs for their staff members, offered staff training at all levels, and formed a staff task force representing personnel from clinical to maintenance staff.

Working program activities into the adolescents' already busy schedules presented difficulties. As a result, the staff decided to present the program in the school setting, where most prevention programs are traditionally offered. Staff had to help school personnel understand that while the program might require children to miss a class or two, the benefits would significantly improve their schooling. Realizing that their students would learn more if they were not using drugs or distracted by family issues, most teachers acknowledged RSAP's importance.

**Costs and Funding Sources:** The RSAP program in Westchester County was initially funded by a five-year demonstration grant from the Center for Substance Abuse Prevention. When federal funds ran out, all six of the facilities where the program was being implemented picked up the costs of the program. The program budget consists only of the salary of the full-time or part-time student assistance counselor working in the facility and some supervision by the agency implementing the program. For communities looking to replicate the program, expenses would include hiring on-site counselors, staff supervision, and training. RSAP offers a five-day training which costs \$375, and on-site training costs range from \$500 to \$1,000 per day, depending on the location. Training fees include the implementation manual, which can also be purchased separately for \$125. A \$20 informational video is also available.

**Program Results:** An independent evaluation of RSAP conducted by Dobler Research Associates of Sand Lake, New York, showed promising results. The evaluation, which compared 125 adolescents who took part in the program with 201 youths who did not, yielded the following information:

- 82 percent of youth who did not drink, 83 percent who did not use marijuana, and 78 percent who did not smoke before entering the program remained nonusers;
- 72 percent of youth who drank, 59 percent who used marijuana, and 27 percent who

smoked before entering the program reported discontinued use at post-test;

- past month alcohol use fell 46 percent (versus a 2 percent drop among the control group);
- marijuana use dropped 45 percent (versus a 12 percent increase in the control group); and
- tobacco use fell 16 percent (versus an 8 percent increase in the control group).

A major accomplishment of RSAP is that it achieved such significant prevention results with adolescents who are considered at highest risk because of multiple risk factors. The combination of a sound theoretical basis for the program and quality staff helped ensure success. While program staff believe in involving parents in prevention, the target audience for the program did not have the parental resources available to most children. For young people without parental support, RSAP proved effective prevention can be achieved.

## IV. Building Family Bonds

Parents are powerful influences in the lives of their children. Through words and actions they can provide key guidance on alcohol, tobacco, and other drug use. Parents have a critical role to play in prevention—not only within the family, but also in collaboration with schools and community groups. Research shows that the more often parents talk with their children about the dangers of alcohol and other drugs, the less likely it is that their children will experiment with them.<sup>25</sup> Increasingly, prevention programs are being designed to enhance parent-child communication and improve other family skills. Parental disapproval of delinquency and drug use can counteract the peer pressure youngsters experience to engage in these activities.

Substance abuse prevention programs have traditionally been part of school and community efforts, but a new trend is toward family-based prevention programs. School and community programs, while essential, are not sufficient because many schools do not begin to address the problem of substance abuse until adolescence; substance abuse often begins earlier. According to the 1999 *Monitoring the Future* study,

by the time children are in eighth grade, more than 50 percent of them have tried alcohol, 44 percent have tried cigarettes, 22 percent have tried marijuana, and 20 percent have tried inhalants.<sup>26</sup> Family-centered approaches train and support families who are trying to keep their children free from alcohol and other drugs.

Family programs employ a variety of tools, including homework assignments, brochures, home study guides, workshops, and audio and video-cassettes. Recent research suggests that the most effective programs promote positive relationships between parents and children.<sup>27</sup> They provide training in communication, especially as young people move into adolescence, and they work to reduce conflict, which can damage bonds between parents and children.

The National Institute on Drug Abuse (NIDA) recommends that family-based prevention programs incorporate the following principles<sup>28</sup>:

- Reach families of children at each stage of development;
- Train parents in behavioral skills to reduce conduct problems in children, improve parent-child relationships, provide consistent discipline and rulemaking, and monitor children's activities during adolescence;
- Include an educational component for parents with drug information for them and their children;
- Direct services to families with children in kindergarten through 12th grade to enhance protective factors; and
- Provide access to counseling services to families at risk.

Family-based programs serve families based on the child's stage of development, ranging from birth to young adulthood. The federal Center for Substance Abuse Prevention recommends three family-centered approaches that show great potential. The first, parent and family skills training, teaches parents how to build protective factors and reduce risk factors linked to substance abuse. These risk factors include communication problems, too lax or too stringent discipline, parental substance use, and child abuse or neglect. Family protective factors include close-knit

familial relationships, consistent discipline, and parental supervision of children's daily activities. These programs can improve poor parent-child communication, child behavior, and parenting skills, and reduce family conflict. Such interventions are directed at families with children who have no apparent risk factors for substance abuse as well as those at moderate and high risk.<sup>29</sup>

Programming differs depending on the target population. For example, Preparing for the Drug Free Years is a program that aims to improve parents' child-rearing techniques, parent-child bonding, and children's peer resistance skills in five weekly sessions, four of which are parent-only. Treatment Foster Care, however, trains foster families to care for teenagers with histories of chronic, severe criminal behavior. Both programs have been found to reduce drug use among participants.

The second approach, family in-home support, provides crisis intervention (such as food, shelter, clothing) and long-range training that addresses the root causes of the crisis. These programs aim to decrease domestic violence, child abuse and neglect, and child placement in foster care, and are most effective with high-risk children. In-home services can also reduce youth crime rates by helping youngsters improve their social skills, anger management, school attendance, and attitudes toward authority.<sup>30</sup>

Family therapy, the third approach, helps family members improve the way they communicate, manage family life, and solve problems. Programs are aimed at families with children at high risk and are designed to improve family functioning and reduce antisocial behavior among both parents and children. Family therapy is often integrated with other prevention efforts, such as in-home support and school-based counseling.<sup>31</sup>

Media campaigns aimed at educating youths and their parents about the dangers of substance abuse are also used to develop family prevention skills. The Office of National Drug Control Policy (ONDCP) launched the National Youth Anti-Drug Media Campaign in 1998, which aims to teach youths about drugs, educate parents about the dangers of drugs, and encourage adults to communicate with their children. Anti-drug advertisements will run through 2002.

Preventing substance abuse by building family bonds is a growing trend among the nation's communities; the following programs are noteworthy examples of the different approaches.

## **Dare to be You, Ute Indian Reservation, Colorado**

**Program Type:** Building Family Bonds.

**Target Audience:** Preschoolers and their families.

**Years in Operation:** 1989-present.

**Program Goals:** Improve communication between parents and their children and train teachers and community members to provide services to target families.

**Contact Information:** Jan Miller-Heyl, Colorado State University, 970-565-3606.

**Description:** Dare to be You is a substance abuse prevention program for families with preschoolers. Developed by researchers at the University of Colorado, the program was inspired by the need for family-based prevention efforts on the Ute reservation, which was experiencing high rates of substance abuse, unemployment, and teenage pregnancy. The program began in 1989, has served approximately 180 families (the entire population of the reservation is 1,400), and remains popular among residents.

There are three components of the Dare to be You program. The family component provides training in communication, parenting skills, and social skills for children and parents. The school component trains and supports child care providers and teachers, and the community component trains community members who will provide ongoing support to the target children and their families. Goals of the program include improving parents' sense of competence, helping parents understand appropriate child management strategies, improving children's and parents' relationships with their peers, and boosting children's developmental levels. Parents are given incentives to complete the program: they receive a free meal each session, child care is provided, and each family receives \$200 at the end of the program.

The Ute program is run through the reservation's Head Start program, and classes are held in the Head Start building. Sessions run concurrently, so while parents are learning skills in one room, their children are receiving developmentally appropriate information



in the same building. Teenagers from the community (sometimes older siblings of preschoolers in the program) are trained and paid to be helpers. Some of the children who entered the program as preschoolers have returned as teen workers. There is a strong emphasis on hiring multicultural teen workers, since Ute youths typically have poor relationships with youths outside their community.

Dare to be You was selected as an Exemplary Prevention Program by the National Association of State Alcohol and Drug Abuse Directors, chosen as a High Risk Youth replication model by the Center for Substance Abuse Prevention, and is a winner of the Colorado Governor's Award for Excellence in Substance Abuse Prevention.

**Challenges:** The major obstacle to implementing Dare to be You on the Ute reservation was securing adequate meeting space. Head Start has donated use of its classrooms; however, it continues to be logistically difficult to share work space. Dare to be You can be implemented through any community organization in contact with the target audience.

**Costs and Funding Sources:** The estimated cost of putting 25-30 families through the program is \$25,000. This amount varies depending on the local cost of living. Program expenses include staffing (including teen worker salaries), parent incentive money, rent (if necessary), and supplies. Training costs approximately \$3,000 for 35 people; everyone involved in the program, including teen workers and agency supervisors, receives the training. The Ute program was originally funded as a demonstration project by the Center for Substance Abuse Prevention. Current funding to support the program's \$11,000 annual budget is provided by a local foundation.

**Program Results:** Researchers at the University of Colorado evaluated the program at four sites in Colorado; Montezuma County, Colorado Springs, San Luis Valley, and the Ute reservation. The program was implemented in community centers, day care, and Head Start facilities, and included Hispanic, African-American, and White parents and their preschool children. The evaluation involved 780 parents, 498 in the intervention group and 282 in the control group.

Parents in the experimental group reported multiple positive benefits which reduce substance abuse risk factors for their children:

- increased satisfaction with their parenting role (15.5 percent more than control group);
- increased sense of personal worth (13.5 percent more than control families);
- a more positive relationship with their children (6.5 percent more than control families); and
- a 13.7 percent decrease in the use of harsh punishment to discipline their children (use of harsh punishment decreased less than one percent among control families).

Children in the program experienced a 6 percent increase in their developmental level compared to their peers in the control group.

Dare to be You has had a positive impact on the Ute reservation and is now a household name in the community. One of the major accomplishments of the program is that it has been institutionalized in the community; all Head Start teachers on the reservation are now trained Dare to be You providers, and they reinforce the themes of the program to preschoolers on a daily basis. Moreover, teen workers who assist with the program have become role models in their community.

## Functional Family Therapy, Las Vegas, Nevada

**Program Type:** Building Family Bonds.

**Target Audience:** Youths ages 11-18 in the juvenile justice system and their families.

**Years in Operation:** 1996-present.

**Program Goals:** Change negative family behavior patterns and assist families in accessing community resources.

**Contact Information:** Kathie Shafer, Project Coordinator, University of Utah, 801-585-1807.

**Description:** Functional Family Therapy (FFT) is a prevention/intervention program for at-risk children (ages 11-18) and their families. The program

mainly targets youths in the juvenile justice system, aiming to reduce delinquency and substance use. The family focus of the program has evolved from the hypothesis that the family setting is the entry point to addressing problem behavior among adolescents. FFT has been identified as a Model Program in *Blueprints for Violence Prevention* by the Center for the Study and Prevention of Violence at the University of Colorado.

In Las Vegas, the fastest growing city in the country, FFT is the sole source of counseling services for all youths in the juvenile justice system. The program is provided by the Family Project—a collaborative effort between the University of Nevada, Las Vegas (UNLV) and the Clark County Family and Youth Services Division. The juveniles entering the system range from relatively low-risk children to youths with multiple antisocial behaviors and related syndromes. To address the diverse needs of these children and their families, FFT is designed as a phased program, with modules that complement one another. Each phase has special intervention and assessment activities aimed at accomplishing specific goals of individual families. The phases include:

- Engage and motivate youths and their families by decreasing the intense negativity so often characteristic of these families;
- Reduce and eliminate problem behaviors and patterns by improving family communication and parenting and problem-solving skills; and
- Generalize changes across problem situations by increasing the families' knowledge of and ability to avail themselves of community resources.

In Las Vegas, four full-time counselors, two from UNLV and two provided by the county, work with families. FFT is a short-term intervention that, on average, conducts eight to 12 one-hour sessions for mild cases and up to 26-30 hours of direct service for more intensive cases. Often, counselors handle 15 cases at a time, and cases average three months in length. Upon completion, participants are assessed at one-month, six-month, and one-year follow-ups. In the last two years, 480 families have been referred to the Las Vegas program.

In addition to the Las Vegas site, FFT is being implemented in 25 locations nationwide. One major innovation is that all sites enter individual case data into a national network called the Clinical Services System that enables researchers to monitor and compare data.

**Challenges:** One of the challenges program providers faced in Las Vegas was creating a partnership with the juvenile justice system. The goal was to formally integrate FFT into the system in order to create a continuum of care for juveniles and their families. Program developers dedicated a great deal of time to developing effective communication with justice personnel. Probation officers were taught to make appropriate referrals to the program and to respect the confidentiality of therapy.

A potential obstacle for communities looking to implement FFT is the year-long training process, which includes basic training, on-going supervision, and use of the Clinical Services System. Program developers insist on strict adherence to the program model.

**Costs and Funding Sources:** In Las Vegas the cost of serving one family ranges from \$500 to \$1,300. The year-long process of training and supervision required to become an FFT-certified site costs \$20,500. A community can expect to pay, on average, \$2,000 per family served.

**Program Results:** Thirteen evaluations of Functional Family Therapy have been conducted over the past 30 years, including studies by the University of Utah and the University of Nevada. The studies indicate that FFT can reduce criminal recidivism among high-risk youths between 25 and 60 percent. A cost-effectiveness study of the program estimated that spending \$2,000 on one family resulted in \$14,000 in cost savings by:

- Deterring adolescents from moving into higher cost treatment services;
- Preventing younger children in the families from entering the system of care;
- Preventing juveniles from entering the adult criminal system; and
- Avoiding future crime victim costs.

Since siblings of the adolescents being served in Nevada generally experience lower arrest rates and minimal contact with the juvenile justice system, it appears that FFT creates systemic change within the families it serves. Another study found that counselors were able to get 86 percent of referred families into at least two program sessions, indicating that FFT providers are successfully engaging families.

## **Strengthening Families Program: For Parents and Youth 10-14, Pella, Iowa**

**Program Type:** Building Family Bonds.

**Target Audience:** Youths ages 10-14 and their parents.

**Years in Operation:** 1992-present.

**Program Goals:** Prevent teen substance abuse by increasing family bonds.

**Contact Information:** Sherry Maakestad, Crossroads of Pella, 515-628-1212; for replication information, Virginia Molgaard, Ph.D., Institute for Social and Behavioral Research, Iowa State University, 515-294-4518.

**Description:** Youths and families in more than 80 Iowa communities participate in the Strengthening Families Program: For Parents and Youth 10-14 (SFP 10-14), a parent, youth, and family skills-building curriculum designed to prevent teen substance abuse and other problem behaviors, strengthen parenting skills, and build family strengths. Developed in 1992 by the Institute for Social and Behavioral Research at Iowa State University, the program is based on the Strengthening Families Program developed at the University of Utah.

For the past six years, Crossroads, a private social service agency in Pella, Iowa (population 15,000), has run two SFP 10-14 programs annually for fifth to eighth graders and their parents, one in the local public school and one in a private school. The programs typically average 15 families annually in seven two-hour weekly sessions. In addition, four two-hour booster sessions are provided between three and 12 months following conclusion of the original sessions. During the sessions, parents and youths meet separately for the first hour, and then during the second hour practice what they have learned together. The seven parent-oriented sessions focus on making house rules, encouraging good behavior, employing discipline,

building bridges, protecting against substance abuse, and using community resources. The child-oriented sessions focus on building personal goals, appreciating parents, dealing with stress, handling peer pressure, and reaching out to others. Family sessions involve supporting and attaining goals, appreciating family members, understanding family values, and building family communication. The booster sessions generally include handling stress and conflict, and improving family communication.

In addition to schools, other possible venues for SFP 10-14 include religious facilities and community centers. While the program can involve 12 families at once, group size should be reduced in special situations, such as court-ordered treatment. Three group leaders are required to implement the program: one to lead the parent session, and two to lead youth sessions. All three leaders facilitate the family sessions.

Over 600 SFP 10-14 facilitators have been trained in Iowa, and programming has reached more than 1,000 families in the state, including those in inner-city settings. Increasingly, the program is expanding outside of Iowa, and is currently being replicated in nearly 40 states. SFP 10-14 has been identified as a Promising Program by the Center for the Study and Prevention of Violence at the University of Colorado and as a Model Family Program for Delinquency Prevention by the Office of Juvenile Justice and Delinquency Prevention.

**Challenges:** A major obstacle to program success is recruiting and retaining families. Schools, social services agencies, and other community agencies are relied upon to recruit families by hosting informational meetings for parent leaders who in turn also assist in recruitment. Advertisements promote the program as help for parents during the teen years, as opposed to a support program for at-risk families. In Pella the program offers on-site child care to help retain families. SFP 10-14 program sites have demonstrated a 94 percent retention rate of families who attend the first meeting.

**Costs and Funding Sources:** To replicate SFP 10-14, curricula for the 11 sessions including a one-day training session, plus manuals and videotapes, costs \$535. The manuals contain instructions for 33 hours of activities, such as learning games, discussions, skill-building activities, and family projects.



Training consists of a lesson on program background and research results, discussion of techniques and teaching philosophy, an overview of program logistics and recruitment, and hands-on practice of selected activities. Agencies at various sites have implemented the program without hiring new staff, keeping costs at a minimum.

The two programs in Pella cost about \$4,500 annually. Child care is provided on-site, and Crossroads conducts publicity campaigns to recruit families.

**Program Results:** Evaluation studies of SFP 10-14 conducted by the Institute for Social and Behavioral Research at Iowa State University have found lowered alcohol, tobacco, and marijuana use among participating youngsters when compared with similar children in a control group. Four years following baseline assessment:

- 31 percent of program youths had ever been drunk, compared to 46.5 percent of the control group;
- 13 percent of program youths had smoked cigarettes in the past month, compared to 24.5 percent of the control group; and
- 8.3 percent of program youths had used marijuana, compared to 17.6 percent of the control group.

Two major accomplishments of the Pella program are successfully involving parents in prevention activities, often a difficult task, and forming a partnership with the schools, facilitating recruiting and publicity.

## V. Empowering Communities

Communities can find solutions to many of their own problems. Community-led initiatives addressing the problems of substance abuse and related crime have proliferated throughout the last decade. Community coalitions aimed at underage drinking, Weed and Seed initiatives, and other programs have sprung up in cities and towns nationwide, supported by foundations, individual donors, and the federal government.

A community coalition is comprised of community stakeholders—service providers, residents, community and business leaders, educators, government officials, law enforcement officers, and others—who combine human and financial resources to address a particular issue or set of issues within the community. The emergence of crack cocaine in the 1980s prompted many communities to form anti-drug coalitions, a number of which still exist today. Coalitions, by mobilizing the community, have helped to change public policy and have empowered residents by giving them a sense of ownership and investment.

The federal government and private foundations recognize the value of building community coalitions to address substance abuse and have spent hundreds of millions of dollars to support these efforts. The Robert Wood Johnson Foundation, for example, created Fighting Back coalitions to help communities reduce the demand for alcohol and other drugs. The Center for Substance Abuse Prevention has spent over \$300 million on its Community Partnership program, which has supported nearly 500 coalitions nationwide. The Drug-Free Communities Act, signed into law in June 1997, provides financial support and technical assistance to community coalitions seeking to reduce adolescent substance abuse. The Office of Juvenile Justice and Delinquency Prevention manages the Drug-Free Communities Support Program, which provides annual grants of up to \$100,000 to community coalitions for youth substance abuse prevention efforts. Funding for the program, which was \$10 million in FY 1998, has increased annually and will be \$43.5 million in FY 2002. There are currently 213 grantees from 45 states and the U.S. Virgin Islands and Puerto Rico.

While most coalitions are established for the same purpose—bringing the community together to address substance abuse—the structure and activities of coalitions can differ markedly, making it difficult to offer one blueprint of how coalitions work. However, studies conducted in 1999 by the Center for Substance Abuse Prevention and the Community Anti-Drug Coalitions of America identified some key elements of successful coalitions<sup>32,33</sup>:

- Understanding the community's needs and resources;
- Widely shared and comprehensive vision;

- Clear and focused strategic plan;
- Diverse membership (including key community leaders, local government officials, and volunteers);
- Strong leadership and committed partners;
- Diversified and relevant funding (coalitions should not accept funding that may compromise their mission); and
- Well-managed structure (including organized administration, effective communication among members/volunteers/staff, and a comprehensive evaluation plan).

The growth of coalitions has also spurred the creation of national organizations to support them. The Community Anti-Drug Coalitions of America and Join Together are two major organizations that provide technical assistance to new and existing coalitions.

Some communities have developed coalitions focused specifically on curbing youth alcohol use. These coalitions have demonstrated an impact by effecting environmental changes that reduce youth access to alcohol, through legislation and public awareness. For example, the Coalition to Reduce Underage Drinking in North Carolina helped pass legislation that sets penalties for adults who supply alcohol to minors and limits the amount of revenue that stores in certain low-income neighborhoods can generate from alcohol sales. In addition, the Coalition worked with retailers to create a media campaign designed to change adult attitudes about youth drinking. Recognizing the devastating effects of underage drinking on communities, the Office of Juvenile Justice and Delinquency Prevention supports coalition efforts through its Combating Underage Drinking Program.

Another Department of Justice program, Weed and Seed, targets the relationship between substance abuse and crime in America's cities. Weed and Seed is a community-based, multiagency initiative designed to control, reduce, and prevent violent crime and drug abuse. Law enforcement agencies and prosecutors cooperate in "weeding out" criminals who participate in violent crime and drug abuse to prevent their return to the target area; "seeding" brings human services to the area, encompassing prevention, intervention, treatment, and neighborhood revitalization.

A community-oriented policing component connects weeding and seeding efforts. An important feature of Weed and Seed is that each site must form a local steering committee, made up of all key community stakeholders and chaired by the U.S. Attorney for that district. The committee is then responsible for establishing goals and objectives, developing programs, providing guidance, and assessing achievement.

The inclusion of local residents, services, and institutions contributes to community ownership of programs, which is important for finding local funding. In Fort Wayne, Indiana, for example, funding for the anti-drug coalition comes from money collected from individuals arrested for driving under the influence or some other drug offense. In Kansas City, Missouri, residents approved a 0.25 percent increase in the sales tax to support community anti-drug efforts. Nonprofit community organizations also offer win-win partnerships with local business and industries looking to support a good cause and garner local publicity.

Evaluation of community coalitions is providing data about what makes coalitions successful. The following programs exemplify how communities can combine grassroots efforts with research-based theories of intervention to address illicit drug and alcohol problems.

### **Midwestern Prevention Project, Marion County (Indianapolis), Indiana**

**Program Type:** Empowering Communities.

**Target Audience:** Pre-middle school youths, their parents, and communities.

**Years in Operation:** 1987-present.

**Program Goals:** To reduce youth drug use by coordinating anti-drug efforts among schools, parents, and communities.

**Contact Information:** Karen Bernstein, University of Southern California, 323-865-0325.

**Description:** The Midwestern Prevention Project (MPP) delivers anti-drug messages to youths through schools, parents, and communities. The program aims to reduce drug supply and demand by combining prevention activities with policy changes. The program began in 1984 and is now being used in five states. The Midwestern Prevention Project was named

a Model Program in *Blueprints for Violence Prevention* by the Center for the Study and Prevention of Violence at the University of Colorado. In 1987, the MPP was implemented in all 133 public schools in Marion County, Indiana.

The MPP consists of five components: school program, mass media, parent program, community organization, and health policy. The program is introduced in sixth or seventh grade, before youths make the transition into middle or junior high school. The program is administered by teachers and student leaders elected by the class and trained by the teacher. During the first year there are between ten and 13 classroom sessions discussing resistance skills, promoting a nondrug use environment, and creating an anti-drug climate in the school. The second year of the program provides five follow-up sessions which reinforce the skills learned in the previous year. Throughout high school, peer counseling and support activities are available.

The mass media component begins the same year as the school component and continues for five years. Each year there are approximately 30 reports about the program on television, radio, and in newspapers. The reports are designed to keep community members involved by keeping them informed of new program components and what students are learning in the program.

The parent component, taking place during years two and three, gets parents involved in supporting a drug-free environment in their homes and in middle school. A group consisting of the principal, four to six parents, and two students meets throughout the school year to institutionalize drug prevention in the school, monitors the school grounds to ensure a drug-free environment, and plans and implements parent skills training twice each year. Each of the schools in Indianapolis has a parent committee led by a parent involved in the Parent Teacher Association.

During years three through five, community leaders are trained and form a community organization to implement drug abuse prevention services. These services complement what is being done in the schools and with the parents. During the fourth and fifth year, members of the community organization form a health policy subcommittee to implement policy changes designed to reduce the supply of and the demand for drugs. Policy changes might include

ordinances restricting cigarette smoking in public areas or mandating drug-free zones. Indianapolis has had eight committees, including a medical action committee which produced a resources list of all local substance abuse treatment facilities serving youth. The list was distributed to area schools and hospitals. The government committee produced a brochure detailing parents' legal responsibilities concerning youth and alcohol, such as the possible repercussions of allowing alcohol to be served at a graduation party in the home. Over 150,000 of these brochures were distributed to parents.

**Challenges:** One of the challenges to implementing the MPP in Marion County was coordinating program development among the key players, including teachers, the school superintendent, local officials in law enforcement, and the business community. In order to address this problem, the Lilly Endowment, the project funder, required that all schools in the district commit to participating in the program before awarding the grant.

**Costs and Funding Sources:** The program was funded by a \$6 million grant from the Lilly Endowment. Additional funding was provided by the University of Southern California for evaluation of the program. It costs approximately \$175,000 over a three-year period for a school to implement the MPP, which includes providing curriculum materials for 1,000 students and training 20 teachers and 20 members of the parent group.

**Outcome Measures:** The University of Southern California and the Kaufman Foundation are conducting an ongoing evaluation of the Midwestern Prevention Project in Kansas City, Missouri, which was the first city to implement the program. Results from the evaluation show that the positive effects of the program endure over time.

By the end of high school, the program youth showed the following net reductions\* in drug use:

- 4.9 percent daily cigarette use;
- 7.2 percent monthly drunkenness; and
- 2.9 percent marijuana use more than twice a week.

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\*Percent increase in control group minus percent increase in program group.

By early adulthood (age 23), program youths continued to show less drug use than the control group:

- 1.9 percent less cigarette use;
- 1.5 percent less marijuana use more than twice a week;
- 6.2 percent less lifetime amphetamine use; and
- 8.1 percent less lifetime inhalant use.

## Project Northland, Ten Minnesota Communities

**Program Type:** Empowering Communities.

**Target Audience:** Youths, their parents, and communities.

**Years in Operation:** First phase: 1991-1994; second phase: 1996-1999.

**Program Goals:** To prevent underage drinking through community and family supported alcohol education.

**Contact Information:** Project Northland curriculum materials, 800-328-9000; in Minnesota, 612-624-0057.

**Description:** Project Northland is a communitywide intervention designed to reduce adolescent alcohol use. The program was developed at the University of Minnesota and piloted in ten Minnesota communities to help prevent underage drinking. The program is a multilevel program involving students, parents, businesses, and community residents and organizations. The Minnesota program served 2,400 students from 24 school districts, including schools on seven Native American reservations with high rates of death and disability from alcohol abuse. Each community site had a part-time field coordinator to assist in implementation.

Through Project Northland, community strategies, action-based curricula, and peer leadership activities all encourage positive individual behavior and environmental change. The first phase of the intervention includes eight sessions each year for sixth, seventh, and eighth grade students that focus on the risks of drinking. These sessions are designed to prevent alcohol use through normative education, social resistance skills training, and decision making. Each of the middle-school years revolves around a specific

theme and incorporates individual, parent, and community training.

- sixth grade—a strong family component targets student and parent communication by requiring parents and children to complete homework assignments together that describe adolescent alcohol use. Group discussions on family communication are held in schools. Also in the first year, a communitywide task force is created to address teen alcohol use.
- seventh grade—a student- and teacher-led classroom curriculum focuses on resistance skills and normative expectations regarding teen alcohol use. Discussions, games, problem-solving, and role plays are all components of this curriculum. A peer participant program creates alternative alcohol-free activities, and parents continue to be involved. The task force focuses on alcohol-related environmental policies, and businesses get involved by providing discounts for children who pledge to be alcohol- and drug-free.
- eighth grade—students work on becoming active citizens by interviewing community leaders about adolescent drinking and conduct town meetings to make recommendations for the community's help in preventing alcohol use.

The second phase, delivered during the students' last two years of high school, incorporates five major components to reduce alcohol availability and reinforce no-use norms: community organizing, parent education, youth participation, media campaigns, and school curriculum. Program staff work with youth in more sophisticated ways for example, developing community action projects focused on teen alcohol issues, creating original videos that focus on alternatives to drinking, community response to teen drinking, and dramatizations of the negative consequences of drinking; and learning about the state legislative process.

**Challenges:** One challenge in implementing the program is creating a community partnership that embraces the program's goals. In Minnesota, staff used media messages to help create a partnership within the community; articles in newspapers and school newsletters helped publicize the program.



Minnesota staff conducted a community leader survey to assess what changes the community would support. Another obstacle can be obtaining agreement from the schools to participate, particularly considering potential shifts in school leadership and administration. A nonlegal binding agreement was used in Minnesota communities to keep schools on board.

**Costs and Funding Sources:** The complete Project Northland curriculum for one school costs \$549, plus \$150 for each set of sixth grade workbooks (one set includes 30 workbooks; individual books can also be purchased). Training sessions (which last two to three days) are held in various sites throughout the country and cost \$1,500 per day. Additional costs include salaries for part-time program coordinators. Project Northland was developed, implemented, and evaluated in Minnesota through a five-year grant from the National Institute on Alcohol Abuse and Alcoholism.

**Program Results:** Project Northland successfully prevents youth substance abuse. While the primary focus of the program is on alcohol, it has impacted tobacco and marijuana use as well. A study comparing Project Northland youths with similar noninvolved youngsters found that participating youths were:

- 30 percent less likely to drink in the past week;
- 20 percent less likely to drink in the past month;
- 20 percent less likely to smoke regularly; and
- 15 percent less likely to use marijuana.

The second phase of the program was completed in 1999, and evaluation of its effectiveness in preventing teen alcohol use is currently underway.

The program has also indirectly contributed to the passage of five alcohol-related city ordinances, including the establishment of responsible beverage server training, stricter requirements for the renewal and granting of liquor licenses, and limitations on liquor establishment operating hours. Project Northland received an “A” in *Making the Grade: A Guide to School Drug Prevention Programs* and has been identified as a Promising Program by the Center for the Study and Prevention of Violence at the University of Colorado.

## **Troy Community Coalition for the Prevention of Drug and Alcohol Abuse, Troy, Michigan**

**Program Type:** Empowering Communities.

**Target Audience:** Youths, their families, and communities.

**Years in Operation:** 1985-present.

**Program Goals:** To reduce underage drinking by educating youths, their parents, and the community.

**Contact Information:** Mary Ann Solberg, Director, 248-740-0431.

**Description:** The Troy Community Coalition formed when the town began to experience an increase in youth alcohol abuse in the mid-1980s. To address the problem, the school district created a three-pronged approach: implement a new health and peer pressure resistance program, develop a parent group, and create a community program. This community program developed into the Troy Community Coalition for the Prevention of Drug and Alcohol Abuse. After operating on a small budget for about one year, the coalition won a \$1.3 million grant from the Center for Substance Abuse Prevention.

The coalition follows a cradle-to-grave strategy, implementing programs for all sectors of the community ranging from pre-schoolers to senior citizens. The coalition works with schools, parent groups, the police department, the court system, and the city commission, among others. For example, the coalition offers a parenting class to help parents talk with their children about alcohol, encourages the police to make sure bars and store do not sell alcohol to minors, and successfully advocated legislation requiring alcohol to be safeguarded, because youths were stealing alcohol from grocery store shelves. In addition, the coalition trains pediatricians to work with parents to help them understand the problems associated with underage drinking.

Through a decade of programming, the coalition has identified several key elements of success:

- Public officials are vital to the work of coalitions;
- Coalition programs must match or exceed community perceptions of quality;

- Creative methods must be used to recruit, retain, and recognize volunteers; and
- Coalitions must be funded, at least in part, locally. Creative use of data and outcomes attracts this funding.

**Challenges:** A major obstacle to the coalition's work in Troy is denial among residents that there are alcohol and other drug problems in the community. The coalition conducts public awareness campaigns to educate the public and demonstrate existing problems. Data collection is a vital activity for informing the creation of programs. The coalition monitors adult and school surveys, emergency room data, police data, etc., to make sure the community's needs are being addressed and met. For example, the coalition observed an increase in alcohol abuse among newly retired senior citizens and created a senior volunteer bureau to address this problem.

Another challenge is maintaining vital relationships with partners in public and private sectors despite constantly changing leadership. Continued public education is needed to explain the mission of the coalition, the problems in the community, and how partnerships can help solve these problems. The coalition must constantly educate new leaders and volunteers to maintain and enhance these linkages, which are vital to the success of the coalition. For example, the linkage with the police department alerts the coalition to emerging drug problems so it can develop appropriate programming.

**Costs and Funding Sources:** The coalition operates on a \$300,000 annual budget, which includes four full-time staff and one part-time employee, and receives funding from the city government (it is a lineitem in the annual city budget). The school

district supplies office space and other services, while corporate donations, small foundation grants, individual donors, and fundraisers make up the remaining budget. Troy staff believe that all fundraisers, in addition to collecting money, should send significant prevention messages as well. For example, an annual celebrity dinner sponsored by local corporations and attended by adults and children is alcohol-free.

**Program Results:** The coalition's efforts to reduce teenage drinking resulted in significant reductions between 1991 and 1998:

- 12th-grade students who reported consuming alcohol in the past month decreased from 62.1 percent to 53.3 percent; and
- eighth-grade students who reported consuming alcohol during the past month decreased from 26.3 percent to 17.4 percent.

In addition, the coalition has been successful in changing community norms. For example, when the National Football League wanted to host a youth competition in Troy sponsored by Budweiser, the county commission (which works closely with the community coalition) declined the offer unless a new sponsor was found. The next year, the NFL resubmitted a proposal with a new sponsor. Another coalition accomplishment is receiving significant community funding. Since its inception, the coalition has worked to establish win-win relationships with businesses and organizations who in turn support the coalition. For example, the coalition assisted one of its corporate sponsors in the development of an anti-drunk driving promotion. The coalition's work has also prompted various public policy changes that have strengthened the community's resistance to alcohol and other drug abuse.

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# Treatment

Substance abuse treatment is the most cost-effective way to reduce addiction, improve the health of drug abusers, and relieve the growing burden of drug-related health care costs. With treatment, addicts can get off drugs, get jobs, and become productive members of society. Addiction to alcohol and other drugs is similar to other chronic illnesses, such as diabetes and hypertension, in that successful treatment requires permanent behavior change. As with all chronic illnesses, relapse is a possibility, and failure to comply with treatment weakens the chances for successful recovery.

An untreated addict can cost society an estimated \$43,200 annually, compared with an average \$16,000 for a year of residential care or \$1,500 for an outpatient program.<sup>34</sup> A 1994 California study (CALDATA) found that \$1 invested in alcohol and other drug treatment saved taxpayers \$7 in future costs.<sup>35</sup> The federal government's 1997 National Treatment Improvement Evaluation Study evaluated the effectiveness of treatment services for 5,000 clients in publicly funded programs. Treating these low-income clients saved society an average of \$9,000 per client, compared to \$3,000 spent on treatment. The study found a 3 to 1 ratio of benefits to costs.<sup>36</sup>

Services offered by substance abuse treatment programs vary, as do the modalities, staff, and target populations. The four most common types of substance abuse treatment are<sup>37</sup>:

- *Outpatient methadone programs*—provide methadone to reduce cravings for heroin. Counseling, vocational training, and case management are often used to stabilize patient functioning;
- *Long-term residential programs*—offer drug-free treatment in a residential community of counselors and recovering addicts. Patients generally stay in the programs a year or more;
- *Short-term inpatient programs*—keep patients up to 30 days. Most of these programs focus on medical stabilization, abstinence, and lifestyle changes. Staff are primarily medical professionals and trained counselors; and
- *Outpatient drug-free programs*—use a wide range of approaches, including problem-solving groups, specialized therapies, cognitive-behavioral therapy, and 12-step programs.

Studies of successful drug treatment programs have identified certain elements that enhance effectiveness. Length of time in treatment, intensity of treatment, and aftercare are key factors in helping addicts stay clean. According to extensive national studies of tens of thousands of addicts, one-third of those who stay in treatment longer than three months are still drug-free one year later. The recovery rate jumps to two-thirds when treatment lasts a year or longer.<sup>38</sup>

The National Institute on Drug Abuse has identified 13 principles of effective treatment that are described in *Principles of Drug Addiction Treatment: A Research-Based Guide* (1999). These principles are as follows:



- No single treatment is appropriate for all individuals;
- Treatment needs to be readily available;
- Effective treatment attends to multiple needs of the individual (such as medical, psychological, social, vocational, and legal problems);
- Treatment and services plans must be assessed continually and modified as necessary to ensure that the plan meets the individual's changing needs;
- Remaining in treatment for an adequate period of time is critical for treatment effectiveness;
- Counseling (individual and/or group) and other behavioral therapies are critical components of effective treatment;
- Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies;
- Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way;
- Medical detoxification is merely the first stage of addiction treatment and by itself does little to change long-term drug use;
- Treatment does not need to be voluntary to be effective;
- Possible drug use during treatment must be monitored continuously;
- Treatment programs should provide assessments for HIV/AIDS and other infectious diseases, and counseling to help patients modify or change behaviors that place them or others at risk of infection; and
- Recovery from drug addiction is a long-term process and frequently requires multiple episodes of treatment.

Although treatment has proven effective, programs are still scarce. The National Academy of Sciences' Institute of Medicine estimates that programs are available for only one quarter of the almost six million people needing treatment.<sup>39</sup> The federal government estimates that the need for substance abuse treatment

in the United States will grow 57 percent over the next 20 years.<sup>40</sup> The shift to managed health care among both public and privately funded treatment providers has reduced the availability of long-term substance abuse treatment. Instead, coverage is provided only for short-term interventions. Failure to provide adequate, appropriate treatment services reduces success rates and contributes to public skepticism about investing in treatment programs.

This chapter discusses various promising treatment approaches involving families, communities, and the criminal justice system. Effective strategies include treating parents with their children, rehabilitating criminal offenders, addressing the unique needs of adolescents, and connecting with the community to serve hard-to-reach clients. The programs described below may serve as examples to other communities trying to develop strategies to meet their own needs.

## I. Family-Based Treatment

Treatment for a parent means prevention for a child. Children whose parents receive substance abuse treatment have lower health care costs than children of parents who do not receive treatment.<sup>41</sup> In addition, children of untreated addicts are at significantly higher risk of abusing substances themselves. Providing treatment services to addicts and their children helps break the inter-generational cycle of substance abuse. However, treatment has historically been largely inaccessible to pregnant addicts and parents without access to transportation, child care, and affordable services.

Pregnant addicts have a particularly difficult time getting treatment, in large part because most treatment models were originally designed for male addicts. The 1997 Uniform Facility Data Set found that only 20 percent of treatment facilities surveyed offered programs for pregnant or postpartum women; 7.2 percent provided prenatal care, 4.8 percent offered perinatal care, and 10.2 percent offered child care.<sup>42</sup> Lack of specialized treatment options translates into greatly increased health and social costs. According to a 1995 study in Washington state, Medicaid expenses during the first two years of life for an infant born to an untreated substance-abusing woman were 1.4 times higher than those incurred for

infants born to treated substance-abusing women.<sup>43</sup> The difference in dollar terms amounted to \$1,800 per infant.

Other deterrents for pregnant addicts are the risks of prosecution and of losing their children. An increasing number of states are prosecuting women under criminal laws for using drugs during pregnancy. For example, several women have been jailed under South Carolina's child-endangerment law, which targets women who use illegal drugs while pregnant. The U.S. Supreme Court, which upheld the state's right to prosecute these women in 1998, is now considering whether a South Carolina public hospital is violating pregnant women's constitutional rights by testing them for crack cocaine use. Public clinics are generally required to report a pregnant woman to child welfare agencies if her urine tests are drug-positive.<sup>44</sup> As a result, many pregnant drug users regard prenatal care as a potential legal trap and choose to forgo it. Recent studies show that prenatal care substantially improves a baby's health, even if the mother continues to use drugs during pregnancy.<sup>45</sup>

Women account for almost one-third of the total number of substance abusers in treatment.<sup>46</sup> The Substance Abuse and Mental Health Services Administration's 1998 Services Research Outcomes Study, which surveyed several thousand addicts five years after their discharge from treatment, found that women responded better to treatment than men. Women reported almost twice as great a reduction in illicit drug use after treatment than men did.<sup>47</sup> The 1997 National Treatment Improvement Evaluation Study also found that women addicts showed marked improvement in the year following treatment.<sup>48</sup> Among women in the treated group, arrests declined by two-thirds, while drug use dropped by almost half.<sup>49</sup>

Certain aspects of women's lives are particularly important in addressing their treatment needs. Children are a central reality in the lives of most women. Unless programs provide help with children, women often cannot participate. Several treatment outcome studies have found that women who have their children with them during residential treatment are less likely to drop out and are more successful after treatment than women whose children are not with them during treatment.<sup>50,51,52</sup> Moreover, having children accompany mothers in both nonresidential and

residential treatment provides an opportunity to teach women parenting skills in a safe therapeutic setting.

Sexual abuse, domestic violence, and depression are widespread among women addicts; these problems must be addressed in order to prevent relapse. Research indicates that women-only programs tend to be more effective than coed, primarily because women feel more comfortable talking to other women about their experiences.<sup>53</sup> Programs should offer access to comprehensive services, such as family planning, physical and mental health care, job training, parenting, and family building skills. This model departs from traditional drug treatment, which concentrates almost exclusively on addressing addictive behavior rather than the constellation of other problems that often contribute to addiction in women.

Despite the challenges, new treatment programs for pregnant, postpartum, and parenting substance abusers have begun to target high-risk families, providing treatment as well as parent training and job readiness skills. An emerging trend is to combine prenatal care with drug treatment to protect unborn babies from exposure to drugs and to prepare pregnant women for parenthood. The Center for Addiction and Pregnancy in Baltimore found that infants of untreated women were more than twice as likely (26 percent) to require neonatal intensive care unit (NICU) hospitalization than infants of treatment patients (10 percent). Taxpayers save nearly \$5,000 per child in NICU costs.<sup>54</sup>

Families in crisis often lack the ability to support each other. Some treatment programs are working with addicts and their families to enhance chances for recovery and family stability. For example, La Bodega de la Familia, a treatment facility in New York City serving families with a relative in the criminal justice system, incorporates family members and in-home visits into the treatment process. La Bodega requires that substance abusers have a family member willing to participate in the treatment program to assist case managers in developing an action plan for the addict and the family. Since children often suffer because of the substance abuse or incarceration of a parent or sibling, family-based interventions are an effective way to integrate prevention and treatment.

By involving the family in the treatment process, addicts need not be distracted by the risks of losing

their children, and at the same time their families serve as support networks in treatment and recovery. Consequently, strengthening family relationships is a major objective for the following family-based treatment programs.

### **Center for Addiction and Pregnancy, Baltimore, Maryland**

**Program Type:** Family-Based Treatment.

**Target Audience:** Substance-abusing women and their families.

**Years in Operation:** 1991-present.

**Program Goals:** To provide multiple types of medical services to substance-abusing women and their families.

**Contact Information:** Center for Addiction and Pregnancy, 410-550-3020; Dr. Lauren Jansson, 410-550-3415.

**Description:** The Center for Addiction and Pregnancy (CAP) offers a comprehensive, multidisciplinary treatment program for substance-abusing women and their families. The program, established in 1991, is housed in one wing of the Johns Hopkins Bayview Medical Center. The CAP program combines substance abuse/mental health treatment, pediatrics, obstetrics/gynecology, family planning, and nursing.

CAP's main goals are to reduce the number and severity of obstetric complications, including HIV infection; to deliver healthier infants to mothers who no longer abuse drugs or alcohol; to provide effective family planning services acceptable to the patient; and to ensure initial and long-term pediatric assessments and care to the infants and siblings of program patients. Upon admission, women are placed into residential care for seven days, during which they receive eight hours of interdisciplinary, individual, and group counseling per day. After this one-week residential stay, the women are transferred to an outpatient program, where they attend six and a half hours of programming each day. As women progress, they go through three levels of treatment that lessen in intensity in accordance with their progress. Ancillary services, including methadone maintenance, psychiatric therapy, and specialized services for HIV-positive women are offered when necessary.

Prenatal assessment and care are provided by nurse midwives and an obstetrician, and infants are delivered on the medical center campus. Pediatric care consists of routine child health care maintenance, as well as developmental screenings every three months and formal psychological assessments at six, 12, and 24 months. A structured parenting program provides individual and group training to all mothers, especially those identified as having exceptional parenting needs. A children's service coordinator conducts pediatric outreach and in-home assessments as well as overall case management for CAP children and their siblings.

Participants, primarily from Baltimore, are predominantly African American. The majority of women have less than a high school education, live in poverty, are single, and have an average of three children. CAP admits between 35 and 40 women per month and performs approximately 200 deliveries annually.

**Challenges:** A challenge to implementing the CAP program was integrating the many disciplines involved. Having all staff members work together without a particular hierarchy encouraged effective working relationships and facilitated the free flow of information, allowing staff to learn about disciplines outside of their expertise.

One of the major obstacles currently facing the CAP program is the cost restrictions of managed care. Although the program historically could provide long-term intensive services, women are now much more limited in their time in the program and access to special services. To address this problem, the program is seeking to provide longer-term services through foundation grants and state funds. In addition, the program is working with managed care companies to address the lack of services.

Another programmatic challenge is retaining women in treatment. A significant number of women entering the program drop out quickly. CAP is working on ways to make treatment more user-friendly, such as offering vouchers and hiring treatment advocates. The program also provides transportation and child care to help reduce barriers to treatment.

**Costs and Funding Sources:** The total expenditures of the program are \$3.7 million annually, including salaries for CAP's 37 full-time employees. Funding for the program comes from managed care companies and Medicaid.

**Program Results:** A cost-effectiveness study of CAP conducted by researchers at Johns Hopkins University, the National Institute on Drug Abuse, and the Maryland State Alcohol and Drug Abuse Administration found that providing treatment services to pregnant women significantly reduced the costs of medical care for their infants. The evaluation compared two groups of pregnant drug-abusing women—100 who received treatment, and 46 who did not. Drug use of mothers at time of delivery was measured using urinalysis. The outcomes were as follows:

- The total neonatal intensive care unit (NICU) costs for infants born to mothers who did not receive substance abuse treatment totaled \$12,183, significantly more than the \$900 in NICU costs for the treated women's infants;
- Factoring in the \$6,639 in costs to provide addiction treatment services to mothers, total cost savings of the program were \$4,644 per mother-infant pair;
- Infants born to treated women averaged less than one day in NICU, compared with more than ten days for control group infants;
- Women in treatment were significantly less likely to use illicit drugs at the time of delivery than women who did not participate in treatment (37 percent and 63 percent, respectively).
- Infants of treated women had a mean birth weight approximately 400 grams heavier and a gestational period approximately three weeks longer than the infants whose mothers did not get treatment for drug abuse.

The cost-effectiveness study won the 1999 Hazelden Foundation Dan Anderson award, which honors clinical research endeavors seeking to improve treatment services.

## La Bodega de la Familia, New York, New York

**Program Type:** Family-Based Treatment.

**Target Audience:** Families of drug users.

**Years in Operation:** 1996-present.

**Program Goals:** Provide services to families of drug users to increase the likelihood of drug users remaining in treatment.

**Contact Information:** Carol Shapiro, Program Director, 212-982-2335.

**Description:** La Bodega de la Familia, begun in 1996, is an alcohol and other drug treatment program focusing on families of drug users. The theory behind La Bodega is that a substance abuser will be more successful in treatment if supported by their family. La Bodega serves a population of 60,000 in a 56-block area of Manhattan's Lower East Side, referred to by locals as Loisaida. Loisaida was chosen as the program site by the Vera Institute of Justice because the community has high levels of drug use and related crime (the building housing La Bodega was formerly the site of a drug market), but also has many churches and health clinics providing crucial support to drug users and their families. The Lower East Side is 33 percent Hispanic (largely Puerto Rican), 30 percent Asian, 29 percent white, and 8 percent African American. Forty-four percent of the children live in poverty.

At La Bodega, case managers help family members of addicts develop a plan to keep their relatives in treatment. Field counselors offer 24-hour support to families in drug-related emergencies, such as encounters with police or relapse; follow-up on client referrals; and act as advocates in law enforcement settings. The program also provides walk-in support and prevention services for all neighborhood residents, including clients who no longer need intensive family case management. Ongoing prevention services include support groups for young mothers, victims of family violence, and community members returning home after incarceration. The bilingual staff at La Bodega helps families deal with substance abuse-related problems, such as domestic violence, child



abuse, and neglect, HIV/AIDS, and truancy. Programs designed to end the generational cycle of drug abuse and criminal activity among youths include mural painting projects, back-to-school nights, and poetry, writing, and photography workshops.

On average, La Bodega maintains a caseload of 90 families. To date, La Bodega has served over 1,400 individuals. Sixty percent of the families required crisis intervention support, 50 percent reported multigenerational substance abuse, 35 percent reported multigenerational involvement with the criminal justice system, and 28 percent had histories of domestic violence.

La Bodega is led by two advisory boards, one national and one local. The Community Advisory Board, consisting of service providers, government partners, and community residents, provides expertise on treatment, helps facilitate referrals, and helps clients resolve medical, financial, and legal problems. The National Advisory Board consists of family therapists, judges, academics, doctors, and law enforcement officials who help guide the staff of La Bodega and put them in touch with other experts across the country.

**Challenges:** One of the greatest obstacles in starting La Bodega was getting law enforcement and health organizations to shift their focus from the individual to the family. Treatment programs often focus exclusively on the drug user, and law enforcement agencies on the offender. But as La Bodega developed, local agencies saw the wisdom in utilizing the family as a natural resource. Law enforcement officials realized that the program increases public safety because the family is the first to know when one of its members relapses into drug abuse and becomes a possible danger to the community. In addition, clients of La Bodega are more likely to contact police when danger, such as domestic violence, arises because they have a healthy relationship with authorities. As an example of confidence in La Bodega's services, the New York Division of Parole has assigned four parole officers to work full-time with caseloads comprised solely of La Bodega participants.

**Costs and Funding Sources:** The annual budget of La Bodega de la Familia is \$1.2 million, which includes staff salaries, walk-in support services, and

24-hour support services. Funding comes from both city and state organizations, including the New York City Department of Mental Health and the New York State Department of Parole.

For communities interested in implementing a similar program, La Bodega staff recommend adding a family component to an already existing organization. In New York clients are already receiving treatment services funded by the New York Division of Parole; La Bodega incorporates families into the treatment to make it more successful. Other program necessities include a local advisory board consisting of criminal justice and health officials and program participants, a neutral program space within the community being served, a project coordinator, and one family case manager for every 25 families.

**Program Results:** The Vera Institute is currently conducting an evaluation of La Bodega which will be completed in the spring of 2001. The evaluation will collect quantitative data from 100 families served by La Bodega and 100 control families. Funding for the evaluation is being provided by the National Institute of Justice and the Fan Fox and Leslie R. Samuels, Robert Wood Johnson, and Jacob and Vealeria Langeloth foundations.

Preliminary results on the qualitative aspect of the evaluation are promising. Parole officers involved with the program are pleased that their relationship with La Bodega allows them to follow up on parolees' treatment progress and say they enjoy the opportunity to focus on the social service aspects of their job. Addicts report that they are more motivated to succeed in treatment when family members are involved because they do not want to disappoint them. Treatment clients say it is easier to deceive a parole officer, whom they might see only once a week, about their drug use than family members they see every day.

In 2000, La Bodega plans to incorporate under the umbrella of Family Justice Inc. to provide training and technical assistance to criminal justice and treatment agencies nationwide. The training will focus on incorporating families into all aspects of substance abuse treatment. La Bodega is already offering training and technical assistance to national drug courts and to New York State parole and probation staff.



## PAR Village: Integrated Addiction and Mental Health Delivery Systems, Largo, Florida

**Program Type:** Family-Based Treatment.

**Target Audience:** Substance-abusing women and their children.

**Years in Operation:** 1989-present.

**Program Goals:** Provide gender-specific treatment for women.

**Contact Information:** Debra Dahl, Clinical Director, 727-538-7245.

**Description:** PAR Village is a fully integrated substance abuse and mental health treatment facility near Tampa, Florida, that has been providing gender-focused rehabilitation and treatment to chemically dependent women and their children since 1989. Although PAR Village accepts a wide variety of women and children, its three target populations are women who are pregnant, injection drug users, or HIV positive. While some women voluntarily enter the program, most are referred by the Florida Department of Corrections or the Department of Children and Families.

Women at PAR Village receive a customized treatment regimen that includes substance abuse classes, physical rehabilitation, spirituality courses, educational and vocational training, anger management workshops, life skills and parenting classes, and career counseling. Unlike most family-based programs, PAR Village also provides comprehensive services to the children of addicted mothers from birth to age 10, including physical therapy, pediatric counseling, speech pathology, Head Start, and occupational counseling, among others.

A staff of 30 provides services to about 100 women and 60 children each year. Each PAR Village case manager, or “primary counselor,” is assigned an average caseload of ten clients. Primary counselors coordinate treatment individually for their clients, manage customized treatment regimens, and coordinate activities with outside treatment specialists, doctors, foster care and social workers, and corrections department officials. Staff also collaborate with local social service agencies and referral sources to ensure that clients without health insurance can receive needed medication.

During the course of treatment, women must pass through four stages tailored to their capabilities. Each level has distinct goals, and advancement is marked by an increase in the level of client responsibility. Before a client graduates to the next treatment stage, progress is evaluated by the professional staff and by the client’s peers at PAR Village. Families in the program reside in ten on-site homes for 16-18 months. This home environment, as opposed to dormitory style living, provides a more natural atmosphere for treatment and allows the professional staff to work around the clock with the families.

**Challenges:** PAR Village’s family-based strategy was challenged at the outset by foster care workers who thought that a drug treatment facility was an inappropriate living environment for young children. PAR’s good track record persuaded opponents to permit the strategy to be tested. Family-based treatment has proved to be a successful method of attracting women to the program by alleviating the fear of being separated from their children and eliminating the need to find interim child care during the rehabilitation process. PAR Village also works with an association of judges and child welfare officials in Tampa to ensure that recovering mothers are not separated from their children as long as they are receiving treatment.

Funding has been a persistent problem for PAR Village. After initial grants from the National Institute on Drug Abuse (NIDA) and the Center for Substance Abuse Treatment (CSAT), funding declined significantly. While enough funding was secured to maintain quality services, the diversity of new funding sources has led to increased paperwork for the program’s counselors. As a result, staff turnover is relatively high. Consequently, PAR Village is attempting to streamline its administrative procedures to reduce the amount of paperwork assigned to its primary counselors.

**Costs and Funding Sources:** PAR Village’s annual budget is \$1.6 million. This includes staff salaries, operational costs of the facilities, and administrative costs. Funding comes from several sources, including the Florida Departments of Corrections and Children and Families, and the federal Department of Housing and Urban Development. In addition, support comes from Head Start, the United Way, Medicaid, and Temporary Assistance for Needy Families.

PAR Village benefits from some special advantages that would ordinarily increase overhead costs for any community looking to replicate the program. The ten houses at the facility were donated, as were the vehicles used to transport clients. The 16-acre tract of land where the facility is situated was provided by a local resident. Furthermore, many of PAR Village's therapists and counselors volunteer their services.

**Program Results:** A five-year evaluation of PAR Village, conducted by the University of Southern Florida and PAR's own in-house research center, found that six months after completing treatment:

- Nearly two-thirds (64.7 percent) of clients are drug-free, and 88 percent are arrest-free;
- 95 percent of clients attain the educational/vocational skills necessary for employment, and more than one-third (35 percent) are employed; and
- 73 percent of clients attain custody of their children.

PAR Village has been recognized by CSAT and NIDA as a model treatment program.

## II. Rehabilitating Criminal Offenders

Alcohol and other drug problems are the common denominator for most offenders in the criminal justice system. Drug offenders constitute a rising proportion of offenders in U.S. prisons. According to the Bureau of Justice Statistics (BJS), between 1980 and 1996 the number of drug offenders in state prisons skyrocketed from 19,000 to nearly 240,000. In federal prisons during this time, the number grew from 4,900 to over 55,000.<sup>55,56</sup> According to the National Institute of Justice's Arrestee Drug Abuse Monitoring Program (ADAM), which tracks drug use among arrestees in 34 cities, the percentage of men testing positive for drugs ranges from 42.5 in Anchorage to 78.7 in Philadelphia. Among women, percentages range from 33.3 in Laredo to 82.1 in New York City.<sup>57</sup> According to BJS, four in ten violent offenders were under the influence of alcohol when they committed their crimes.<sup>58</sup>

Despite the growing numbers of substance abusers in the criminal justice system, treatment remains scarce. The percentage of inmates who reported being treated for drug abuse dropped significantly between 1991 and 1997. One in ten state prisoners reported receiving treatment in 1997, down from one in four in 1991, according to BJS data.<sup>59</sup> Without treatment, three in four offenders are rearrested within three years, continuing the costly cycle of addiction and crime. Providing treatment to offenders is a less expensive alternative than incarcerating them for future illicit drug and alcohol-related crimes. The most expensive drug treatment programs cost about \$10,430 per year for each offender, compared to \$20,142 per year for incarceration.<sup>60</sup>

The major contributors to relapse among addiction treatment patients are low socioeconomic status, co-occurring psychiatric conditions, and lack of family or other social supports. Often, criminal offenders have multiple risk factors for relapse, making long-term abstinence even more difficult to achieve. However, treatment even for this population has resulted in maintained abstinence for some, and significantly reduced drug use for others, which in turn lead to reduced crime and social costs.

According to the National Institute on Drug Abuse, the therapeutic community treatment model has been found to be quite effective in reducing drug use and criminal recidivism.<sup>61</sup> Therapeutic communities are intensive, long-term, residential treatment programs. Program participants are segregated from the general prison population so that the "prison culture" does not overwhelm progress toward recovery. Treatment gains can be lost if inmates are returned to the general prison population after treatment. Moreover, relapse and criminal recidivism are significantly lower if the offender continues treatment after returning to the community. A 1996 18-month follow-up study of prisoners in Delaware State Prison found that inmates who participated in a therapeutic community and continued treatment in a work-release program and aftercare were significantly more likely to remain drug free than those not treated (76 percent versus 19 percent).<sup>62</sup> The effects were still visible after three years, with one-third of treated offenders remaining drug-free, compared to 5 percent of the comparison group.<sup>63</sup>

Women are the fastest-growing population in jails and prisons, largely due to drug offenses and crimes committed to support addiction, like theft and prostitution. Increased use of mandatory minimum sentencing laws for drug offenses has contributed to the explosive growth of the nation's prison population. According to the Center for Substance Abuse Treatment, mandated sentencing without the parallel development of treatment services has had a particularly devastating impact on women in prisons.<sup>64</sup> In 1997, 79,600 women were serving sentences in federal and state prisons, six times the number incarcerated in 1980.<sup>65</sup> More than two-thirds of the women inmates in federal prisons have been incarcerated for drug offenses.<sup>66</sup>

The criminal justice system is an important treatment entry point which can interrupt and shorten a career of drug use. The criminal justice system refers drug offenders into treatment in a variety of ways, such as diverting nonviolent offenders and stipulating treatment as a condition of probation or pretrial release. There are also specialized courts (to be discussed in greater detail under Alternatives to Incarceration) that handle drug cases and mandate treatment for participants. According to the National Institute on Drug Abuse, individuals in court-mandated treatment stay longer and perform as well as or better than those who participate in treatment voluntarily.<sup>67</sup> The threat of criminal sanctions can be a strong motivator to stay in treatment.

Providing treatment to addicted offenders requires collaboration between criminal justice and treatment systems, which have traditionally operated with different goals. Criminal justice and treatment personnel must work together to develop services that respond to offenders' overlapping criminal and drug problems. Such collaborations include client screening, placement, testing, monitoring, and supervision, and the systematic use of sanctions and rewards. Cross-training helps familiarize staff from both systems with each other's philosophy, approach, language, goals, and objectives, and fosters an environment of mutual respect.

The following examples highlight the kinds of programs that show promise for wide replication.

## Delaware KEY/CREST, Wilmington, Delaware

**Program Type:** Rehabilitating Criminal Offenders.

**Target Audience:** Substance-abusing offenders in Delaware prisons.

**Years in Operation:** 1988-present.

**Program Goals:** Reduce drug use and criminal recidivism.

**Contact Information:** Sandra Buell, Regional Director for KEY/CREST, Spectrum Behavioral Services, 302-325-9500. Kathy English, Delaware Department of Corrections, 302-739-5601.

**Description:** Alcohol- and other drug-addicted offenders in four Delaware prisons have access to the KEY/CREST program, where they receive substance abuse treatment in a therapeutic community setting while in prison, followed by work-release and after-care services in the community.

The KEY program, developed in 1988, provides treatment to inmates in the last 12 to 18 months of their incarceration. Offenders learn to change the behaviors that led them to drug use. Clients are housed in the therapeutic community setting, separate from other inmates, and they spend seven days a week focusing on treatment. To avoid distraction, participants do not have access to television or telephones during the day. Treatment includes individual counseling, group therapy, educational seminars, HIV education, family and parenting education, and 12-step programs. Clients are also encouraged to participate in GED and vocational programs offered by the prison. KEY counselors work with 20 clients at any given time. Other staff include a program director, a clinical supervisor, and an administrative assistant.

Upon leaving the correctional facilities, KEY participants enter one of three CREST Outreach Centers, which operate work-release programs based on a therapeutic community model. Developed in 1992 as a National Institute on Drug Abuse demonstration project, CREST is designed to help inmates make a smooth transition into society. Residents of CREST receive six months of intensive substance abuse treatment presented in two phases. During the first three-month phase, clients adapt to life outside of prison by learning job skills, visiting their families

and communities, attending AA meetings, and continuing their substance abuse treatment with a strong focus on relapse prevention. During the next phase, clients work full time in the community but return to the facility in the evenings. They also take part in community service activities as a form of restitution to the community.

After completing CREST, clients go through a six-month aftercare program during which they return to CREST weekly for group sessions, drug testing, and counseling. At any given time there are approximately 572 clients in the four KEY programs, 328 in the three CREST programs, and an additional 350 clients in aftercare. The Delaware Department of Corrections contracts with Spectrum Behavioral Services to run all three components of the program.

**Challenges:** One of the challenges to implementing KEY/CREST was convincing those in the corrections field that it was beneficial and cost effective to treat substance-abusing criminal offenders. Many people in the criminal justice field did not believe that it was possible to change an offender into a law-abiding citizen. Changing people's perceptions so that they would not view the treatment program as merely an "easy way out" for offenders required extensive training of the correctional staff. Soon after the program began, correctional officers observed that offenders in the therapeutic communities were less violent than offenders in the general prison population.

Getting offenders into treatment is an ongoing challenge for KEY/CREST. Some offenders do not believe they need treatment and are unwilling to take part in the rigorous therapeutic community. Delaware prisons have increased the number of participants in treatment by sanctioning offenders who choose not to participate and offering incentives to those who do. Offenders who are identified as needing treatment, but are unwilling to participate, are not considered for early release (early release is a result of good time credits and other behavioral incentives).

**Costs and Funding Sources:** KEY/CREST programs are funded through the Delaware Department of Corrections. The programs receive approximately \$4 million per year from the state, funding treatment for approximately 13,000 inmates yearly. It is estimated that treatment costs are \$7.50-\$8.00 per day for each offender in the program (this is for treatment

only and does not include food and other services that all inmates receive).

**Program Results:** An evaluation of the CREST program by researchers at the University of Delaware showed promising results. The evaluation included 279 people divided into four groups: CREST dropouts, CREST graduates without aftercare, CREST graduates with aftercare, and a control group of offenders with substance abuse problems assigned to a traditional work-release program with little alcohol and other drug treatment. Three years after release from prison:

- 69 percent of inmates completing CREST and aftercare remained arrest-free, compared to 55 percent of those completing CREST only, 28 percent of CREST dropouts, and 29 percent of the control group.
- 35 percent of inmates completing CREST and aftercare remained drug-free, compared to 27 percent who completed CREST, 17 percent who dropped out, and 5 percent of the comparison group.

## Forever Free, Frontera, California

**Program Type:** Rehabilitating Criminal Offenders.

**Target Audience:** Substance-abusing women in California prisons.

**Years in Operation:** 1991-present.

**Program Goals:** Provide alcohol and other drug treatment to incarcerated women and encourage them to continue treatment after their release.

**Contact Information:** The Department of Corrections Office of Substance Abuse Programs, Contract Manager, 916-327-3707, or David Conn at Mental Health Systems Inc., 619-689-2633.

**Description:** Since 1991, Forever Free has been providing substance abuse treatment to inmates at the California Institute for Women (CIW) in Frontera. Developed through a partnership between the California Department of Corrections and the Department of Alcohol and Drug Programs, Forever Free has provided approximately 4,000 female inmates with substance abuse treatment.



Most women who participate in Forever Free do so voluntarily. When offenders enter the prison system, they are screened for substance abuse. If they are found to have an alcohol or other drug problem and meet the criteria for entering the program (such as adequate length of stay in prison and no violent history), prison officials suggest they volunteer. Some women are involuntarily placed in the program by prison officials.

Participants in Forever Free are housed separately from other inmates in a 240-bed facility. They spend four hours a day at prison work assignments, such as cooking or grounds work, and four hours a day in treatment. There are two treatment tracks, one lasting four months and the other six. Track placement depends on length of incarceration. Women who are sentenced to more than six months may remain in Forever Free for the duration of their sentence.

The State Department of Corrections contracts with Mental Health Systems Inc. to run the treatment program. Forever Free utilizes a behavioral change approach, and treatment includes counseling, relapse prevention, problem solving, re-socialization, 12-step groups, and case management. Women's issues, such as dependency, physical and sexual abuse, and coping with the stress of motherhood are also addressed. Prior to parole, transition plans are developed for program participants which detail their arrangements for employment, housing, and further treatment. Clients are encouraged to voluntarily enter community residential substance abuse treatment, funded by the state, upon parole. The State Department of Corrections contracts with community treatment providers, who reserve a number of beds for Forever Free clients at a reasonable cost.

Thirty percent of program participants are African American, 23 percent are Hispanic, and 44 percent are white. The average age of clients is 35. Forever Free serves approximately 720 clients per year and has a staff of 17, including 13 counselors, one supervising counselor, one transition counselor, an administrative assistant, and a project director.

**Challenges:** The biggest obstacle for Forever Free is finding qualified inmates. Because most inmates in CIW are serving short terms for lesser offenses such as parole violation, they often do not remain in prison long enough to receive successful treatment. To solve

this problem, CIW tries to engage women in the program as soon as they enter prison. Women who are serving only a few months in prison are also allowed into the program if they agree to enter a residential treatment facility upon their release.

**Costs and Funding Sources:** The total budget for the program during FY 1999/2000 was approximately \$1.6 million. Nearly half of the budget, \$739,000, is for post-release community treatment services. The remaining amount includes program staff, staff training, and in-prison treatment. The Department of Alcohol and Drug Programs also sets aside community treatment beds for Forever Free participants at no cost.

**Program Results:** The California Department of Corrections contracted with an evaluator to examine the impact of Forever Free on program participants who left prison in 1995 and 1996. The evaluation compared four groups of women: all women who entered the program, women who dropped out of the program, women who received only the in-prison program, and women who continued to receive treatment after being paroled. Program retention during these years was high; 94.8 percent of women completed the program. Women who completed the in-prison program and at least three months of community treatment fared the best.

Twelve months after parole:

- Only 9 percent of women receiving 120 days or more of community treatment were re-incarcerated; and
- 38 percent of women who dropped out of the program and 39 percent of the in-prison only group had returned to custody versus 32 percent of women receiving continuing care.

Twenty-four months after parole:

- Only 25 percent of women receiving more than 120 days of treatment after being paroled were returned to custody after two years; and
- 60 percent of program drop-outs were reincarcerated, compared to 48 percent of the continuing care group.

Despite changes in staff and prison management, Forever Free has sustained effective programming for



almost ten years. A major accomplishment of the program is that 50 percent of participants agree to enter a residential treatment program upon release from prison.

## **New Vision Therapeutic Community, Kyle, Texas**

**Program Type:** Rehabilitating Criminal Offenders.

**Target Audience:** Substance-abusing prison inmates in Texas.

**Years in Operation:** 1992-present.

**Program Goals:** Provide substance abuse treatment and other services to inmates to help them succeed after prison.

**Contact Information:** Shirlee Livingston, Program Director, 512-268-0264.

**Description:** New Vision, begun in 1992, was the first in-prison therapeutic community in Texas. Currently, the program is offered in four Texas prisons and has been replicated in Oklahoma and New Mexico. The primary goal of the program is to provide residents with the skills necessary to live as productive members of society after their release from prison. In order to be considered for the treatment program, offenders must be assessed as having a substance abuse problem, be in the last nine to 12 months of their sentence, and need only medium or less security. New Vision serves 520 clients in its program (approximately 750 offenders per year).

New Vision provides clients with educational seminars and lectures, therapeutic groups, individual and group counseling, and 12-step meetings. Counseling is also offered to offenders and their families on Saturdays and Sundays. The program consists of three phases: orientation, main treatment, and re-entry. During orientation, offenders are introduced to the therapeutic community and learn the rules and policies of the program. They also become familiar with the concepts of substance abuse, the addiction process, and relapse.

During the main treatment phase of the program, participants begin to identify the problems contributing to their addiction, accept responsibility for their addiction, and formulate long- and short-term recovery goals. During the last phase, re-entry, clients and counselors design relapse prevention and

continuum of care plans which include employment, housing, and peer support groups. Movement through the phases depends on the individual client's progress; there is no specified duration for any phase. After completion of the program, some offenders serve as role models for program participants and assist in facilitating group activities.

Upon prison release, New Vision participants enter a community aftercare program that helps them reintegrate into society. Offenders are paroled to a three-month residential work-release program, which is followed by up to 12 months of outpatient counseling. Participants meet with their parole officers regularly, undergo monthly urine tests, and have frequent contact with case managers to review progress and any problems.

New Vision staff consist of a program director, two administrative staff, a family therapist, a training coordinator, and 26 counselors. There is one counselor for every 20 clients. The program also utilizes volunteer interns from local colleges and universities.

**Challenges:** The biggest obstacle to creating New Vision was convincing therapists, who had been trained to work within a different model of treatment, to try the therapeutic community model. To convince them, program developers used evidence of other successful in-prison therapeutic communities. Another problem was achieving cooperation between the treatment and correctional staff, which was addressed through cross-training, allowing staff to learn more about the treatment model and to appreciate the various roles in the in-prison treatment design.

**Costs and Funding Sources:** The annual budget for New Vision is \$1.4 million. Program funding is provided by the Texas Department of Criminal Justice and the Texas Department of Substance Abuse Treatment. In order to replicate the program, qualified staff would be required, including a program director, administrative staff, and a counselor to client ratio of 1:20. Staff training would also be a significant cost.

**Program Results:** A 1997 three-year follow-up study of 394 New Vision participants was conducted by researchers at Texas Christian University. Recidivism rates were examined for three groups of offenders: prison treatment and aftercare, aftercare dropout, and an untreated comparison group. One of the major findings of the evaluation was that

completion of the New Vision aftercare component is a critical factor in maintaining treatment success. The recidivism rates were as follows:

■ prison treatment and aftercare	25 percent
■ aftercare dropout	64 percent
■ untreated	42 percent

The study further divided the subjects by severity. High-severity offenders had more serious criminal and drug-related problems and were viewed as more likely to be reincarcerated. However, offenders completing treatment and aftercare had significantly lower recidivism rates than dropouts and untreated offenders. Recidivism rates for the high- and low-severity offenders were as follows:

#### **High-severity**

■ prison treatment and aftercare	26 percent
■ aftercare dropout	66 percent
■ untreated	52 percent

#### **Low-severity**

■ prison treatment and aftercare	22 percent
■ aftercare dropout	52 percent
■ untreated	29 percent

### **III. Assessing and Treating Adolescents**

The number of adolescents in alcohol and other drug abuse treatment programs increased by more than a third between 1992 and 1997; however, young people continue to be greatly underserved.<sup>68</sup> According to the National Household Survey on Drug Abuse (1999), of an estimated one million youths ages 12 to 17 assessed as drug dependent, only 175,000 had received treatment.<sup>69</sup> Since most substance abuse treatment is designed for adult addicts, appropriate services for adolescents can be hard to find. According to the federal Center for Substance Abuse Treatment (CSAT), less than one percent of the more than 6,700 publicly funded treatment programs nationwide are designed exclusively for adolescents.<sup>70</sup>

Adolescent users differ from adult users in many ways. Young teens begin with experimentation and occasional use, while adults have often experienced a decade or more of addiction and have developed severe problems, such as job loss, criminal histories, and medical complications. The types of drugs abused also tend to vary with age. Marijuana and alcohol are the most prevalent among treatment clients under age 18, while opiates and cocaine are associated with older clients. Adolescents also have unique treatment needs. Teen treatment models tend to be less confrontational than treatment for adults. Concurrent mental illness, legal problems, educational needs, family and community environment, and emotional, intellectual, and physical development must all be considered in planning effective youth treatment.

Treatment for adolescents should incorporate a wide range of social services, provide aftercare services to reinforce progress, and encourage family involvement. Teaching parents the skills to support their children through treatment can enhance family stability and increase chances for success. Learning to appropriately monitor their children and identify warning signs of relapse enables parents to participate in their children's recovery.

Teen treatment programs should consider youths' ethnicity and gender when designing services. Norms, values, and health beliefs may differ across cultures, and these factors can have a significant impact on treatment. Gender-related factors also affect an adolescent's involvement in treatment. For example, adolescent females may require more attention with regard to problems such as sexual abuse.

Most adolescent treatment that does exist is aimed at youths with serious drug habits; relatively few are designed to help teens who are just beginning to develop problems. As a result, these teens are often referred to programs focused on severely troubled addicts, which may exacerbate rather than reduce their drug use. Different levels of pathology require different treatment environments; not all programs are equally effective for young people. Early intervention offered through a school-based student assistance program, for example, can substantially reduce drinking and marijuana use before more intensive services are needed and is far less costly than making treatment available only after teens develop an addiction, drop out of school, or commit crimes.

In addition to developing more youth-specific treatment approaches, it is important to screen young people to identify those most likely to need treatment, such as teens who exhibit warning signs of abuse, including substantial behavioral changes, significant changes in academic performance, trauma injuries, and contact with the juvenile justice or child welfare systems. Homeless and runaway teens in shelters and all teens who receive mental health assessments should be screened for addiction treatment needs. According to the Substance Abuse and Mental Health Services Administration, adolescents with severe emotional and behavioral problems are significantly more likely to have substance abuse problems than other adolescents.

Involvement in the juvenile justice system is an important consideration when developing appropriate substance abuse treatment for teens. According to CSAT, programs designed for this population should be holistic and include juvenile justice, substance abuse treatment, schools, community-based organizations, and other providers of health and social services in one plan. Case management is critical to coordinate services for these children and to act as the central monitoring and tracking source for each child.

CSAT identifies essential elements to treating juvenile offenders in *Strategies for Integrating Substance Abuse Treatment and the Juvenile Justice System* (1999).<sup>71</sup> They include:

- Focusing treatment on risk factors associated with criminal behavior, such as antisocial attitudes and peers, rather than on risk factors that are not particularly associated with criminal behavior, such as self-esteem;
- Concentrating more intensive services on those who are at risk of re-offending; and
- Offering comprehensive treatment that addresses all related behaviors, especially the need for academic and vocational education and work skills training.

Since juveniles placed in detention facilities are unlikely to receive the special programs necessary for treatment or reintegration into society, alternative placements have increased dramatically in recent years. Options include intensive community supervision, day treatment, evening and weekend programs, and tutoring.

While programs designed for adolescents are still scarce, the following examples highlight how communities are utilizing successful approaches to treat young people.

## The Bridge, Columbia, South Carolina

**Program Type:** Assessing and Treating Juveniles.

**Target Audience:** Juveniles recently released from prison or inpatient substance abuse treatment.

**Years in Operation:** 1994-present.

**Program Goals:** Provide aftercare services to youths to assist them in making the transition from institutionalization to the community.

**Contact Information:** Katherine Yandle Thornton, Coordinator of Juvenile Justice Services, South Carolina Department of Alcohol and Other Drug Abuse Services, 803-734-4184.

**Description:** The Bridge, begun in 1994 as a Center for Substance Abuse Treatment demonstration project, is a family-centered program designed to prevent juveniles from returning to prison or inpatient substance abuse treatment. The program is sponsored by the South Carolina Department of Alcohol and Other Drug Services and is recognized as a promising approach to juvenile alcohol and other drug treatment by the American Probation and Parole Association and the Office of Juvenile Justice and Delinquency Prevention. The program is offered in seven counties in the state.

The goal of The Bridge is to improve alcohol and other drug treatment outcomes for adolescents leaving, or in danger of entering, residential treatment or juvenile justice facilities. The program strives to reduce alcohol and other drug use, juvenile offending, dropping out of school, high-risk sexual activity, and violent behavior. Clients are 80 percent male and 48 percent African American. Participants, on average, are between 15 and 16 years old, have more than three delinquency referrals, and a family income under \$15,000. Criminal behavior has occurred in more than half the families, and the majority of clients' households are headed by a single mother. Nearly three-quarters of the clients are referred by the Department of Juvenile Justice (DJJ), with most of the remainder being referred by inpatient alcohol and other drug treatment facilities. The program serves approximately 240 clients annually.

Since making the transition from institutional settings into the community can be difficult for youths and their families, The Bridge offers gradual “step-down” services. The program consists of three phases: intensive assessment, intensive care management, and continuing care. First, program staff assess the youngsters through interviews, home visits, and interagency communication about the family’s history and needs. Based on the four- to six-week assessment period, a treatment plan is developed. Next, the client receives four to six weeks of intensive case management during which the case manager maintains daily contact with the adolescent, the family, and any agencies involved in the case. Clients receive intensive services, including alcohol and other drug treatment and home-based support. Services are also available for family members to help them improve their parenting skills and to create a healthy home environment for their child. Once clients achieve abstinence and improve areas, such as school performance and family relations, they are moved to continuing care. Continuing care lasts up to seven months and provides clients with less intensive treatment and services. At the culmination of continuing care, a formal graduation is held.

**Challenges:** The greatest obstacle to implementing The Bridge was convincing the DJJ that youth alcohol and other drug use is a major problem. The Bridge staff succeeded in doing this by providing background information and education about the scope of the problem. In the past two years The Bridge has seen a decline in the educational success of the clients they serve, due in part to new zero tolerance policies at schools which often target youths with substance abuse problems. Another factor is that The Bridge serves more older clients (17 years old) than when the program began, who are at higher risk for dropping out of school. Program staff are working with school officials to help keep The Bridge clients enrolled in school.

**Costs and Funding Sources:** The annual budget of The Bridge is \$714,845, which includes costs of personnel, evaluation, wrap-around services such as drug testing and transportation, staff training, and client incentives. The program receives \$300,000 from the South Carolina Department of Alcohol and Other Drug Services and \$418,845 from matching federal block grant funds.

Minimum program start-up expenses include staff development and salaries, wrap-around services, and client incentives. Program staff include one case manager for every 22 to 25 youths, a part-time administrator, and a project director to supervise the program. In South Carolina, the Department of Alcohol and Other Drug Services assigns one of its staff as program director in each county to The Bridge at no cost. Wrap-around services cost approximately \$1,100 per youth annually. In South Carolina, The Bridge staff from across the state meet once a month for training and meetings, which helps boost staff morale. Client incentives can include tee-shirts, hats, or any other items which might encourage youth to continue in the program.

**Program Results:** The Bridge contracts with an independent evaluator who monitors the progress of clients and reports on trends. Results of the ongoing evaluation are promising:

- **Reduced Recidivism:** One year after program discharge, only 19 percent of program participants (including those who did not complete the program) have been reincarcerated, and only 16 percent have been readmitted to inpatient treatment programs. Only 10 percent of youths completing the program have been reincarcerated.
- **Increased Abstinence:** At time of graduation, 78 percent of the clients are abstinent and an additional 11 percent have reduced their level of use. Among program drop-outs, 27 percent are abstinent and another 22 percent have reduced their level of use.
- **Improved Vocational and Educational Performance:** Since the program began, 85 percent of program graduates versus 64 percent of program drop-outs have completed high school; 71 percent of graduates are successfully employed versus 30 percent of drop-outs.
- **Reduced Costs to State:** Since 1994, the program has saved the state \$800,000 in incarceration costs alone. (This number was derived by comparing one-year recidivism rates of The Bridge clients, 18.7 percent, versus average juvenile recidivism rates, 40 percent.)



## The Denver Juvenile Justice Integrated Treatment Network, Denver, Colorado

**Program Type:** Assessing and Treating Juveniles.

**Target Audience:** Juvenile offenders with substance abuse problems.

**Years in Operation:** 1995-present.

**Program Goals:** Coordinate alcohol and other drug treatment agencies serving juveniles.

**Contact Information:** Jennifer Mankey, Project Director, 303-893-6898.

**Description:** A major obstacle to treating youths in the juvenile justice system is the fragmented systems designed for these children. To address this problem, the Denver Juvenile Justice Integrated Treatment Network was created to provide seamless and comprehensive substance abuse services to juvenile offenders from initial contact through parole. The Network coordinates services among more than 100 participating agencies, including state and local juvenile justice and law enforcement agencies, welfare and social services providers, substance abuse and mental health organizations, public schools and universities, and community coalitions. With funds from the Center for Substance Abuse Treatment (CSAT), the Denver Juvenile Court created the Network in 1995.

Network services include screening, assessment, referral, case management, treatment and rehabilitation, family advocacy, and health services for offenders ages 10 to 21. In the five years since its development, the Network has helped to standardize services among its participating member organizations. A management information system (MIS) facilitates the sharing of information between agencies. A streamlined network of providers enables more comprehensive assessment and screening procedures, which helps ensure that a juvenile's multiple needs are met. As a result, issues of gender and culture are being regularly addressed in treatment, as is family advocacy.

Each point of entry in the juvenile justice system performs a preliminary substance use screen to identify the degree of substance abuse. Referrals from both the juvenile justice system and social services are sent to one central point for referral. Case managers, who are certified alcohol and other drug abuse counselors, and staff from some participating agencies conduct

assessments, develop treatment plans, link juveniles with Network services, and conduct ongoing monitoring and follow-up. Services are provided based on specific needs of each juvenile and family.

The Network employs seven full-time staff and coordinates services for approximately 600 juvenile offenders per year. The Network is directed by a local coordinating committee composed of 40 representatives of member organizations.

**Challenges:** Because the Network is the creation of many established organizations, it was a challenge to create an appropriate forum for discussion and collaborative problem solving. The Network's lead agency, the Denver Juvenile Court, linked it to a smaller, previously existing network to help guide the process during the start-up phase.

A second challenge was the need to integrate progressive, results-oriented thinking into established systems. The Network responded by analyzing each organization and system, identifying similar philosophies and ideals, and building linkages based on these common elements. The Network then coordinated a series of staff training sessions to familiarize the member organizations with new methodologies.

**Cost and Funding Sources:** The Network's original 1995 CSAT grant was \$1 million. The annual budget for the Network is \$676,000 and includes staff, facilities, equipment, evaluation costs, MIS development, and administrative costs. The average cost per client is \$2,126, which covers the services they receive from assessment through program termination. In addition to the CSAT grant, the Network receives financial support from federal block grants, the City and County of Denver, various state alcohol and other drug abuse programs, the Denver Public School System, and the Rose Foundation.

**Program Results:** In 1999 the Network contracted with Human Resources Consortium, a private consulting firm, to evaluate the effectiveness of the program. Outcome data indicate that among juveniles that received Network services:

- Abstinence increased from 20 percent to 52 percent;
- Ability to remain alcohol- and drug-free went from 19 percent to 49 percent;



- Positive family relationships improved from 24 percent to 40 percent; and
- Ability to respect and follow the law grew from 20 percent to 47 percent.

A 1998 survey of key decision makers in participating member agencies involved in the Network found an overwhelming majority surveyed (95 percent) reported the Network had a positive impact on information sharing; 84 percent reported the Network improved services to juveniles.

The Denver Juvenile Justice Integrated Treatment Network has been recognized by Harvard's John F. Kennedy School of Government as "an outstanding innovation in government." The Robert Wood Johnson Foundation is funding replication projects based on the Denver model in communities nationwide.

## IV. Connecting with the Community

Substance abuse treatment often encompasses more than treating addiction; it also involves helping clients prevent relapse when treatment ends. Vocational and educational training, and access to health care and other social services, are provided by many treatment programs to help prepare their clients for life in the community when the structure and supervision of treatment are no longer there to support them. In addition to helping treatment participants re-enter society, some programs serve another vital function in the community by reaching out to the underserved (such as homeless addicts and those at high-risk for HIV) to engage them in treatment.

During the past decade the gap between treatment clients' needs for support services and the availability of those services has grown. According to a 1995 analysis of outpatient treatment conducted by the Research Triangle Institute in Raleigh, North Carolina, 60 percent of the clients did not receive support services in 1993, compared with 18 percent in 1981.<sup>72</sup> This decline reflected a substantial reduction in federal support for treatment-related services nationwide. Such support services address medical, psychological, family, legal, vocational, and financial problems which must be resolved to keep drug

addicts in treatment, reduce substance abuse, and improve other areas of social functioning.

For substance abusers with multiple needs, case managers help link clients with appropriate services. According to the Center for Substance Abuse Treatment (CSAT), case management enhances treatment success by retaining clients in treatment and ensuring their needs are met. CSAT identifies the functions of a case manager in *Comprehensive Case Management for Substance Abuse Treatment: Treatment Improvement Protocol 27* (1998)<sup>73</sup>:

- Provide the client a single point of contact for multiple health and social services systems;
- Advocate for the client;
- Be flexible, community-based, and client-oriented; and
- Assist the client with needs generally thought to be outside the realm of substance abuse treatment.

Addiction, as science has revealed, is a chronic, recurring disease that requires lifelong management. Clients often need help remaining abstinent following treatment, particularly when a recovering addict re-enters the community and faces old temptations. Providing aftercare services, such as group or individual counseling, 12-step meetings, relapse prevention, vocational training and employment, primary and mental health care, and parenting/family skills training can prevent or delay relapse. Case management is often used to coordinate services.

Attempts to treat homeless substance abusers tend to be ineffective due to the multiple risk factors that often accompany homelessness, such as co-occurring mental disorders. Recruitment of these addicts into treatment programs also poses a challenge, and for those who do enter treatment, dropout rates are high. There are a few innovative approaches however, showing promise for treating this group. National Institute on Drug Abuse-sponsored programs in New York City and Birmingham, Alabama, address patient recruitment and retention problems by coordinating efforts with homeless shelters and social service agencies. They move patients from highly structured interventions to more flexible treatment as patients progress toward self-sufficiency by living with peers,

paying rent, and working. In Birmingham clients participate in “contingency management” programs that make access to housing and employment contingent on staying clean. Program evaluation found participants in the contingency management program remained abstinent from drugs substantially longer than other patients.

HIV prevention is an increasingly critical part of drug treatment. Drug use is now the major risk factor in new cases of AIDS, hepatitis C, and tuberculosis in the United States.<sup>74</sup> Alcohol abuse may also increase an individual’s risk of exposure to HIV by decreasing the likelihood of condom use.<sup>75</sup> Drug injectors who do not enter treatment are up to six times more likely to become infected with HIV than injectors who participate in treatment.<sup>76</sup> Treatment presents disease prevention opportunities, including screening, counseling, and referral for additional services.

Needle exchange programs designed to stop the transmission of HIV and hepatitis among injection drug users are controversial. Critics believe they promote illegal drug use. However, the U.S. General Accounting Office and the Centers for Disease Control and Prevention have found that needle exchange programs do not increase drug use and are effective in reducing the spread of HIV and hepatitis B.<sup>77</sup> According to the National Institute on Drug Abuse’s *Sixth Triennial Report to Congress* (1999), comprehensive programs that include needle exchange, community-based outreach, and drug treatment remain the most cost-effective approaches to averting new HIV infections.<sup>78</sup>

Alcoholics and other drug addicts often have significant difficulty staying clean when they re-enter the same community that fostered their substance abuse. Programs that help train people for jobs, help them find employment and housing, and link them with other social services can facilitate the transition. In addition, some people in the community are in need of treatment services but, due to a lack of access or motivation, are not receiving them. Community outreach is critically important in engaging these individuals in treatment. The following examples highlight how treatment programs are connecting with communities.

## **University of Alabama at Birmingham School of Medicine and Birmingham Healthcare for the Homeless, Birmingham, Alabama**

**Program Type:** Connecting with the Community.

**Target Audience:** Homeless alcohol and other drug addicts.

**Years in Operation:** 1991-present.

**Program Goals:** Provide services to the homeless and help them design long-term goals.

**Contact Information:** Dr. Cecelia McNamara, Project Director/Investigator, 205-934-8960.

**Description:** In 1991 the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse (NIDA) jointly funded a project in Birmingham to study effective addiction treatments for people who are homeless. Since then, researchers from the University of Alabama at Birmingham in partnership with Birmingham Healthcare for the Homeless have been developing and testing successful treatment models for homeless crack cocaine abusers through NIDA grants.

The Birmingham program involves homeless clients in six hours of treatment a day, five days a week, over a two-month period. Clients receive psycho-educational and behavioral group therapy, individual counseling, and assessment by a psychologist or post-doctoral fellow. Clients set long-term goals to address their problems with drug abuse, housing, employment, mental illness, and social/recreational activity. Clients meet with counselors weekly to set short-term objectives which are designed to help achieve the long-term goals. Weekly sessions are held in which clients rate their own progress as well as that of other clients.

Transportation to and from treatment and lunch are provided. Day treatment is followed by ten months of aftercare (once-a-week group sessions) and individual counseling as needed. The program employs a tracker who assists with follow-up and goes to shelters, crack houses, and abandoned buildings to bring clients back to treatment.

A unique treatment component of Healthcare for the Homeless is the use of contingency rules, which make housing and work dependent on drug-free living. Housing is provided after clients have several consecutive negative drug screens. To remain in housing, participants must remain drug-free. Upon testing positive, participants are immediately placed in a shelter until they again demonstrate abstinence through two consecutive clean tests. Clients can participate in four months of a work program, where they receive vocational training in construction (refurbishing housing for other homeless people in the program) or educational training.

The program has 2.5 full-time substance abuse counselors, a housing manager, a recreation therapist, a vocational counselor, and various personnel involved in job training, administration, transportation, or other aspects of the program. Counselors have approximately seven to ten individual clients in day treatment at any given time and up to 60 clients in aftercare.

**Challenges:** The first major obstacle was arranging to cooperate with the housing authority administration in time to meet deadlines and provide necessary documentation for a collaborative study. In the second phase of the program, a challenge was getting psychiatrists to prescribe medications for cocaine-abusing clients. Most of these clients are now sent to a clinic run by the Salvation Army. Staff turnover and the problem of finding homes suitable for rehabilitation are also pressing issues. Obstacles have been overcome through perseverance by the clinical and research teams who have forged alliances within the local community.

**Costs and Funding Sources:** The annual budget has not been calculated because research-specific costs comprise such a substantial part of the budget. However, treatment costs have been calculated. In the first phase of treatment (including enhanced day treatment for two months), cost per client was \$3,177; during the second phase (which included abstinent contingent work and housing for four months), cost per client was \$3,476; during the third phase (including counseling as needed, weekly after-care groups, and drug testing for six months), cost per client was \$599. Total program cost for one year was \$7,212 per client.

Major costs to implement the program include administration, facility fees, salaries, cost of day treatment (counseling, food, transportation), urine monitoring (\$684/client), housing purchases, materials and tools (a total of \$80,000 for two houses annually), and stipends for clients in the vocational program (\$2,307/client).

**Program Results:** Outcomes have been measured in two different studies conducted by researchers at the University of Alabama at Birmingham. In the first study, the enhanced homeless treatment package (DT+) was compared with usual care (UC), which consisted of weekly individual and group counseling sessions and case management for work and housing referrals. Overall, greater reductions were found in DT+ than UC for alcohol use (self-report), cocaine use (measured by urine toxicology), and days homeless at two, six, and 12 month follow-ups.

In the second study the enhanced treatment package (DT+) was compared to day treatment alone (DT). Consecutive weeks of abstinence as measured by urine toxicology were significantly greater for DT+ during the first six months of treatment (at six months, DT+ averaged 9.1 consecutive weeks clean versus DT at 3.99 weeks). Days housed were also significantly higher in DT+. In addition, the second study demonstrated reductions in AIDS risk behaviors as a result of day treatment (number of different sex partners decreased from 7.5 at baseline to 2.3 post day treatment, and the number of times trading sex for crack decreased from 6.6 at baseline to 0.11 post day treatment).

## **Pioneer Human Services, Seattle, Washington**

**Program Type:** Connecting with the Community.

**Target Audience:** High-risk populations, including ex-criminal offenders and substance abusers.

**Years in Operation:** 1962-present.

**Program Goals:** Provide treatment, job training, and other social services through a self sufficient program.

**Contact Information:** Larry Fehr, Senior Vice President, 206-322-6645, ext. 211.

**Description:** Pioneer Human Services (PHS) has provided job training to ex-offenders and substance abusers since 1962. The nonprofit organization serves

over 6,000 people each year in its employment/training, treatment, community corrections, and residential facilities. Since the program began, PHS has served more than 50,000 clients. In 1999, PHS clients were 34 percent female, 49 percent white, and 30 percent African American. The program employs 1,100 staff members, and 70 percent of the \$55 million annual operating budget is financed by the program's industrial activities.

The first phase of PHS programming is provided by its community corrections and behavioral health divisions. Behavioral health offers residential and outpatient alcohol and other drug, mental health, and case management services to clients living in PHS substance-free transitional residences, including a 153-bed chemical dependency facility (Pioneer Center North) and over 600 units of low-income housing. Treatment services vary depending on the needs of the client. Pioneer Center North, for example, serves severe alcohol and other drug addicts who have been involuntarily assigned to the program by civil courts. In 1999, 2,638 people were served by behavioral health. Community corrections operates six correctional residences for adults and juveniles with a total of 239 beds. Four of the residences are work-release residential facilities for men and women, and two are for juvenile male offenders sentenced to detention by the courts. In 1999, a total of 1,360 were served by the community corrections division.

Clients from the community corrections and behavioral health divisions are recruited for the second phase of PHS, the employment and training programs. In 1999 about 80 percent of PHS enterprises employees were recruited from PHS-run corrections and treatment programs. Clients receive training in one of the businesses operated by PHS, which include two food service businesses, two food distribution companies, a printing company, a real estate management office, two manufacturing plants, and a consulting service. The businesses serve such firms as Hasbro, Starbucks, Nintendo, and Microsoft. After receiving job training from PHS, which lasts from three weeks to 18 months depending on the degree of specialization required, clients participate in a graduation ceremony. After graduating, clients can opt to remain with PHS or find employment elsewhere in the community.

**Challenges:** The greatest obstacle to implementing the program was getting staff from different fields to work together, social service workers being client-focused and business managers tending to look more at profits. Since PHS is both a business and a social service agency, all staff members had to modify their outlook. The collaboration has paid off, and provision of social services have improved, because like a business, PHS now focuses on obtaining results. PHS collects data to measure its effectiveness in helping clients. Among the 200 monthly outcome indicators measured are improved cognitive skills, decreased risk of substance abuse, and successful transition into the community. The business personnel have also benefitted by learning to focus on the personal health of the clients in addition to the financial health of the company.

**Costs and Funding Sources:** The annual budget for Pioneer Human Services is \$55 million, which covers all services, including its business enterprises, educational and treatment programs, housing, and staff costs. Seventy percent of the budget comes from the revenues of its business operations. The remainder comes from contracts with federal, state, and local agencies.

Pioneer Consulting Services (PCS) was recently created to help nonprofit organizations explore entrepreneurial options and develop systems for measuring their outcomes. The cost is \$800 per day in consulting fees; however, this price varies depending on whether PCS provides a one-time consultation or ongoing services.

**Program Results:** A case study of PHS, funded by the Ford and Annie E. Casey Foundations and conducted by researchers at the University of Washington, was completed in January 2000. The study found that PHS clients had lower recidivism rates compared to ex-offenders in another work release program (6.4 percent versus 15.4 percent). In addition, with funding from the Ford Foundation, PHS recently initiated a longitudinal study of program graduates in the community. One of the primary findings is that one year after release from PHS job training, 96.6 percent of clients are employed.

In addition, according to internal program data, PHS graduates pass workplace drug tests more

frequently than the general public. In 1999, PHS conducted over 17,000 random urinalysis and blood tests on its clients and found that only 1.4 percent were positive, compared to a figure of 7.3 percent for

the general workforce in 1998.<sup>79</sup> PHS programs have been featured in articles in *Newsweek*, *The Wall Street Journal*, and *Forbes*.



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# Law Enforcement

Substance abuse accounts for most of the criminal activity in cities and towns nationwide. Illicit drug and alcohol-related crime includes a broad range of illegal activity—possession or sale of illicit drugs, crimes to obtain money to buy drugs, driving under the influence of alcohol, underage drinking, and crimes such as child abuse and domestic violence resulting from illicit drug and alcohol abuse. The myriad criminal offenses related to substance abuse require various approaches, and criminal justice personnel—from police officers to corrections personnel to judges—are well-positioned to affect the amount of alcohol- and other drug-related crime in communities.

Law enforcement efforts are often dependent on local factors, such as personnel and financial resources, populations served, and the nature of drug problems. Despite differences in community characteristics many police agencies focus significant resources on local drug problems. The following section details some of the different strategies used by law enforcement and criminal justice agencies to address illicit drug and alcohol abuse, and related crime: community policing, problem-oriented policing, reducing drug availability, and alternatives to incarceration. Often, these strategies overlap. In addition to these four strategies, alcohol-related approaches are discussed in depth.

Drug enforcement has evolved over the decades. Traditionally, federal, state, and local law enforcement agencies had focused primarily on wholesale drug activity, often using specialized narcotics units. The introduction of crack cocaine in the mid-1980s led local police to focus more on retail street sales. In addition, since the late 1980s, many communities have mobilized grassroots groups to respond to local illegal drug and alcohol problems; these community coalitions can serve as valuable partners for law enforcement agencies. In many jurisdictions, police partner with and make referrals to various social, health, and legal agencies. By linking law enforcement with social services, police improve the overall quality of their responses.

Law enforcement officers working with community residents to reduce illicit drug and alcohol-related crime and improve quality of life is a growing trend in cities and towns nationwide. Community policing evolved out of foot patrol experiments in the 1980s. Putting officers back on the beat has helped them become regular fixtures in communities and increases police legitimacy in the eyes of residents.

Police departments are now training landlords and community leaders to implement problem-solving techniques to deter drug use on their properties and within their neighborhoods. Close relationships with community agencies can help police identify and refer individuals in need of substance abuse services. Working with the community is a central tenet of problem-oriented policing, which trains the officer to assess why crimes occur in certain areas, to identify circumstances contributing to those crimes, and to decide how to best solve crime problems.

Police tactics are crucial to reducing the availability of illicit drugs and alcohol. Targeting of hot spots of criminal activity by the police can make the buying and selling of illegal drugs more risky, thereby decreasing trafficking and related crime.

Confronting establishments that sell alcohol to minors minimizes underage drinking and the problems that often accompany it, such as driving under the influence and delinquency. Probation and parole officers can reduce drug use and criminal recidivism by referring offenders with substance abuse problems to treatment. Corrections officials can reduce the availability of drugs in prison through programs that test and sanction prisoners for drug use.

Judges, prosecutors, and defense attorneys can take advantage of alternatives to incarceration programs that combine criminal sanctions and accountability with substance abuse treatment. Drug courts enable judges to use their sentencing power to get substance-abusing offenders into treatment, while still holding them accountable for their crimes.

This chapter discusses various promising law enforcement approaches that may help other communities develop strategies to meet their specific needs. Whatever law enforcement approaches are used in a community, the need to evaluate their effectiveness is critical to furthering knowledge of what works.

## I. Community Policing

Community policing involves police officers and private citizens working together to reduce crime and disorder and restore community cohesion. The central figure in this strategy is the community police officer, whose mission is to maintain direct contact with the citizens of a small, defined area. This officer serves as liaison between the community and the police. The Department of Justice's Weed and Seed program, for example, requires that each local site have a community policing initiative to link the "weeding out" of drugs and crime with the "seeding in" of community prevention, treatment, and other anti-crime tactics. Community policing has become a popular approach to fighting drug-related crime and bolsters traditional police anti-drug tactics.

Policing reforms in the 1920s, while helping to professionalize law enforcement, also distanced the police from the community. Government-sponsored reports on the causes of the urban riots of the 1960s found that police had lost touch with minority group residents, both by changing from foot patrols to cars and by taking a more legalistic approach to law enforcement. Police were urged to increase their daily

contact with citizens in everyday settings rather than just responding to emergencies. As a result, the community policing model has flourished under the theory that increasing the quantity and quality of police-citizen contact reduces crime.

The Violent Crime Control and Law Enforcement Act of 1994—popularly known as the "Crime Act"—authorized \$8.8 billion over six years for grants to local policing agencies to add 100,000 officers and to promote community policing in innovative ways. To implement the law, Attorney General Janet Reno created the Office of Community Oriented Policing Services (COPS) within the U.S. Department of Justice to put additional police officers on the streets using community policing strategies. For more information on community policing initiatives, visit the COPS website at [www.usdoj.gov/cops](http://www.usdoj.gov/cops).

According to the Bureau of Justice Assistance and the Community Policing Consortium's *Understanding Community Policing: A Framework for Action*, community policing consists of two core components: community partnership and problem solving.<sup>80</sup> The police become an integral part of community culture, and the community assists in defining future law enforcement priorities and in allocating resources. In Georgetown, Texas, for example, the police department has collaborated with community residents, social service organizations, and city agencies to resolve 80 percent of all illegal drug and alcohol problems they encounter.<sup>81</sup> The rise of community coalitions addressing substance abuse and related crime since the 1980s has created increased opportunities for citizen and police collaboration.

By working with community groups and being more familiar with their concerns and problems, police can be more responsive to the needs and fears of the community and increase their cultural sensitivity. Publishing drug-related materials and delivering law enforcement messages to immigrant communities in their primary (and sometimes only) language can help resolve public distrust of the police, which runs deep in certain locations and cultures. Community relations efforts are essential to community policing to forge bonds with community members and legitimize police efforts. *Preventing Crime: What Works, What Doesn't, What's Promising*<sup>82</sup> discusses the strong correlation between the perceived legitimacy of police and citizen willingness to obey the law. Furthermore,

establishing and maintaining mutual trust will give the police greater access to information that can lead to the prevention and solution of crimes.

The second component of community policing—problem solving (described in depth under Problem-Oriented Policing)—involves identifying neighborhood crime problems, understanding why the problems occur, developing and implementing long-term solutions, and determining the solutions' impact on the problems.

The success of community policing has led to innovations in forging partnerships with communities to prevent and solve problems. For example, the Midtown Community Court in New York City is the first criminal court in the country with on-site social services, such as counseling, health care, education, and substance abuse treatment. The sentencing process is viewed as an opportunity to solve root problems by requiring offenders to perform community service and providing them with needed social services. Court counselors also work with police officers on patrol to identify and find treatment for homeless individuals and alcoholics and other drug addicts before their behavior leads to arrest.

The following examples demonstrate how community policing is addressing illicit drug and alcohol-related crime in neighborhoods nationwide.

## Chicago Alternative Policing Strategy, Chicago, Illinois

**Program Type:** Community Policing.

**Target Audience:** All residents of Chicago.

**Years in Operation:** 1993-present.

**Program Goals:** For the police and the community to work together to reduce crime and increase public safety.

**Contact Information:** Barbara McDonald, Assistant Deputy Superintendent, Chicago Police Department, 312-745-6071.

**Description:** The Chicago Alternative Policing Strategy (CAPS) has changed the way law enforcement agencies in Chicago operate by bringing police, the community, and city agencies together to identify and solve neighborhood crime problems. During the 30 years prior to the program, steady increases in

arrests had produced a backlog of court cases. However, crime rates were not dropping, and citizens' fear of crime was increasing. CAPS was created to make a lasting impact on crime by partnering police with community groups to solve neighborhood crime problems. The strategy began in five of Chicago's police districts in April 1993; by the end of 1994 it had been introduced in the remaining 20 districts. In 19 of the 25 districts, community assessments found drugs to be the main cause of concern among citizens. Since 1993, more than 2,000 new police officers have been hired for CAPS.

CAPS uses a number of activities to fight crime, including beat meetings, beat officers, and rapid response officers. Officers are assigned to one of Chicago's 279 police beats for at least one year, allowing them to get to know the community and its particular crime problems. The system also permits community members to work directly with their beat officers to solve crime problems. Teams of rapid response officers have been set up to answer many of the emergency calls so beat officers have more time to work with residents.

The police department has added new technology to support the CAPS program. A computerized crime analysis system called ICAM allows police officers to analyze and map crime hot spots and cross-reference the data with information about the community, such as number of bars and sites of abandoned buildings. Police share the ICAM information with the community to increase public safety and awareness. The department has also developed an advanced 9-1-1 center and increased the use of cellular phones and pagers to support beat officers.

Community members can get involved in CAPS by attending monthly beat meetings, where residents identify and prioritize neighborhood crime problems and discuss ways to solve them. During 1995 and 1996, the police department held CAPS orientation programs throughout the city to increase public awareness of the program. The program is also promoted through television, posters, signs, and newsletters.

CAPS has established a special protocol with a number of city agencies to prioritize requests for services that have an impact on crime and public safety. By the end of 1995, more than 90 percent of the 60,000 requests for city services, including improved

street lighting and trash pick-up, had been responded to. Police officers also help community members track court cases that are of major concern to the community. Through this process, citizens have created support networks for crime victims and witnesses.

The success of CAPS is most striking in the Englewood district. Englewood was chosen as an original CAPS district because it is a disenfranchised neighborhood where 99 percent of residents are black, 36 percent live below the poverty line, and 31 percent of families are single mother households. In 1993, community residents cited street drug dealing, gang violence, abandoned buildings, and trash as “big problems” in their neighborhood. In 1994, after the implementation of CAPS, the percentage of residents citing these issues as big problems decreased dramatically. Residents citing street drug dealing as a big problem decreased from 63 to 49 percent, gang violence from 41 to 35 percent, abandoned buildings from 45 to 28 percent, and trash from 38 percent to 24 percent.

**Challenges:** One of the challenges to implementing the program was skepticism about a new approach. Police officers felt that they were not able to make an impact on drug-related crime and were not sure that a new policing strategy would make a difference. Once the program was implemented, however, officers realized that they were able to address some of the larger community problems, such as poor coordination between law enforcement and city agencies, rather than spend all of their time answering emergency calls. Another challenge was getting assistance from the community. The police department spent money on marketing to educate citizens about the CAPS program, explain what police needed from them, and help the communities set realistic expectations.

**Costs and Funding Sources:** Since this program involved a total restructuring of the Chicago Police Department, all department funds and resources went into the program. The annual budget of the department is just under \$1 billion. Chicago adapted the CAPS program to meet the needs of its police department without incurring additional costs. A smaller city or town could replicate a similar community policing strategy using existing resources.

**Program Results:** A consortium of four Chicago-area universities—Northwestern, DePaul, Loyola, and

the University of Illinois at Chicago—is conducting an ongoing evaluation of the CAPS program. The evaluation is being funded by the Illinois Criminal Justice Information Authority, the National Institute of Justice, and the MacArthur Foundation. The most recent evaluation report, published in May 1999, showed promising results.

- Since 1996, citizen awareness of CAPS has grown from 53 percent to 79 percent;
- Attendance at beat community meetings increased to 69,700 in 1998 from 59,200 in 1995; and
- Attendance at beat community meetings is higher among residents in low-income areas.

Although it is impossible to draw a direct link between CAPS and reduction of crime in Chicago, statistics show that crime has decreased dramatically since the program was introduced. Since 1992, the year before CAPS began, violent crime has decreased 38 percent, and property crime has decreased 27 percent. It is important to note that crime decreased in cities nationwide in the 1990s.

## **Weed and Seed, Stowe Village, Hartford, Connecticut**

**Program Type:** Community Policing.

**Target Audience:** Residents of Stowe Village, a high drug and crime area in Hartford.

**Years in Operation:** 1995-Present.

**Program Goals:** To work with the community to reduce drugs and crime and increase community leadership.

**Contact Information:** Sergeant Gordon Jones, 860-527-7300, ext. 5585. For general information on Weed and Seed, contact the Executive Office for Weed and Seed, 202-616-1152, [www.ojp.usdoj.gov/eows/](http://www.ojp.usdoj.gov/eows/).

**Description:** Stowe Village, a public housing development in Hartford with substantial gang and drug activity, became a Weed and Seed target area in 1995. The Weed and Seed program, administered by the Executive Office for Weed and Seed within the Department of Justice, aims to “weed” out drugs and crime in targeted areas and “seed” in community programs. Currently, over 230 communities are



implementing the Weed and Seed strategy nationwide. Community policing initiatives are required at each Weed and Seed site to serve as a link between the police and the community, and have greatly contributed to making the Weed and Seed program in Stowe Village a success.

Community police officers in Hartford, called Community Service Officers (CSOs), are not responsible for responding to emergency calls and can therefore devote the vast majority of their time to problem solving. The goal of CSOs is to enhance police-community relations and to improve citizen satisfaction with the delivery of police services. Prior to the implementation of Weed and Seed in Hartford, there was only one Community Service Officer assigned to the Northeast Neighborhood, a large area that includes Stowe Village. The new program enabled additional community policing coverage, which resulted in a CSO being assigned specifically to Stowe Village.

The Stowe Village CSO focuses on building better community relations, organizing community activities, and participating in school and community programs. For example, in 1996, the CSO helped organize an annual police summer youth academy. Twenty-four Stowe Village youths, ages 11 to 13, participated in the program. They learned what police do on the job and went on field trips with the Stowe Village CSO and two other community officers. The CSO has also trained residents to become community leaders through the Building Captain program. Applicants from the 23 apartment buildings in Stowe Village were chosen and trained to serve as Building Captains who report illegal activities to the police and provide information to residents.

The CSO works within the broader enforcement activities supported by Weed and Seed funding. The Hartford Police Department has overall responsibility for weeding activities and has utilized a variety of department resources, including the patrol division, the vice and narcotics division, the CSO unit, the mounted patrol unit, and the traffic enforcement unit. The vice and narcotics division conducted a series of surveillance and undercover buy operations, with the goal of identifying and obtaining warrants on as many drug sellers in Stowe Village as possible. Following this effort, high visibility patrol operations were implemented, which involves assigning specialized police units on an as-needed basis. Vehicular

barriers were installed to discourage drive-up drug purchases. Weed and Seed tactics also include using prosecutorial review to target drug sellers and purchasers, particularly those with significant serious felony records.

The success of Stowe Village has prompted the department to use its remaining Weed and Seed funding to target services to the entire Northeast Neighborhood. Two additional Community Service Officers and two additional patrol units have been assigned to the neighborhood.

**Challenges:** The biggest challenge to community policing efforts in Stowe Village was overcoming community distrust of police. To address the problem, the Community Service Officer assigned to Stowe Village made no arrests within the community for two years. Instead, the officer focused on getting to know the residents, going to community functions, and helping residents access services established through the seeding process. The officer also worked at the elementary school in Stowe Village, getting to know the children and their parents. All enforcement work was left to beat officers in the area. As a result, the community service officer was able to forge positive relationships with area residents.

Another constant challenge is getting people involved in community activities and communicating with the police. Giving Stowe Village residents an incentive helped overcome the obstacle. Building Captains are given free basic phone service so they can call the police to report illegal behavior, and they receive a \$100 rent credit each month. According to the evaluators of the program, buildings with Captains are much cleaner and more orderly than those without Captains. Although financial incentives were required to recruit Building Captains, they are a benefit to the community.

**Costs and Funding Sources:** The Hartford Weed and Seed program was funded through federal grants from the Executive Office for Weed and Seed totaling \$1.8 million between fiscal year 1994 and fiscal year 1998. In addition, Hartford received nearly \$1 million in asset forfeiture funds from the Department of Justice. As part of the weeding funds, the department received between \$100,000 and \$180,000 annually (totaling over \$750,000) to support its enforcement efforts. As of June 2000, the program is funded by



grant money left over from the first five years. The city plans to apply for new funds when this reserve is depleted.

**Program Results:** The Hartford site is one of eight included in the National Weed and Seed evaluation funded by the National Institute of Justice. According to evaluation data, crime in Stowe Village dropped 25.9 percent from 1994 to 1995 (the first year of Weed and Seed) and an additional 27.1 percent from 1995 to 1996. In the area surrounding Stowe Village, crime also dropped substantially: 21.4 percent and 36.6 percent in the first two years of Weed and Seed, suggesting that crime was not displaced to other areas in the Northeast Neighborhood. Crime rates in Stowe Village continue to remain below their original levels.

Surveys of Stowe Village residents were conducted as part of the national evaluation. The Institute for Social Analysis conducted one survey in 1995, and Abt Associates conducted another in 1997. Major findings from the two surveys include:

- In 1997, 21 percent of respondents indicated that drug use is “not a problem at all” or “a small problem,” up from 12 percent in 1995;
- In 1997, 68 percent of respondents indicated that the police were doing a “very good job” or a “good job” of controlling the use and sale of drugs, up from 55 percent in 1995;
- In 1997, 79 percent of respondents indicated that the police were doing a “very good job” or a “good job” in responding to community concerns, up from 51 percent in 1995; and
- In 1997, 55 percent of respondents indicated that Stowe Village had become a better place to live over the preceding two years, up from 45 percent in 1995.

## II. Problem-Oriented Policing

Problem-oriented policing compels officers to think creatively to find solutions to persistent crime problems within a community. Problem-oriented police are trained to uncover patterns of crime, to

identify solutions, and to find the resources needed to address the problems. The focus shifts away from the limited perspective offered by crime statistics to broader questions about the root causes of crime: Why in this location? Why this behavior? What impact is being made on people and the environment? According to *Preventing Crime: What Works, What Doesn't, What's Promising*, the basic theory behind problem-oriented policing is that the more accurately police can identify and minimize causes of specific crime patterns, the less crime will exist.<sup>83</sup>

In the late 1970s, Herman Goldstein, a University of Washington law professor, published an article, “Improving Policing: A Problem-Oriented Approach,” in which he asserted that many seemingly separate crime incidents actually stemmed from common underlying conditions and were part of a broader pattern.<sup>84</sup> Under a more traditional model of policing, success might be measured by the number of arrests made at a drug location; however, using a problem-solving approach, police measure effectiveness as shutting down the operation. Arrest is only one of several strategies, and all strategies are assessed by how effectively drug crime is reduced. If one strategy is ineffective, then alternatives are tried.

The Bureau of Justice Assistance (BJA), in *Problem-Oriented Drug Enforcement: A community-based approach for effective policing*, defines a problem as something that concerns or causes harm to citizens, not just the police; it is a group or pattern of crimes, cases, calls, or incidents.<sup>85</sup> Responding to a problem means more than providing a quick fix; it means dealing with the underlying conditions that create the problem. Problems must be analyzed thoroughly so that solutions can be specifically tailored to address them. According to the Community Policing Consortium’s *Community Problem Solving* training module (1997), problem solving is best defined by its parts<sup>86</sup>:

- Identifying neighborhood crime problems;
- Understanding the conditions that give rise to these problems;
- Developing and implementing long-term solutions tailored to the problems; and
- Determining the solutions’ impact on the problems.

One problem-solving model developed by Goldstein and used by various police departments is SARA: Scanning, Analysis, Response, and Assessment. Scanning consists of searching for patterns or persistent problems in the community to enable officers to focus their efforts on concentrations of crime. Identification of crime problems can come from a variety of sources, including officer observations, citizens' surveys, community meetings, information from other agencies, and analysis of crime statistics.

Analysis, often the most difficult step in the process, facilitates a greater understanding of the targeted problem, which in turn leads to the development of effective solutions. Questions include: What conditions or events precede or accompany the problem? What are the problem's consequences? How often does the problem occur? Based on the answers to these and other questions, a hypothesis is formed about why the problem occurs. For example, if convenience store robberies are a problem in a particular neighborhood, police might examine what the stores being robbed have in common. The next step is to define a tentative goal, identify resources that may be of assistance in solving the problem, and identify what procedures, policies, or rules have been established to address the problem.

Developing a response to the problem involves identifying various solutions and choosing the most feasible. Officers decide what needs to be done before implementing the plan and who will be responsible for preliminary actions. Stating specific goals of the plan and identifying data sources during the response phase facilitates the assessment phase, which examines the outcomes of the plan and identifies any changes to be made. Using the example of the convenience store robberies, if several of the stores had bushes that hid robbers from view, officers might respond by asking the property owner to trim back the hedges.

An important element of problem-oriented policing is working with various community groups to solve problems. Police face two separate challenges: dealing with the immediate situation, and working to establish long-term community safety. Law enforcement is a necessary tool in the short term, but police also need to help the community identify underlying problems and solutions. Some problem-oriented police departments have developed resource books listing agencies, contact persons, descriptions of

services, criteria for participation, and costs of services. Other police departments routinely invite outside agencies to inform officers about services and to offer tips on how to access them.

Problem-oriented policing often works in tandem with community policing. A police officer may realize that drug sales in a certain locale are facilitated by a nearby building with lax management, many vacant rooms, and conveniently placed pay phones. Had the neighborhood been equipped with a community policing officer, the building's role in encouraging drug activity might have been pointed out by neighbors long before arrests were necessary.

The following programs highlight how law enforcement organizations are effectively using problem-oriented policing to address drug-related crime.

### **Landlord Training Program, Portland, Oregon**

**Program Type:** Problem-Oriented Policing.

**Target Audience:** Landlords.

**Years in Operation:** 1989-present.

**Program Goals:** To teach landlords how to reduce drug-related problems in rental properties.

**Contact Information:** John Campbell, Campbell Delong Resources, Inc., 503-221-2005.

**Description:** Launched in 1989 by Campbell Delong Resources, the Portland Landlord Training Program has trained over 8,500 landlords to recognize drug activity in their rental properties. More than 80 jurisdictions in 20 states have adopted elements of the Portland program, which has been recognized as an Innovation in State and Local Government by the Kennedy School of Government at Harvard University.

Developed with input from landlords, attorneys, tenant advocates, and police officers, the program teaches landlords effective property management to reduce drug activity. Landlords learn simple steps they can take to reduce drugs and crime on their property. Police teach landlords how to screen rental applicants, make their property less conducive to crime, create a feeling of community within their buildings, and work with police officers to solve problems. The need for the program is great; an average of 27 percent of

landlords attending the training between 1989 and 1992 reported recent drug activity on their property.

There are three main components to the program: a training manual, marketing and outreach, and the training itself. The training manual is designed to be user-friendly and can be adapted to reflect tenant/landlord laws in specific communities. Marketing and outreach is critical; the more landlords trained, the greater the benefit to the community. The Portland Chief of Police sent letters to landlords in high-crime neighborhoods, attracting over 7,000 landlords to the program between 1989 and 1995. Word of mouth and local media attention are also important marketing tools.

A manual for police officers interested in starting a similar program is available through Campbell Delong Resources, Inc. (see contact information above). The guide discusses important implementation issues, including finding competent staff, developing a local training manual, and designing and marketing the training. Successful program replication requires six basic elements: an appropriate trainer, a program tailored to the needs of the community, a complete understanding of landlords' needs and concerns, partnerships with both tenant and landlord advocates, a focus on immediate solutions to illegal activity (as opposed to discussing how laws should be changed), and effective marketing.

**Challenges:** One of the major challenges to implementing the program was defining the roles of the people involved. Landlords initially felt that any criminal activity taking place on their property was the responsibility of the police and were reluctant to get involved. When landlords learned that they were responsible for crime on their property and that they could take action against problem tenants, they were willing to partner with police.

**Costs and Funding Sources:** Initially, the program was funded through a grant from the Bureau of Justice Assistance. The program is now funded by the city's Office of Planning and Development Review. It is estimated that each training session costs approximately \$1,300, which includes logistics and trainer time. Program marketing is an additional cost.

The Landlord Training Program is designed to be replicated, and communities seeking to implement

their own programs have many options. Large cities often want to tailor the national manual to their own needs and policies, which can take up to six months and requires a full-time staff person. Large cities also need a part-time program director and multiple trainers. Fifteen to 20 training sessions are conducted during the first two years, with approximately five held in each of the following years. Programmers in small cities can order the national manual and participate in state or national training sessions. Small cities usually conduct one or two training sessions per year. Landlord training programs are often funded by the Office of Community Oriented Policing Services within the Department of Justice.

**Program Results:** In 1992, Campbell Delong Resources conducted a follow-up study of the 1,512 landlords who attended the program in 1991. The survey found that 91 percent of the landlords changed the way they managed their property after the training. The most common actions taken by the landlords were:

- More frequent and careful inspections of the property (71 percent) (they visited the site more often and were more aware of what signs of drug activity to look for);
- Improvements to the visibility of the property, such as trimming back overgrown hedges (71 percent); and
- Purchasing updated rental forms to match the current landlord tenant law.

The survey also found that 220 landlords had to deal with drug problems on their property after the training; 95 percent of them said that what they learned in the training helped them address the problems. Results of post-training questionnaires given to the 3,335 landlords who attended training sessions between 1989 and 1993 indicate that the program was useful:

- 78 percent of the landlords said that they would definitely change the way they manage their property as a result of the training; and
- 80 percent of the landlords felt that the training was worthwhile.

## Mario's Market, Delray Beach, Florida

**Program Type:** Problem-Oriented Policing.

**Target Audience:** Drug buyers and sellers and other perpetrators of crime in the vicinity of Mario's Market.

**Years in Operation:** 1993-1995.

**Program Goals:** To work with the community to solve drug and crime problems at Mario's Market, a local convenience store, and the surrounding area.

**Contact Information:** Sergeant Javaro Sims, Delray Beach Police Department, 561-243-7888.

**Description:** Two community police officers working in an eight-man foot patrol in Delray Beach, Florida, recognized that Mario's Market, a local convenience store, was generating a substantial number of service calls and criminal activity in the area. The officers, utilizing a problem-oriented policing approach, examined the store and the surrounding area to identify contributors to illegal activity. Contributing factors included the layout of the property (the market was open on all sides, and a T-shaped alley in back provided easy entry and escape for buyers and sellers of drugs), poor lighting, and a drug house located behind the store.

Upon completion of the assessment, the two officers invited the other officers on their beat, the chief of police, the local fire chief, the property owners and proprietors, and supervisors from other public agencies to a meeting to discuss possible solutions to the problem. The officers presented an itemized list of what they wanted to accomplish at Mario's Market and what assistance they required. Before beginning their work, the officers knew they needed community cooperation, which they got by appealing to community leaders early in the process.

The officers employed a wide variety of tactics to solve the problem at Mario's Market. They started a nuisance abatement case against the owners of the drug house, and the dealers were eventually evicted. The officers put up a chain-link fence to deter dealers, and barriers to stop cars from entering and exiting the alley. They installed a fake video camera (donated by a local TV-repair company), and enlisted the help of probationers on community-service detail to fix up the parking lot. Delineating parking spaces helped eliminate the drive-through nature of the drug market,

and establishing handicap parking spaces in the front of the store meant drug buyers were subject to a \$240 fine if they parked there.

**Challenges:** A major challenge in Delray Beach was bridging the gap between the community and the police. The store proprietors were hesitant to help the police because they were afraid of retaliation from the drug dealers. When the police increased their presence in the area, the proprietors' fear was alleviated and they cooperated with police. To further engage the proprietors, the police painted the store to make it more attractive. Enhancing the store's appearance attracted more law-abiding customers.

A second challenge was enlisting the help of city departments and private organizations. Officers personally met with supervisors of specified agencies and explained what they wanted to do and how it would benefit the community. This approach, in addition to the initial meeting with community leaders, brought people on board to assist the officers. One private organization, Florida Power and Light, agreed to install bullet-resistant lights on the property for free. The owners pay \$18 a month for each light to cover the additional electric costs.

**Costs and Funding Sources:** Police overtime costs were the largest community expenditure. Most of the materials the officers used to enhance the property were donated by community organizations. In addition, the increased police involvement encouraged the owners of the property to spend their own money on renovation.

**Program Results:** The officers' work contributed to a reduction in calls for service on the block from more than 100 in 1994 to fewer than ten in 1995. Additionally, there were no robberies on the property in 1995. The project helped institutionalize problem-oriented policing in the area by proving to both the community members and law enforcement officers that resources can be effectively pooled to solve specific neighborhood crime problems.

## III. Reducing Drug Availability

Drug problems vary widely among cities, towns, and neighborhoods. As a result, anti-drug tactics used by local law enforcement agencies differ depending on



community need. According to the Police Executive Research Forum (PERF), there are over 17,000 state and local law enforcement agencies engaged in almost 160 different anti-drug tactics. PERF's 1996 report, *Police Antidrug Tactics: New Approaches and Applications*, lists a wide range of activities, including police observation of drug sales in plain view, directed patrols that concentrate police presence in areas of heavy drug activity, undercover operations, regulatory code enforcement, community-based programs, and anti-drug efforts targeting locations, individuals, and events.

Police have long known that there are “hot spots” in many communities that generate a large number of calls for service. Research confirms this view. It is estimated that 10 percent of locations generate about 60 percent of crimes.<sup>87</sup> The presence of uniformed officers at these locations tends to deter the activities of would-be offenders; it also guarantees immediate response to problems. By concentrating law enforcement resources in specific locations for several hours a day, hot spot strategies disrupt retail drug sales without necessarily increasing arrests. Charleston, South Carolina, has adopted a hot spot strategy that includes stationing police at the busiest drug markets and photographing drug buyers. Police can reduce drug transactions by increasing the risk to buyers and sellers.

A federally administered program designed to address hot spots of drug activity is the High Intensity Drug Trafficking Area (HIDTA) program. The Office of National Drug Control Policy (ONDCP) directs funds to areas within the United States which exhibit serious drug trafficking problems. Law enforcement organizations within HIDTAs assess these problems and design specific initiatives to reduce or eliminate the production, manufacture, transportation, distribution, and chronic use of illegal drugs. Since 1990, 31 areas within the country have been designated as HIDTAs. The key priorities of the program are to assess regional drug threats; develop and fund efforts that combat drug trafficking threats; facilitate coordination among federal, state and local efforts; and improve the effectiveness of drug control efforts to reduce or eliminate the harmful impact of drug trafficking.

Effectively enforcing local regulatory codes can reduce drug activity. Nuisance abatement programs,

for example, target rental properties that are hot spots of drug activity. Police threaten court action to seize property unless owners take action to curtail drug dealing. In Oakland, California, a nuisance abatement project has produced significant reductions in arrests, field contacts, and citizen calls.

Another local effort that reduces drug activity in high crime areas, particularly when used as an ancillary activity to increased police crackdowns, is altering traffic patterns. By changing the flow of traffic, police can make it difficult for drug dealers to use routes that permit easy access to drive-by purchases. Street closures used in a Los Angeles neighborhood with a high level of drug activity and shootings reduced homicides by 65 percent.<sup>88</sup>

Technological advances in law enforcement enhance police ability to identify hot spots of drug activity. The National Institute of Justice's Drug Market Analysis Project (DMAP), for example, uses computer technology to map drug activity, which improves police departments' ability to analyze their crime and drug problems. One DMAP experiment in Jersey City, New Jersey, found consistent and strong effects on emergency calls for service in the targeted area with little displacement of drug activity to the surrounding area. The data, presented in *Policing Drug Hot Spots*, suggests that the benefits of tighter control also spread to areas around the hot spots.<sup>89</sup>

Forming task forces to combat high rates of drug-related crime is a popular option for many communities, often in concert with the federal government. The Drug Enforcement Administration (DEA) administers several programs designed to help localities address drugs and crime. The Mobile Enforcement Team (MET) program, created by DEA in 1995, is designed to help local law enforcement combat violent drug organizations in their neighborhoods. Over 200 deployments have been completed nationwide. DEA also supports the State and Local Task Force Program, which provides a federal presence in sparsely populated areas. Such programs combine federal funds and expertise with local officers' investigative talents and detailed knowledge of their own jurisdictions.

The Organized Crime Drug Enforcement Task Force Program is another federal program that has been working with local law enforcement agencies fighting major drug trafficking organizations since



1982. Nine federal agencies participate in the program, including the DEA, the Federal Bureau of Investigation (FBI), the U.S. Marshals Service, the U.S. Coast Guard, and the Bureau of Alcohol, Tobacco and Firearms. State and local law enforcement officers can be deputized as federal officers for the duration of a task force investigation, and local agencies are eligible for reimbursement for certain expenses incurred during the program. Another option for states and localities is the FBI Safe Streets Gang Task Force, which addresses gang-related violence and drug trafficking by initiating investigations of violent street gangs; for example, the New Orleans Gang Task Force increased the percentage of murder cases solved in the city from 58 percent in 1998 to 65 percent in 1999.

Along with domestic anti-drug tactics, international efforts target illegal drugs entering the country. These efforts include cooperative efforts with other nations in building their institutions, attacking illegal drug production, interdicting drug shipments in both source and transit countries, and dismantling multinational drug trafficking organizations. Technological advances are key to reducing drug flow into the country. For example, the Office of National Drug Control Policy is examining the use of computer mapping to study how drugs flow from source countries.

The following are examples of how community law enforcement efforts are successfully reducing the availability of illicit drugs.

## **Drug Interdiction Program, the State of Pennsylvania**

**Program Type:** Reducing Drug Availability.

**Target Audience:** Prison inmates using illicit drugs.

**Years in Operation:** 1996-present.

**Program Goals:** To reduce drug use among prison inmates and enhance inmate and staff safety.

**Contact Information:** Major Daniel Nagy, Chief of Security, Pennsylvania Dept. of Corrections, 717-730-5012.

**Description:** In response to increases in drug overdoses and violence among inmates, the Drug Interdiction Program was implemented in all Pennsylvania prisons in 1996. The program, launched by the Pennsylvania Department of Corrections, is

designed to rid prisons of illicit drugs by combining interdiction methods, drug testing, and drug treatment. In 1997, the Pennsylvania Department of Corrections opened the state's first substance abuse treatment prison.

All offenders entering the Pennsylvania prison system undergo a substance abuse assessment; on average, 92 percent of inmates are identified as needing treatment. All of Pennsylvania's 24 prisons offer drug treatment, and seven have therapeutic communities. The prisons also have highly sensitive drug detection equipment that can identify drugs smuggled in by visitors, personnel, or through the mail. In 1998, 734 of the 22,074 visitors were found to be possessing drugs. A new phone system allows staff to randomly monitor inmates' conversations for evidence of drug smuggling or use. Drug-sniffing dogs search cells for evidence of drugs or weapons. In 1998 the dogs were responsible for 137 drug and 23 weapon confiscations.

Using software developed by the department, corrections officers randomly select inmates to be tested for drugs each day. Those who test positive face mandatory punishment and must undergo drug treatment. Corrections officers also conduct drug tests on prisoners in treatment or with previous disciplinary problems. Both urinalysis (which detects drug use in the previous 48-hours) and hair analysis (which can detect use in the previous three months) are used. In 1999, Pennsylvania correctional officers conducted 148,444 random and targeted drug tests. In addition to selecting prisoners for testing, the software also serves as a database to track the results of all drug tests.

**Challenges:** One of the greatest challenges to implementing the Drug Interdiction Program was training prison staff in how to use the new computer software. Although all corrections staff knew how to test inmates for drugs, many did not have a great deal of experience with computers and all were unfamiliar with the new software. To educate prison staff, the department held two statewide training sessions.

**Costs and Funding Sources:** All components of the program are funded through the Pennsylvania Department of Corrections. In 1999, the total cost of the program was \$500,140 which covered staff salaries and operating costs. Start-up expenses for the

program would vary depending on how comprehensively the program is replicated and might include costs for drug screening equipment, phone equipment, and computer equipment.

**Program Results:** The National Institute of Justice evaluated the interdiction program in five prisons representing a cross-section of all prisons in the state and including both male and female inmates.<sup>90</sup> Urinalysis and hair tests were conducted on 917 inmates in 1996, prior to implementation of the program; 1,031 inmates were tested in 1998. Tests were conducted only on inmates who had been in prison for at least three months to ensure that any indicated drug use occurred after entering prison. Results of the evaluation showed a dramatic reduction in drug use.

- Positive hair tests for marijuana dropped from 9.3 percent to 0.8 percent, tests positive for cocaine dropped from 2.3 percent to 1.2 percent, and tests positive for opiates dropped from 0.8 percent to 0.6 percent. Hair tests positive for any drug dropped from 10.6 percent to 2.3 percent.
- Positive urinalysis tests for marijuana dropped from 2.0 percent to 1.6 percent; cocaine dropped from 0.1 percent to zero, and opiates rose slightly, from 0.6 percent to 0.8 percent. Positive urinalysis tests for any drug dropped from 3.4 percent to 2.2 percent.

In addition to decreasing drug use in the prisons, violence declined as well. The department found that inmate-on-inmate assaults dropped 20.2 percent between 1995 and 1998 (from 534 to 426). Inmate-on-staff assaults decreased 20.8 percent during the same time period, from 869 to 688.

### **Mobile Enforcement Team (MET) Deployment, Key West, Florida**

**Program Type:** Reducing Drug Availability.

**Target Audience:** State and local law enforcement agencies throughout the United States.

**Years in Operation:** 1995-present.

**Program Goals:** Deploy MET Special Agents nationwide to combat violent drug crimes and drug-related gang activity.

**Contact Information:** Drug Enforcement Administration, Office of Domestic Operations, Mobile Enforcement Section, 202-307-8799.

**Description:** The Mobile Enforcement Team (MET) program was implemented in 1995 in response to increased drug-related violent crime in local communities. At the request of local law enforcement, the Drug Enforcement Administration (DEA) deploys special agents to work hand-in-hand with local law enforcement to identify major sources of drug-related crime; to collect, analyze, and share data; to cultivate investigations; to arrest offenders; to seize assets; and to support state, local, and federal prosecutors. Key West, Florida, is one of over 200 MET deployment sites implemented nationwide since the DEA developed the program.

The Key West MET deployment, which lasted from June 1999 to December 1999, was requested by the chief of police. The Key West Police Department was having difficulty infiltrating drug trafficking networks due to limited staff, lack of financial resources, and the “closeness” of the community, which made it difficult for police officers to work undercover. A violent group of drug traffickers formed an alliance (known as TROCHE/ALSTON) to control the crack and heroin market in the Bahama Village section of Key West.

The Miami MET used technical equipment, surveillance tactics and undercover penetration to gather evidence on members of the TROCHE/ALSTON organizations. The tactics led to the indictment of 65 drug distributors and helped MET uncover the primary sources of crack cocaine. A total of 56 officers from the DEA, U.S. Customs Service, and the Key West Police Department took part in the operation.

The project concluded on December 9, 1999, with the arrest of 65 individuals and the seizure of approximately four kilograms of cocaine, three kilograms of crack cocaine, 20 pounds of marijuana, seven ounces of heroin, 50 LSD tablets, and 50 ecstasy tablets. In addition, approximately \$70,000 in firearms were seized. The drug operation had been the largest ever in Key West, which is renowned for its long history of drug smuggling.

**Challenges:** One of the challenges for communities requesting MET assistance, including Key West, is the lack of state and local manpower and funding to fight violent drug traffickers on their own. In some instances the community is so small that local police are well-known and undercover tactics, such as surveillance, cannot be used. DEA meets these challenges through the MET program.

**Costs and Funding Sources:** For fiscal year 2000, Congress appropriated \$8 million to DEA for operation of the MET program.

**Outcomes Measures:** DEA agencies track the results of MET operations. As of April 30, 2000, the 262 MET deployments had achieved the following results:

**Drug Seizures:**

■ cocaine:	1,637.23 lbs.
■ methamphetamine:	562.73 lbs.
■ heroin:	84.82 lbs.
■ marijuana:	3,043.33 lbs.

**Asset Seizures (value):** \$14,984,433

**Arrests:** 10,128 (includes 52 arrests for murder)

Recently, with financial assistance from the Bureau of Justice Assistance and technical assistance from the National Crime Prevention Council, the DEA piloted MET-II, which provides training in community mobilization and drug demand reduction to leaders from MET communities. In fiscal year 1999 there were three regional training sessions involving 40 MET communities in 23 states. Each community sent a team of up to five individuals that included elected officials, judges, law enforcement officers, city and school administrators, community activists, and representatives of the business and faith communities.

The purpose of the training sessions is to prevent a re-emergence of drug-related violent crime in the target communities. The training stresses the importance of a systemwide approach to preventing drug use and trafficking, encourages community leaders to commit themselves to implementing strategies that enhance public safety, and equips leaders to fulfill these commitments by teaching them techniques for planning, organizing, and evaluating prevention programs.

According to surveys of participants after the training sessions, 89 percent stated that they were satisfied with the workshops and benefitted from them. At least four MET-II training sessions were planned for 2000.

## **North Hills Block Project, Citywide Nuisance Abatement Program, Los Angeles, California**

**Program Type:** Reducing Drug Availability.

**Target Audience:** Residents of North Hills, a neighborhood with severe drug-related crime problems.

**Years in Operation:** 1997-2000.

**Program Goals:** Reduce drug-related crime problems in North Hills and increase quality of life among residents.

**Contact Information:** Mary Clare Molitor, Assistant City Attorney, Director of Nuisance Abatement, 310-575-8552.

**Description:** Launched in early 1997, the Citywide Nuisance Abatement Program (CNAP) is a multiagency task force that targets Los Angeles neighborhoods with histories of pervasive narcotics activity. Participating agencies include the Los Angeles Police Department, City Attorney's Office, Housing Department, Department of Building and Safety, and Planning Department. CNAP's Neighborhood Block Projects combine enforcement, enhancement, and outreach efforts to revitalize communities. The North Hills Block Project covers the portion of the San Fernando Valley once considered by police as the most concentrated area of narcotics sales in the city of Los Angeles.

The first step in the North Hills Block Project was to conduct a needs assessment survey in which residents identified drug and gang activity as the community's most urgent problems. CNAP's enforcement team in North Hills was created using a multiagency approach to community policing, and included representatives from city, county, state, and federal agencies. In order to reduce flagrant street sales of narcotics in the area, officers conducted numerous early morning buy/bust and reverse or sting operations. A prosecutor from the city attorney's office worked closely with local narcotics detectives to ensure that narcotics arrests were reviewed, and to train the officers regarding new drug-related laws. In

addition to undercover operations, prosecutors, narcotics officers, and code inspectors employed site-specific narcotics abatement strategies. A gang abatement lawsuit was filed which led to an injunction against 24 street gang members named in the lawsuit.

The enhancement team in North Hills formed a community impact team (CIT) broken down into five subcommittees: the North Hills Business Organizing Committee, the Neighborhood Watch Committee, the Community Outreach Committee, the Sepulveda Park West Committee, and the North Hills Beautification Committee. A public park for neighborhood soccer leagues is being built, streets and alleys have been re-paved, increased street lighting plans have been proposed, a plan to divert drug-related traffic from the area has been successfully implemented, and residents have access to a published list of city resources and community contacts.

Results from the community needs assessment identified a lack of communication among community groups already operating in North Hills. CNAP's outreach team worked to bring these organizations together to respond to community needs. A monthly calendar of events was developed, which was translated to serve the predominantly Spanish-speaking community. CIT members publicized local events and trained new leaders in the community. As a result, Familias Unidas, a nonprofit, community-based organization, was formed in the project area to serve families.

Currently, CNAP is preparing to expand the program into other neighborhoods. However, personnel will remain available to assist local law enforcement and community members. For example, abatement prosecutors will continue to handle site-specific narcotics abatement, and a community resource specialist will be available for residents and agencies seeking assistance. In addition, CNAP will include North Hills in its Kid Watch L.A. Program, which focuses on ensuring the safe transit of school children through high crime areas using local neighborhood volunteers.

**Challenges:** The major challenge to implementing CNAP was in organizing agencies that had never worked together before and were unfamiliar with one another's goals and responsibilities. CNAP resolved this problem by creating the Community Impact Team (CIT).

Another challenge is familiarizing prosecution and police personnel with using civil remedies, such as abatement, to respond to criminal acts. It is critical to get a commitment from local prosecutors to use civil abatement remedies and from the police department to train officers on how to use abatement.

**Costs and Funding Sources:** The CNAP program, including all of the integrated services and personnel from various agencies, costs approximately \$9 million annually. The core nuisance abatement program costs \$3.8 million. Although the budget is quite large, program staff say smaller municipalities can operate a similar program for much less money by tapping into already existing governmental and private resources. A critical cost is money to hire a community resource specialist, at an average cost of \$50,000 to \$60,000 per year. These specialists work within a particular neighborhood to combine resources and act as a liaison between residents, businesses, governmental agencies, and other interested parties. The North Hills specialist has a background in grassroots community organizing and is responsible for door-to-door surveys, meeting planning and set-up, and keeping participants in the community impact team on task. CNAP activities are funded by the City of Los Angeles' General Fund. In addition, the city directs funds from federal block grants to the project, including the Edward Byrne Formula Grant Program and the Community Development Block Grant.

**Program Results:** The success of the North Hills Block Project is being measured by progress in both enforcement of the laws and enhancement of the community.

*Enforcement:*

- Crime statistics show crimes (robbery, burglary, rape, assault, and grand theft auto) in the Block Project Area from July through September of 1999 were 27 percent lower than for the same three-month period in 1997, just prior to the beginning of the project (186 crimes compared to 254 crimes);
- Gang-related crime in the Devonshire area (most of which originates in the North Hills area) decreased 39 percent from February 1999 to February 2000; and



- Over 40 separate locations were investigated for nuisance abatement during the project; only three remain open, and investigations of these locations are still pending.

According to a survey of area residents one year after implementation of the North Hills Block Project, the enforcement activity improved the life of the community. For the first time in years, people could walk to the grocery store without being approached by gang members or drug dealers.

*Enhancement:*

- In 1999 the percentage of school children re-enrolling for the next term at a North Hills elementary school was nearly 60 percent, up from 30 percent in 1997; and
- The vacancy rate in area apartment complexes dropped from 50 percent in 1997 to 5 percent in 1999.

## IV. Alternatives to Incarceration

Drug offenses are the primary cause of case overload in all parts of the criminal justice system. Thirty percent of state prisoners and 60 percent of federal prisoners are sentenced for drug law violations. At least half of drug offenders sentenced to probation in state courts are rearrested for felony offenses within three years; a third are rearrested for drug offenses.<sup>91</sup> Drug-abusing offenders are more likely than other criminals to become repeat offenders. Fifty-one percent of parolees who abuse drugs, regardless of their offense, return to prison within three years of release, compared to 40 percent of all parolees.<sup>92</sup>

Alternatives to incarceration are designed to stop the revolving door of drug abuse and crime by using the coercive power of the court to engage drug-abusing offenders in treatment. The criminal justice and substance abuse treatment systems work together to provide offenders with the services they need while still holding them accountable for their crimes. Compliance with alternatives to incarceration programs is generally based on measurable performance goals, such as completion of treatment phases and abstinence. Programs often provide clear choices, sanctions, and incentives to help individuals take

control of their own recovery and to hold them accountable for failure to comply with treatment.

Communities often create alternatives to incarceration programs by determining their specific needs. What types of cases are most prevalent? Which offenders return to the system repeatedly? Some programs target first-time offenders, while others concentrate on repeat offenders.

Programs can serve offenders who may not have committed a drug offense but have an addiction problem. Program developers must consider what treatment strategies, incentives, and sanctions will be most effective for the types of offenders that the program targets.

Alternative to incarceration programs differ depending on the stage in the justice system where the intervention occurs. Different models include:<sup>93</sup>

- **Diversion/deferred prosecution model**—for first-time offenders who enter the program prior to prosecution. Charges may be reduced or dropped altogether if participants meet the requirements of the program;
- **Plea model**—before entering the program, defendants enter a guilty plea which can be stricken from their record upon successful completion of the program;
- **Post-adjudication**—used mainly for repeat offenders who face increasingly severe penalties. While prosecutors may be unwilling to defer prosecution for these offenders, they will consider more lenient sentencing if participants plead guilty and undergo treatment prior to sentencing; and
- **Combination model**—used by programs that handle many different types of cases, including first-time and habitual offenders. Such programs often use different models to meet the needs of a particular case.

One innovative alternative to incarceration is drug court. Drug courts place nonviolent, drug-abusing offenders into intensive court-supervised treatment instead of prison. Instead of a traditional adversarial courtroom scenario (the defense versus the prosecution), everyone works together to develop a positive outcome for the offender. Judges interact



continually with participants, increasing offender accountability. Extensive studies show that, on average, drug courts reduce recidivism by two-thirds among those who “graduate,” requiring a fraction of the cost of incarceration.<sup>94</sup> The first drug court began in Miami in 1989, and as of June 2000, 440 drug courts have been implemented nationwide and an additional 279 are in the planning stages. Information on drug court programs nationwide can be found on the Drug Courts Program Office website at [www.ojp.usdoj.gov/dcpo/](http://www.ojp.usdoj.gov/dcpo/).

The National Association of Drug Court Professionals has developed a manual explaining the ten key elements of successful drug courts<sup>95</sup>:

- Integrate alcohol and drug treatment services with justice system case processing;
- Use a nonadversarial approach in which prosecution and defense counsel promote public safety while protecting participants’ due process rights;
- Identify eligible participants early for immediate referral to the program;
- Provide access to a continuum of treatment and rehabilitation services;
- Monitor abstinence by frequent drug testing;
- Coordinate court and treatment responses to compliance or lack of compliance, including contingency contracts that involve participants in their own sanctions and incentives;
- Require ongoing judicial interaction with drug court participants;
- Monitor and evaluate achievement of program goals and program effectiveness;
- Promote effective programs through interdisciplinary education of planning teams; and
- Forge partnerships among drug courts, public agencies, and community-based organizations.

Another program that employs the coercive power of the criminal justice system to get individuals into treatment is TASC, Treatment Accountability for Safer Communities. TASC, created in the 1970s by the Law Enforcement Assistance Administration, provides a bridge between the criminal justice system and

the drug treatment community. Some drug offenders are diverted out of the criminal justice system and into community-based supervision, others receive treatment as part of probation, and still others enter into transitional services when they leave a correctional institution. All treatment and rehabilitation services are provided in concert with criminal justice sanctions. There are over 200 TASC programs operating throughout the United States.

Many communities are using alternatives to incarceration to break the cycle of drug abuse and crime. The following examples highlight several of these efforts.

### **Alternative Incarceration Program, the State of Connecticut**

**Program Type:** Alternatives to Incarceration.

**Target Audience:** All offenders who are not a threat to the community, including many drug offenders.

**Years in Operation:** 1990-present.

**Program Goals:** Provide alternatives to incarcerating offenders while protecting the safety of the community.

**Contact Information:** William Carbone, Director, Court Support Services Division, 860-563-1332.

**Description:** Connecticut’s Alternative Incarceration Program (AIP), begun in 1990, provides alternatives to incarceration for offenders who are not considered dangerous to society. The program was initiated in response to Connecticut’s skyrocketing prison construction expenditures; between 1985 and 1990, the state spent over \$1 billion building prisons. In 1990 the newly created Office of Alternative Sanctions (OAS) (now the Court Support Services Division of the State Judicial Branch) was assigned the task of creating alternatives to incarceration for low-risk offenders. As of 1999, 165,280 offenders had been processed through AIP. The program’s capacity is approximately 4,500 adult and 700 juvenile offenders at any one time.

The Alternative Incarceration Program was designed to give judges an array of alternatives to incarceration when sentencing an offender. Judges can choose from eight programs that provide various services, including substance abuse treatment. Offenders are sentenced to programs depending on the circumstances and the severity of their crime. Individual

services are provided by over 100 private, nonprofit organizations throughout the state.

Offenders enter AIP at either the pretrial or post-conviction stage of criminal processing. Offenders held in pretrial detention are assessed by bail commissioners who, based on the needs of the offenders and their likelihood of rearrest, recommend an appropriate alternative sanction program to the judge. Offenders entering the program at the postconviction stage are assessed by probation officers who work directly with individual AIPs to ensure that offenders are channeled to appropriate programs. The officers also help guide judges in offender placement. Community safety is considered each time an offender is recommended for a program.

Offenders successfully completing AIP, which can last from four months to two years, do not serve prison time. However, offenders who are dismissed from the program for any reason must complete their prison sentence.

**Challenges:** Connecticut faced many obstacles in implementing AIP. The program had to overcome public fear of placing offenders in the community. Careful placement of offenders in programs with the appropriate amount of supervision, along with the low recidivism rates of program participants, helped alleviate these fears. Another problem was that many communities did not want an AIP program housed in their neighborhood. The state overcame this by requiring offenders to complete community service hours in the neighborhood where their program was located. In 1996 alone, more than 7,000 offenders participated in community service projects, providing 250,000 hours of work valued at \$1.3 million.

**Costs and Funding Sources:** The 2000 budget for the program is \$55 million, \$30 million of which is for adult programs and \$25 million for juveniles. All of the funds are provided by the state.

**Program Results:** Connecticut's Alternative Incarceration Program has proven successful on many levels. The legislation establishing the program included a five-year "sunset clause" stating that a number of goals had to be met or the program would be canceled. In 1994, based on the positive results of the program, the legislature unanimously passed a bill to continue AIP indefinitely with no further sunset clauses.

■ **Cost saving:** The average annual cost for an offender in the program is \$7,000 per year, versus \$25,000 for incarceration. In 1998 it was estimated that it would have cost \$525 million in prison construction costs and an additional \$94 million in operating costs to imprison the 150,000 offenders in the program.

A three-year longitudinal study by the Justice Education Center, Inc. completed in 1996, found that program participants were less likely to commit crimes than offenders who had been in prison.

- Three years after release, offenders in a Department of Corrections comparison group were rearrested for drug offenses at three times the rate of AIP participants.
- Three years after release, there were two felony arrests of program clients for every three among the comparison group.

## Multnomah County S.T.O.P. Drug Diversion Program, Multnomah County, Oregon

**Program Type:** Alternatives to Incarceration.

**Target Audience:** People charged with their first drug offense.

**Years in Operation:** 1991-present.

**Program Goals:** To reduce recidivism and substance abuse among drug offenders through a treatment and sanctions program.

**Contact Information:** The Honorable Harl Haas, 503-248-3052.

**Description:** The Sanction-Treatment-Opportunity-Progress (STOP) Drug Diversion Program was launched in 1991 to reduce the backlog of cases in the Multnomah County court system and to provide needed treatment for first-time drug offenders. The program serves between 400 and 500 clients per year. Since the program began, 1,750 people have graduated, and 65 drug-free babies have been born to program clients.

To be eligible for STOP, offenders must be charged with drug possession and cannot have any manufacturing or distribution charges. Defendants choose to participate in the program and can withdraw within the first 14 days with no penalty. Before

entering the program, offenders agree to give up their right to contest the charges against them. If they fail the treatment program, their cases are tried solely on the police reports which shortens case processing time to less than one minute. Charges are dropped for all offenders who successfully complete STOP. Approximately 46 percent of the offenders who enter the program graduate.

Substance abuse treatment is provided by InAct Inc., a private agency. At the beginning of the program clients are required to attend group and individual therapy each weekday and later once or twice per week. Clients also go to court once a month and are given random urinalysis tests. The frequency of urinalysis and drug court appearances depend on how well the client is doing in treatment; clients who are having problems are tested and appear in court more frequently than those who have clean drug screenings and are doing well in treatment. InAct Inc. also offers educational and employment services and treatment for clients with mental health problems. Offenders who do not comply with the treatment program are sanctioned with jail time or work camp. Clients are usually enrolled in the program between one year to 18 months.

**Challenges:** One of the challenges to implementing the Portland program, which is common among drug courts, was deciding whether the judge or the treatment provider would have the authority to terminate clients from the program. A consensus was reached in Portland that the judge should have this authority because the offenders, while involved in treatment, are under the jurisdiction of the criminal justice system. Resolving that issue enabled the court and the treatment providers to work together to best serve the clients.

**Costs and Funding Sources:** The annual budget of STOP averages \$1.2 million and covers only the cost of treatment. There are no costs for salaries because duties of probation officers, district attorneys, the drug court judge, and staff are recalculated to include the drug court. Funding for STOP comes from a federal block grant and through the County Department of Community Justice.

**Program Results:** An evaluation of STOP, published in 1998, was funded by the State Justice Institute and conducted for the Multnomah County

Department of Community Corrections by the Northwest Professional Consortium. The evaluation examined arrests of STOP participants within two years after leaving the program and compared them with arrests of offenders who were eligible for the program but did not participate. The evaluation found that program participants had fewer arrests than non-participants and that the amount of time spent in the program had a positive effect on arrest rates. Two years after leaving the program:

- Program participants (graduates and nongraduates) had 61 percent fewer total arrests than the comparison group; program graduates had 76 percent fewer arrests than the comparison group.
- Program participants (graduates and nongraduates) had 64 percent fewer felony arrests than the comparison group; graduates had 80 percent fewer felony arrests than the comparison group clients.
- Program participants (graduates and nongraduates) had 72 percent fewer drug arrests than the comparison group; program graduates had 85 percent fewer drug-related arrests than the comparison group.

It was estimated that STOP saved Oregon taxpayers \$23,235 in avoided costs per program participant in the first two years after completing the program. The majority of cost savings are to the Multnomah County Criminal Justice System at \$5,629 per client.

## **Drug Treatment Alternative-to-Prison, Brooklyn, New York**

**Program Type:** Alternatives to Incarceration.

**Target Audience:** Criminal offenders with substance abuse problems.

**Years in Operation:** 1990-present.

**Program Goals:** To divert drug-using criminal offenders to treatment while protecting community safety.

**Contact Information:** Anne Swern, Deputy District Attorney, 718-250-3939.

**Description:** In 1990, Brooklyn became the first community in the country to have a prosecutorial program providing alternatives to incarceration for

drug offenders. Drug Treatment Alternative-to-Prison (DTAP), as the program is called, diverts prison-bound felony offenders to drug treatment. The District Attorney's office is primarily responsible for screening offenders, referring them to treatment and contracting with treatment providers. As of March 2000, 1,136 defendants had been accepted into the program. Of this group, 439 successfully completed the program and had their charges dismissed; 235 clients were still in treatment. Federal legislation is currently being drafted to provide funds to communities replicating DTAP.

DTAP began under the premise that offenders were better prepared to resist drugs and crime if they received treatment rather than more costly prison time. The program targets drug-addicted defendants arrested for nonviolent felony offenses who have at least one prior felony conviction and face a mandatory prison sentence under New York State's Second-Felony Offender Law. Defendants enter a guilty plea and receive a deferred sentence. After 15 to 24 months in treatment, successful graduates have their charges dismissed. The program used a deferred prosecution model (offender does not have to enter a plea) up until 1998, when the program was changed to increase retention rates. DTAP uses a graduated system of rewards and sanctions which allows clients to make a few mistakes before being sent to prison to complete their full sentence.

An assistant district attorney screens all potential DTAP clients; those who meet program eligibility criteria are further screened by Treatment Alternatives to Street Crime (TASC), a drug assessment and referral organization. DTAP and TASC personnel work together to find the most appropriate treatment facilities for participating offenders, and the judge presiding over the case allows the defendant to enter treatment rather than prison. If the defendant is on probation or parole, the New York City Department of Probation and the New York State Division of Parole must approve as well. Of the 132 defendants accepted into treatment in 1999, the average age was 36, 61 percent were employed, 30 percent were receiving public assistance, 53 percent reported that heroin was their drug of choice, and 38 percent reported crack or cocaine.

TASC also performs case management and monitors defendants' treatment progress. Clients are

treated in a therapeutic community, consisting of three treatment phases: orientation, during which clients examine their beliefs about addiction and their own patterns of behavior; primary treatment, which involves individual, group, and family counseling; and re-entry, where clients focus on relapse prevention and adjusting to independent living. Participants also receive vocational training and assistance in securing housing when returning to the community.

In order to assure public safety in the event of treatment failure, the district attorney's enforcement team collects contact information on each client in DTAP to ensure that they can be located and returned to custody if they leave the treatment program. The team has a record of returning 97 percent of clients to court in a median time of nine days.

**Challenges:** The greatest challenge in implementing DTAP was convincing the treatment community that it would be beneficial for them to work with criminal justice clients. Treatment providers feared that partnering with the criminal justice system would compromise their ability to protect and advocate for their clients, assure the safety of treatment staff, and maintain records of success with criminal offenders. However, treatment providers soon realized that the threat of criminal sanctions produced better treatment results for criminal justice clients. After criminal justice and treatment personnel understood each other's responsibilities and goals, they worked well together.

Another challenge was ensuring that DTAP participants were referred to the most appropriate treatment programs, and that DTAP personnel could keep track of their progress in treatment. To solve this problem, the TASC systems were integrated to help DTAP refer and follow up on clients.

**Costs and Funding Sources:** To replicate DTAP would cost approximately \$270,000 annually, not including the cost of treatment. In New York, treatment costs are covered by the state, with 40 percent coming from public assistance, 40 percent from the Office of Alcoholism and Substance Abuse, and the remainder from private sources. DTAP costs \$18,000-\$21,000 per year per client (compared to more than \$60,000 per year for incarceration). DTAP costs would be lower in communities where services and salaries are not as expensive as in New York.



**Program Results:** DTAP has proven successful on many levels. As of October 15, 1999:

- **Retention Rates**—The one-year retention rate for clients was 66 percent overall and had risen to 74 percent since January 1998, when the program shifted from a deferred prosecution model to a deferred sentencing model;
- **Employment**—92 percent of employable graduates were currently working, whereas only 26 percent were employed upon arrest. In addition, a study of 117 graduates found that three-year recidivism was 33 percent among those who were unemployed, but only 13 percent among those employed;
- **Recidivism**—The three-year reincarceration rate for program graduates was less than half of the rate for the control group rate (23 percent compared to 47 percent); and
- **Cost Saving**—The 439 successful DTAP clients saved \$16.1 million in corrections, health care, public assistance, and recidivism costs.

DTAP is currently being evaluated by the National Center on Addiction and Substance Abuse at Columbia University. The \$2 million evaluation is being funded by the National Institute on Drug Abuse, and preliminary results are promising. A six month follow-up found that drug use declined more for offenders in DTAP than for offenders in prison. Heroin use declined 71 percent among program participants versus 62 percent among the control group; similar declines were found for cocaine (85 percent versus 27 percent), crack (96 percent versus 51 percent), and marijuana (83 percent versus 69 percent).

## V. Alcohol-Related Approaches

Alcohol, more than any other drug, is associated with high rates of criminal activity. According to the Bureau of Justice Statistics, nearly four in ten violent offenders report having committed their crimes under the influence of alcohol, and about four in ten fatal motor vehicle accidents are alcohol-related.<sup>96</sup> In addition, national surveys indicate that ten million young people under the age of 21 drink alcohol at least once

a month.<sup>97</sup> Underage drinkers often get alcohol from adults, who sell or provide it illegally. Law enforcement has a large role to play in reducing alcohol-related problems. Police officers are vital in identifying and arresting drunk drivers. Efforts by police to solve alcohol-related problems in communities improves quality of life and reduces crime.

One in ten arrests made in 1997 was for driving under the influence of alcohol (DUI).<sup>98</sup> Large numbers of DUI arrests stem from proactive approaches to arresting drunk drivers, such as checkpoints, which concentrate police resources at key times in high-risk places. According to *Preventing Crime: What Works, What Doesn't, What's Promising*, the greater the effort police put into proactive arrests, the greater their ability to reduce drunk driving.<sup>99</sup> Unfortunately, the time required to process a DUI arrest is often a deterrent to more enforcement. The Impaired Driver Enforcement Unit (IDEU), developed by the National Highway Traffic Safety Administration (NHTSA), is designed to reduce the time a patrol officer spends processing a DUI arrest. Once an officer determines that a driver is impaired, an IDEU van responds to the call and helps officers complete the booking process. In Phoenix, Arizona, which has six such vans in service, the time required to complete the arrest and booking process decreased from over three hours to just one hour.

Repeat DUI offenders pose a significant threat to the community. Innovative approaches targeting these high-risk drivers are gaining popularity. Ignition interlock, for example, which connects a breathalyzer to the car ignition, is an alternative to long-term license revocation. DUI probationers must blow into the device before starting their vehicles; if they have been drinking, their ignitions will not operate. In Hancock County, Indiana, almost all repeat DUI offenders had the device in their cars by 1993. Between 1990 and 1995, DUI arrests in the county dropped 40 percent, and law enforcement officers attributed the decline to ignition interlock. Another example is DUI court, which combines criminal sanctions with treatment to reduce DUI recidivism among drunk drivers with multiple arrests.

According to the 1999 *Monitoring the Future* study, conducted by researchers at the University of Michigan, nearly 90 percent of tenth graders in the United States think alcohol is easy to get.<sup>100</sup> Increased



law enforcement, including the use of sting operations targeting alcohol merchants and underage buyers, is essential in reducing underage access to alcohol. For example, the Denver Police Department's compliance check program, aimed at package beer outlets, reported that sales to underage buyers decreased from nearly 60 percent of attempts at the program's start to 26 percent after two waves of compliance checks.<sup>101</sup>

When targeting merchants, police officers often employ youths to attempt illegal sales, while other police crackdowns on underage drinking target the drinkers instead. Cops in Shops is one such program which has police officers posing as retail clerks. Offending youths are issued citations and, in some programs, are required to attend educational sessions on the consequences of alcohol use. Police departments often notify the media prior to implementing a Cops in Shops program in an effort to deter underage buyers.

In many instances, police officers work with residents to address alcohol-related issues that are causing problems in communities. In response to resident complaints about a neighborhood bar in Hayward, California, for example, police officers met with residents, mediated between the owner and residents, trained the bar's security staff to handle problems better, educated residents about civil court options, and worked with the Alcohol Beverage Control Board. After the police intervention, calls for service in the area decreased from an average of 20 per month to just one or two.

Working with alcohol servers and retailers is another way for law enforcement to create partnerships within the community. In North Carolina, for example, Alcohol Law Enforcement officers conduct a statewide B.A.R.S. (Be a Responsible Server) program, which educates licensed establishments and their employees about responsible sales of alcohol and checking for proper identification.

In addition to bars and taverns, stores licensed to sell alcohol for off-premises consumption can create problems. A 1999 study of alcohol outlets in New Orleans found a 2 percent increase in the homicide rate for every 10 percent increase in the density of such establishments.<sup>102</sup> Alcohol outlet density has also been associated with increased motor vehicle accidents and other problems that degrade neighborhoods,

such as street corner drinking. Police in Portland, Oregon worked with residents and local merchants to ban oversized bottles of beer and malt liquor in an area experiencing problems that stemmed from street drinking. Detoxification holds (which are indicators of heavy drinking) and drinking-in-public incidents were both cut in half in Portland between 1993 and 1996.

While crimes such as driving under the influence are directly linked to alcohol consumption, the role of alcohol in other crimes, such as domestic violence, is less obvious. More than two-thirds of domestic violence victims report that the offender had been drinking prior to the offense.<sup>103</sup> Police officers can be trained to identify the role of alcohol in a domestic violence incident and to respond accordingly. Being familiar with treatment options in the community can help police officers deal effectively with victims and assailants.

The following are successful examples of the various law enforcement initiatives that are underway to reduce alcohol-related crime in communities.

### **DWI/Drug Court Program, Bernalillo, New Mexico**

**Program Type:** Alcohol-Related Approach.

**Target Audience:** Nonviolent offenders convicted of multiple DWIs.

**Years in Operation:** 1997-present.

**Program Goals:** To reduce recidivism of persons charged with driving while intoxicated (DWI).

**Contact Information:** Mark Pickle, Program Director, 505-841-8184.

**Description:** In Bernalillo County, New Mexico, 5,000 people are arrested annually for driving while intoxicated (DWI). In an effort to reduce the number of arrests, Judge Michael Kavanaugh opened a DWI/Drug Court Program in July 1997. Eligible offenders go before a judge who combines criminal penalties with court-mandated treatment in an effort to break the cycle of DWI recidivism. Since it opened, 327 offenders have participated in the program, and 128 have graduated.

Nonviolent offenders convicted of at least three, but not more than five, DWIs are eligible for the

program. Although almost all—98 percent—of the participants are DWI offenders, the court also accepts other types of offenders who are addicted to alcohol or other drugs. The court is a postconviction, presentence voluntary program; offenders must be convicted before they enter the program. Program participants are supervised by DWI/Drug Court probation officers, receive mandatory alcohol and other drug treatment, comply with random drug testing, complete community service, attend victim impact panels, and appear regularly before the judge. The judge is responsible for imposing sanctions on clients as well as rewarding them when they comply with the program. Clients often develop a positive relationship with the judge, wanting to succeed in part to please him.

Defendants who violate conditions of the program face sanctions, which include a mandatory appearance before the judge and either a reduction in “points” (a certain number are needed to progress through treatment) or jail time. Upon completion of the treatment program, offenders are sentenced. They receive the mandatory minimum sentence, but instead of serving time in jail they may enter an alternative program in which they are allowed to work but must remain at home during nonworking hours.

Participants receive an average of 24 weeks of treatment, which includes counseling and 12-step meetings. During the treatment phase of the program, clients regularly appear before the drug court judge and meet with the probation officer. Urinalysis is used to detect alcohol and other drug use. Education and job training are also provided. During 12 weeks of aftercare, clients meet with a probation officer weekly, attend at least one counseling session per week, attend 12-step meetings and receive random urinalysis and breathalyzer testing. Program participants are required to pay for their treatment on a sliding scale.

Taking advantage of recent technological advances, Bernalillo is working with BI Inc. of Boulder, Colorado, to monitor repeat DWI offenders at home using remote breathalyzer units. These units are installed in the mouthpieces of standard telephone systems and transmit test information over telephone lines to a monitoring station. At random times during the day or evening, a preprogrammed computer can call the remote unit and lead the offender through an impromptu breath test. The unit is very accurate

and is nearly impossible to circumvent. Typically, a judge will order a unit installed in a repeat offender’s home for approximately six weeks. Bernalillo currently operates five of these units.

**Challenges:** One of the challenges in implementing the Bernalillo DWI/Drug Court was convincing participants that they would benefit from the treatment program. Most other drug courts operate at the felony level, and judges have the power to dismiss cases when clients successfully complete treatment. In Bernalillo, however, offenders convicted of their third DWI arrest must serve a minimum sentence whether or not they enter a treatment program. In order to make the program worthwhile for clients, the court guarantees that those who successfully complete the program will receive no more than the mandatory sentence, will be allowed to serve their sentence at home while remaining employed, and will not be put on probation after the minimum amount of time is served.

A second challenge was convincing the public defender’s office that the program was beneficial to its clients. At first, public defenders were wary about recommending the program to their clients because they would not get credit for their time in treatment if they failed the program. A few months after the program began, however, it was clear that clients were benefitting from it.

**Costs and Funding Sources:** Cost per client is approximately \$2,400, which covers treatment and administrative costs. Funding comes from local, state, and federal sources as well as clients’ co-pays (average \$1,500–\$1,800 per month for all clients). Costs for replicating the program would include treatment costs and the costs of paying a program director, one parole officer for every 30 clients, and a judge working a few hours per week.

**Program Results:** According to internal data from the DWI court, statistics for the 128 clients graduating the program between July 1997 and March 2000 are promising.

- Only 9 percent of program graduates have been rearrested for DWI, compared to the 35 to 40 percent national average recidivism rate for DWI offenders sentenced to traditional probation; and

- The program's retention rate is 82 percent.

The DWI/Drug Court is in the process of contracting with the University of New Mexico to conduct a two-year follow up study of program participants.

## Checkpoint Tennessee, The State of Tennessee

**Program Type:** Alcohol-Related Approach.

**Target Audience:** Drivers with blood alcohol levels exceeding the legal limit.

**Years in Operation:** 1994-present.

**Program Goals:** To implement a statewide sobriety checkpoint in an effort to reduce alcohol-related crashes and fatalities.

**Contact Information:** Trooper Tim Dover, Tennessee Highway Patrol, 615-741-0065.

**Description:** In March 1994, the Tennessee Highway Patrol (THP) partnered with the National Highway Traffic and Safety Administration (NHTSA) to conduct and evaluate a statewide sobriety checkpoint program that uses random testing to determine whether a driver has been drinking. Between April 1, 1994, and March 31, 1995, a total of 882 checkpoints were conducted, compared to a previous annual average of ten to 15. A total of 144,299 drivers passed through these checkpoints, resulting in 773 arrests for driving under the influence and an additional 201 arrests for other drug violations. One of the goals of Checkpoint Tennessee is to deter people from driving while intoxicated, and all checkpoints are advertised ahead of time.

During the first year of the program there were checkpoints in at least four counties every weekend, and in all counties on five weekends. Every Monday morning, all eight THP districts were required to submit reports of activity at checkpoints conducted the previous weekend. The reports were tabulated by the THP planning and resources section and used to monitor implementation of the program and to provide information for news releases.

One of the goals of the program is to ensure that states wishing to replicate the model can do so with little outside help. Toward this end, NHTSA funds are used only for equipment and evaluation; the

checkpoints are staffed by reassigning Tennessee Highway Patrol officers. Each checkpoint is required to have a minimum of four uniformed officers for reasons of safety and visibility. The Tennessee Highway Patrol invites officers from local departments in the region of each checkpoint to participate. In each of the eight THP districts, four officers were trained to operate vans outfitted with alcohol detection equipment, such as breathalyzers and passive alcohol sensors (flashlights which can detect the smell of alcohol).

Publicity is an important aspect of Checkpoint Tennessee. The program is covered on television and advertised on billboards statewide. Press releases announce checkpoints and detail the number of cars passing through checkpoints and the number of drunk drivers arrested. Surveys administered in driver license renewal offices throughout Tennessee before, during, and after the first year of the program found that 90 percent of citizens supported the use of checkpoints.

Based on the success of the Tennessee program, NHTSA awarded grants of \$1 million to Tennessee, Texas, Louisiana, Pennsylvania, and Georgia to conduct a 30-month program, beginning in the summer of 2000, aimed at reducing drunk driving fatalities using checkpoints, saturation patrols, and increased public awareness. NHTSA will evaluate the results of the programs, and a best practices manual will be written to guide other states in replicating the program.

**Challenges:** There were significant logistical challenges in implementing Checkpoint Tennessee, since all of the checkpoints had to be scheduled one year in advance. Another logistical difficulty was getting personnel and equipment to each checkpoint; four specially equipped vans had to be shared by eight THP districts. After a few checkpoints were conducted and the program became routine, personnel and equipment challenges were overcome.

**Costs and Funding Sources:** The total cost of the two-year demonstration project was \$927,594. The state provided \$475,339 for police salaries, publicity costs, and other program expenses. The funds used for the salaries were reallocated Tennessee Highway Patrol funds rather than new funding. NHTSA funding covered educational materials, equipment, and the program evaluation. Of the

NHTSA funding, \$350,000 was for equipment, including the vans, passive alcohol sensors, generators to run the equipment at the checkpoints, mobile lighting to illuminate the checkpoint area, and road signs alerting drivers to the presence of the checkpoint. Once the equipment has been purchased, the costs are primarily for staff salaries. Many larger communities already have the equipment necessary to conduct checkpoints, which would substantially reduce program costs.

**Program Results:** Results from the NHTSA evaluation are promising. During the first year of the program, drunk-driving fatal crashes were reduced by 20.4 percent, a reduction of nine fatal crashes per month. This reduction was sustained for at least 21 months after completion of the formal program. Another important measure of success is that the Tennessee Highway Patrol has continued to conduct checkpoints more often than before the program began. In 1999 there were 287 checkpoints, compared to the usual ten to 15 conducted annually.

## **Secret Shopper, The State of North Carolina**

**Program Type:** Alcohol-Related Approach.

**Target Audience:** Establishments with liquor licenses.

**Years in Operation:** 1999-present.

**Program Goals:** Reduce alcohol sales to minors.

**Contact Information:** Angela Hayes, North Carolina Alcohol Law Enforcement, 919-733-4060.

**Description:** In 1999, North Carolina Alcohol Law Enforcement (ALE) initiated Secret Shopper with funding from the Combating Underage Drinking Program, a grant program of the Office of Juvenile Justice and Delinquency Prevention (OJJDP). Secret Shopper is a statewide program designed to reduce underage alcohol sales by employing young people who have been trained by police to attempt to purchase alcohol illegally from retailers. The need for the program was great. According to the 1997 North Carolina Youth Risk Behavior Survey, two-thirds of high school students said it was easy to purchase alcohol from stores. During 1999, youths employed by ALE visited 1,000 Alcohol Beverage Control (ABC) licensed outlets. ALE has received a second OJJDP grant and will conduct 4,100 Secret Shopper visits in 2000.

During the first phase of the program, conducted in March 1999, youths were sent into 500 randomly selected businesses while ALE agents waited outside. If merchants were willing to make the sale, minors handed them fake money along with a flier stating that if the money had been real the merchant would have been arrested by the agents waiting outside. The program is designed to foster a working relationship between retailers and the police. Merchants who refused to sell to minors were given a certificate of appreciation from the chief of police, along with a button reading "I survived Secret Shopper."

The second phase of the program was conducted in October and November of 1999. All of the retailers who sold to minors in the first phase were revisited, along with randomly selected sites which did not sell and some randomly selected new sites, a total of 500 businesses.

All merchants visited by Secret Shopper are invited to participate in the B.A.R.S. (Be A Responsible Server) educational program. B.A.R.S. teaches merchants how to sell alcohol responsibly by checking identification and recognizing fake IDs. ALE agents reinforce the state's alcohol laws and introduce merchants to any new laws. Although the program has not been evaluated, results from the Secret Shopper program show that merchants who attend B.A.R.S. are less likely to sell alcohol to minors.

Along with conducting 1,000 Secret Shopper visits, ALE used the OJJDP grant to educate local law enforcement agencies throughout the state in three training sessions. Participating officers received copies of a training video and manual on how to conduct compliance checks. Copies of the video and manual were also mailed to all law enforcement agencies that did not attend.

The second OJJDP grant will allow ALE to conduct 4,100 additional visits; 2,600 of these visits will be in the ten counties with the highest rates of alcohol-related youth crime and traffic crashes. The remainder of the visits will be randomly dispersed throughout the state. All local law enforcement officials, not just ALE agents, will be invited to participate in the program and will receive a fee for each site visit they conduct. Unlike visits conducted under the first grant, law enforcement officials will have the option of arresting merchants who sell alcohol to minors. Visits are scheduled to begin in August 2000.

**Challenges:** The main implementation challenge of Secret Shopper was targeting a random sample of businesses. In order to do a random sample, all establishments randomly selected should be visited. However, some of the establishments randomly selected (topless bars and establishments with a history of violence) were unsafe for youths and were therefore excluded from the program.

**Costs and Funding Sources:** Secret Shopper was funded with a \$168,250 grant from OJJDP. This covered all costs of the project, including overtime pay for ALE agents and hourly wages for the youth workers (\$5.55). Additional costs included printing the training manual and purchasing a color printer to produce the fliers handed to merchants. For a community looking to implement a similar program, costs would be minimal. Local law enforcement can

conduct the site visits, and the only costs are youths' wages and any rewards for merchants who refuse to sell to minors.

**Program Results:** According to ALE data, the program showed that both the Secret Shopper program and the B.A.R.S. program significantly contributed to reduced alcohol sales to minors. During the first phase of the program, 26 percent of the businesses visited sold alcohol to minors. During the second phase of the program, of the establishments who originally sold to minors:

- 29 percent of those who did not attend B.A.R.S. sold to minors a second time; and
- Only 16 percent of those who attended B.A.R.S. sold to minors a second time.



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# Conclusion

*Promising Strategies to Reduce Substance Abuse* describes the most effective prevention, treatment, and law enforcement strategies. Programs that incorporate elements of these strategies are included to demonstrate how some communities are combating substance abuse and related problems. The report is designed to give community residents and local policy makers tools for constructing approaches best suited to meet their goals.

An essential component of effective local programming is collaboration among various sectors of the community. Prevention, treatment, and law enforcement systems, personnel, and resources are all part of the continuum of care vital to the success of anti-drug strategies, and they can work together to respond to the costs of substance abuse. Community leaders from schools, family groups, social services, police, probation, the courts, and others are more effective working together than working alone.

To combat substance abuse and related crime, it is also important for communities to spend their often limited resources implementing programs that have shown promise. The growing emphasis on “what works” requires that communities learn from each other and implement program models with track records of success. The programs in the report can be modified to fit the needs and resources of a specific community. When a program model is replicated, it must be evaluated to ensure it is working in the new community. Incorporating an evaluation plan into program development is critical. Evidence that a program works is also essential when appealing for public and private funding.

Communities looking to implement promising anti-drug approaches should first assess their greatest areas of need. For example, increases in youth alcohol, tobacco, and other drug use may call for a greater focus on prevention and treatment, while violent drug-trafficking may require heightened law enforcement activities. Determining gaps in services currently provided is an essential step. The local health department, police department, other state and local agencies, and citizens should all be involved in assessing community need.

*Promising Strategies to Reduce Substance Abuse* provides communities with information on what approaches are effectively reducing substance abuse and related problems nationwide and is intended to assist them in determining how strategies and programs can address their specific needs.

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# Endnotes

1. Understanding Substance Abuse Prevention, Toward the 21st Century: A Primer on Effective Programs. Center for Substance Abuse Prevention, Monograph, 1999.
2. Understanding Substance Abuse Prevention, Toward the 21st Century: A Primer on Effective Programs. Center for Substance Abuse Prevention, Monograph, 1999.
3. J. David Hawkins, "Risk Focused Prevention: Prospects and Strategies," Presentation to the Federal Coordinating Council on Juvenile Justice and Delinquency Prevention, June 23, 1989.
4. Barry S. Brown and Arnold R. Mills, eds., *Youth at High Risk for Substance Abuse*, Rockville, MD: National Institute on Drug Abuse, 1987.
5. *Preventing Drug Use Among Children and Adolescents: A Research-Based Guide*. National Institute on Drug Abuse, 1997.
6. Understanding Substance Abuse Prevention, Toward the 21st Century: A Primer on Effective Programs. Center for Substance Abuse Prevention, Monograph, 1999.
7. *Making the Grade: A Guide to School Drug Prevention Programs*. Drug Strategies, 1999.
8. *Making the Grade: A Guide to School Drug Prevention Programs*. Drug Strategies, 1999.
9. Bridget Grant and Deborah Dawson, "Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey." *Journal of Substance Abuse*, 9:103-110, 1997.
10. *Making the Grade: A Guide to School Drug Prevention Programs*. Drug Strategies, 1999.
11. *Making the Grade: A Guide to School Drug Prevention Programs*. Drug Strategies, 1999.
12. Denise C. Gottfredson, School-Based Crime Prevention, in *Preventing Crime: What Works, What Doesn't, What's Promising*, prepared by the University of Maryland, Department of Criminology and Criminal Justice for the Office of Justice Programs, 1997.
13. Michael D. Resnick, Peter S. Bearman, Robert Wm. Blum et al., "Protecting Adolescents from Harm: Findings from the National Longitudinal Study on Adolescent Health." *Journal of the American Medical Association*, 1997, 278 (10):823-832.

14. *Making the Grade: A Guide to School Drug Prevention Programs*. Drug Strategies, 1999.
15. National Drug Control Strategy, Budget Summary. Washington, DC: Office of National Drug Control Policy (February 1997).
16. *Mentoring—A Proven Delinquency Prevention Strategy*. Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin, April 1997.
17. Joseph P. Tierney, Jean B. Grossman, and Nancy L. Resch, *Making a Difference: An Impact Study of Big Brothers/Big Sisters* (Philadelphia, PA: Public/Private Ventures, November 1995).
18. *Preventing Crime: What Works, What Doesn't, What's Promising*. Lawrence W. Sherman, et al. U.S. Department of Justice Office of Justice Programs, 1997.
19. Understanding Substance Abuse Prevention, Toward the 21st Century: A Primer on Effective Programs. Center for Substance Abuse Prevention, Monograph, 1999.
20. Understanding Substance Abuse Prevention, Toward the 21st Century: A Primer on Effective Programs. Center for Substance Abuse Prevention, Monograph, 1999.
21. Deborah A. Ellis, Robert A. Zucker and Hiram E. Fitzgerald, "The Role of Family Influences in Development and Risk." *Alcohol Health and Research World*, NIAAA, 21(3):218-226, 1997.
22. *The Relationship Between Mental Health and Substance Abuse Among Adolescents*. Substance Abuse and Mental Health Services Administration, 1999.
23. *Parental Drug Abuse Has Alarming Impact on Young Children*. Washington, DC: U.S. General Accounting Office, April 1994.
24. Olds, D., Henderson, C.R., Cole, R., et al., "Long-term Effects of Nurse Home Visitation on Children's Criminal and Antisocial Behavior: 15-year follow-up of a randomized trial." *Journal of the American Medical Association*, 280(14):1238-1244, 1998.
25. 1997 PRIDE Survey. Bowling Green, KY: Parents Research Institute for Drug Education, October, 1997.
26. "National Survey Results on Drug Abuse from Monitoring the Future Study." NIDA, 1998.
27. *Preventing Substance Abuse Among Children and Adolescents: Family-Centered Approaches*. Center for Substance Abuse Prevention, SAMHSA, 1998.
28. *Preventing Drug Use Among Children and Adolescents: A Research-Based Guide*. National Institute on Drug Abuse, 1997.
29. *Preventing Substance Abuse Among Children and Adolescents: Family-Centered Approaches*. Center for Substance Abuse Prevention, SAMHSA, 1998.
30. *Preventing Substance Abuse Among Children and Adolescents: Family-Centered Approaches*. Center for Substance Abuse Prevention, SAMHSA, 1998. Also see NIJ study.

31. *Preventing Substance Abuse Among Children and Adolescents: Family-Centered Approaches*. Center for Substance Abuse Prevention, SAMHSA, 1998.
32. *The 48 Community Cross-Site Evaluation of Community Coalitions*. Center for Substance Abuse Prevention, in press.
33. *Learning from Eight of the Best. Lessons Learned from Annie E. Casey Case Studies of Effective Community Coalitions*. Community Anti-Drug Coalitions of America, in press.
34. Henrick J. Harwood, Martin Thomsom, and Travis Nesmith, "Healthcare Reform and Substance Abuse Treatment: The Cost of Financing Under Alternative Approaches" (Fairfax, VA: Lewin-VHI, Inc., February 1994).
35. *Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA) Executive Summary* (Sacramento, CA: Department of Alcohol and Drug Programs, 1994).
36. *National Treatment Improvement Evaluation Study*, SAMHSA (1997).
37. *Drug Abuse Treatment Outcomes Study*, NIDA, December 1997.
38. Mathea Falco, *The Making of a Drug-Free America, Programs That Work* (New York, NY: Times Books, 1994).
39. Dean R. Gerstein and Henrick J. Harwood (eds.), *Treating Drug Problems, Volume I* (Washington, DC: National Academy Press, 1990).
40. "Marijuana Initiates and Their Impact on Future Drug Abuse Treatment Need." *Drug and Alcohol Dependence*, April 1999.
41. R. Lennox, J. Scott-Lennox, H. Holder, "Substance Abuse and Family Illness: Evidence from Health Care Utilization and Cost-Offset Research." *The Journal of Mental Health Administration* (Special Issue: Substance Abuse Services), 19(1):83-95, 1992.
42. *Uniform Facility Data Set (UFDS)*, SAMHSA (December 1997).
43. Lauri Cawthon and Laura Schrager, "Substance Abuse, Treatment, and Birth Outcomes for Pregnant and Postpartum Women in Washington State." Olympia, Washington: Department of Social and Health Services, January 1995.
44. Vicki Breitbart, Wendy Chavkin, and Paul H. Wise, "The Accessibility of Drug Treatment for Pregnant Women: A Survey of Programs in Five Cities." *American Journal of Public Health*, Vol. 84, No. 10, October 1994, pp. 1658-1661.
45. March of Dimes data; Shawn LaFrance, "Community-Based Services for Pregnant Substance-Using Women," *American Journal of Public Health*, Vol. 84, No. 10, October 1994.
46. *Uniform Facility Data Set (UFDS)*, SAMHSA (December 1997).
47. *Services Research Outcomes Study*, SAMHSA (September 1998).
48. *National Treatment Improvement Evaluation Study*, SAMHSA (1997).

49. *National Treatment Improvement Evaluation Study*, SAMHSA (1997).
50. Shirley D. Coletti, John A. Schinka, Patrick H. Hughes, Nancy L. Hamilton, Carol G. Renard, Donna M. Sicilian, and Robert L. Neri, "Specialized Therapeutic Community Treatment for Chemically Dependent Women and Their Children." In *Community as Method: Therapeutic Communities for Special Populations and Special Settings*. Ed. George De Leon. Westport, Connecticut: Praeger Publisher, 1997.
51. Charles Winick and John T. Evans, "A Therapeutic Community Program for Mothers and Their Children." In *Community as Method: Therapeutic Communities for Special Populations and Special Settings*. Ed. George De Leon. Westport, Connecticut: Praeger Publisher, 1997.
52. Sally J. Stevens, Naya Arbiter, and Robin McGrath, "Women and Children: Therapeutic Community Substance Abuse Treatment." In *Community as Method: Therapeutic Communities for Special Populations and Special Settings*. Ed. George De Leon. Westport, Connecticut: Praeger Publisher, 1997.
53. L. Dahlgren and A. Willander, "Are Special Treatment Facilities for Female Alcoholics Needed?: A Controlled 2-year Follow-up Study from a Specialized Female Unit (EWA) Versus a Mixed Male/Female Treatment Facility." *Alcoholism: Clinical and Experimental Research*, 13(4):499-504, 1989.
54. Dace E. Svikis, Archie S. Golden, George R. Huggins, et al., "Cost-Effectiveness of Treatment for Drug-Abusing Pregnant Women." *Drug and Alcohol Dependence*, 45:105-113, 1997.
55. *Correctional Populations in the United States*, 1994. Bureau of Justice Statistics, 1996.
56. *Prisoners in 1997*. Bureau of Justice Statistics, 1998.
57. *Arrestee Drug Abuse Monitoring Program*, National Institute of Justice, 1999.
58. *Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime*. U.S. Department of Justice, Bureau of Justice Statistics, April 1998.
59. *Substance Abuse and Treatment, State and Federal Prisoners, 1997*. Bureau of Justice Statistics, 1999
60. *Keeping Score 1995*, Drug Strategies, 1995.
61. *Principles of Drug Addiction Treatment: A Research-Based Guide*. National Institute on Drug Abuse, 1999.
62. Inciardi, J.A., *A Corrections-Based Continuum of Effective Drug Abuse Treatment*. National Institute of Justice's Research in Progress Seminal Series, 1996.
63. Martin, S.S., Butzin, C.A., Saum, C.A., Inciardi, J.A., "Three-Year Outcomes of Therapeutic Community Treatment for Drug-Involved Offenders in Delaware: From Prison to Work Release to Aftercare." *The Prison Journal*, 79(3):294-320, 1999.



64. *Planning for Alcohol and Other Drug Abuse Treatment for Adults in the Criminal Justice System: Treatment Improvement Protocol (TIP) Series 17*, SAMHSA, 1995.
65. *Prisoners in 1997*, Bureau of Justice Statistics, 1998.
66. *Sourcebook of Criminal Justice Statistics, 1993*. U.S. Department of Justice, 1994.
67. *Principles of Effective Treatment: A Research-Based Guide*. National Institute on Drug Abuse, 1999.
68. *Treatment Episode Data Set*, SAMHSA, 1998.
69. *Preliminary Results from the 1998 National Household Survey on Drug Abuse*. Substance Abuse and Mental Health Services Administration, 1999.
70. *Keeping Score 1997*, Drug Strategies, 1997.
71. *Strategies for Integrating Substance Abuse Treatment and the Juvenile Justice System: A Practice Guide*. Center for Substance Abuse Treatment, 1999.
72. Etheridge RM, Craddock SG, Duntzman GH, and Hubbard RL, "Treatment Services in Two National Studies of Community-Based Drug Abuse Treatment Programs." *Journal of Substance Abuse*, 7:9-26, 1995.
73. *Comprehensive Case Management for Substance Abuse Treatment: Treatment Improvement Protocol 27*. Federal Center for Substance Abuse Treatment, 1998.
74. *Drug Abuse and Addiction Research: 25 Years of Discovery to Advance the Health of the Public*. National Institute on Drug Abuse, 1999.
75. Lee Strunin and Ralph Hingson, "Alcohol Use and Risk for HIV Infection." *Alcohol Health and Research World*, 17(1):35-38, 1993.
76. *Principles of Effective Treatment: A Research-Based Guide*. National Institute on Drug Abuse, 1999.
77. J. Normand, D. Vlahov, and L.E. Moses (eds.), *Preventing HIV Transmission, The Role of Sterile Needles and Bleach* (Washington, DC: National Academy Press, 1995).
78. *Drug Abuse and Addiction Research: 25 Years of Discovery to Advance the Health of the Public*. National Institute on Drug Abuse, 1999.
79. The 1998 figure is based on SmithKline Beecham's *Drug Testing Index for the General Workforce*.
80. *Understanding Community Policing: A Framework for Action*. Community Policing Consortium, Monograph, 1994.
81. *Forging New Links: Police, Communities and the Drug Problem*. Drug Strategies, 1997.
82. *Preventing Crime: What Works, What Doesn't, What's Promising*. Lawrence W. Sherman, et al. U.S. Department of Justice Office of Justice Programs, 1997.

83. *Preventing Crime: What Works, What Doesn't, What's Promising*. Lawrence W. Sherman, et al. U.S. Department of Justice Office of Justice Programs, 1997.
84. Herman Goldstein, "Improving Policing: A Problem-Oriented Approach." *Crime and Delinquency*, 25(2):236-258, 1979.
85. Problem-Oriented Drug Enforcement: A community-based approach for effective Policing. Bureau of Justice Assistance, 1993.
86. *Module Three: Community Policing Problem-Solving: Taking a Problem-Solving Approach to Tackling Crime, Fear and Disorder*. Community Policing Consortium, 1997.
87. William Spelman and John E. Eck, "Sitting Duck, ravenous Wolves, and Helping Hands: New approaches to Urban policing." *Public Affairs Comment*, 35(2):1-9, 1989.
88. James R. Lasley, "Using Traffic Barriers to 'Design out' crime: A Program Evaluation of LAPD's Operation Cul-De-Sac." Report to the National Institute of Justice. California State University, Fullerton, 1996.
89. *Policing Drug Hot Spots*. National Institute of Justice, 1996.
90. Thomas E. Feucht and Andrew Keyser, "Reducing Drug Use in Prisons: Pennsylvania's Approach." *National Institute of Justice Journal*, October 1999.
91. *Cutting Crime: Drug Courts in Action*. Drug Strategies, 1997.
92. *Cutting Crime: Drug Courts in Action*. Drug Strategies, 1997.
93. *Cutting Crime: Drug Courts in Action*. Drug Strategies, 1997.
94. *Cutting Crime: Drug Courts in Action*. Drug Strategies, 1997.
95. *Defining Drug Courts: The Key Components*. The National Association of Drug Court Professionals in collaboration with Drug Courts Program Office, Office of Justice Programs, 1997.
96. *Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime*. U.S. Department of Justice, Bureau of Justice Statistics, April 1998.
97. *Preliminary Results from the 1998 National Household Survey on Drug Abuse*. Substance Abuse and Mental Health Services Administration, 1999.
98. *Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime*. U.S. Department of Justice, Bureau of Justice Statistics, April 1998.
99. *Preventing Crime: What Works, What Doesn't, What's Promising*. Lawrence W. Sherman, et al. U.S. Department of Justice Office of Justice Programs, 1997.
100. "National Survey Results on Drug Abuse from Monitoring the Future Study." NIDA, 1998.

101. Preusser, D.F., A.F. Williams, and H.N. Weinstein. Policing underage alcohol sales. *Journal of Safety Research*. 25(3):127-133. 1994.
102. Richard Scribner, Deborah Cohen, Stephen Kaplan and Susan H. Allen, "Alcohol availability and homicide in New Orleans: conceptual considerations for small area analysis of the effect of alcohol outlet density." *Journal of Studies on Alcohol*, 60(3):310-316, 1999.
103. *Alcohol and Crime: An Analysis of National Data on the Prevalence of Alcohol Involvement in Crime*. U.S. Department of Justice, Bureau of Justice Statistics, April 1998.