



Preventing Youth Substance Abuse in Your Community

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This booklet is one of a series produced by the Planning Division of the Vermont Agency of Human Services to assist the work of its regional and local partners in achieving positive outcomes for Vermont's citizens. The State Team for Children, Families, and Individuals has identified 9 **outcomes**, or conditions of well-being, that form the basis for these efforts. Those outcomes are listed in the box below.

These outcomes will be achieved only by the collective efforts, formal and informal, of individuals, families, organizations, and institutions; our communities, rather than any single program, "own" the outcomes. However, communities have expressed a need for guidance about which programs and practices are most effective.

Experience is the best teacher

We need to learn from experience; and we sometimes need to make difficult choices between one program and another. Programs that focus on **preventing** problems before they start, especially in childhood, as opposed to programs that focus on remediation or treatment, hold more potential, over the long run, for achieving these outcomes.

9 Outcomes

Conditions of Well-Being for Vermonters

- Pregnant women and newborns thrive
- Infants and children thrive
- Children are ready for school
- Children succeed in school
- Children live in stable, supported families
- Youth choose healthy behaviors
- Youth successfully transition to adulthood
- Elders and people with disabilities live with dignity and independence in settings they prefer
- Families and individuals live in safe and supportive communities, where they are engaged and contributing members

In addition, in the long-run prevention programs save resources because they stop conditions from growing into larger problems that **cost the community more** in terms of lost human potential. Prevention is not a "stop-gap" strategy, but addresses the **long-term** health and well-being of the community.

The *What Works* series offers brief overviews of programs that research has shown to be effective in achieving the outcomes listed above by preventing problem conditions and behaviors and promoting positive ones.

As a practical matter, most booklets focus on programs addressing a particular aspect of our success (or failure) in achieving one of the outcomes: for example, preventing child abuse and neglect is an important measure, or indicator, of our progress toward the

outcome, "Children Live in Safe and Supported Families." Some programs have been shown to be effective in impacting multiple indicators, or even multiple outcomes; thus, descriptions of these may appear in more than one of our booklets.

Although the focus here is on specific *programs*, we also know that any program's success—and the success of a community's collective efforts—is dependent on the wider community context. Thus, we identify (on page 6) some key components of a coordinated community strategy.

Much has been learned in recent years about the strategies and characteristics, the "best practices," that underlie successful prevention programs.

Here, we call **Effective Programs** those for which research demonstrating success in changing the targeted behaviors has been published in peer-reviewed journals, or, if not so published, then those evaluated with a control-group and follow-up assessment of results. **Promising Programs** are those that appear to be successful in changing the targeted behaviors, but which do not meet the criteria for **Effective Programs**—that is, they have not appeared in peer-reviewed journals, or do not have a control-group and follow-up in their design. Finally, **Noteworthy Programs** are prevention efforts that have demonstrated success in changing relevant attitudes and knowledge, but not the targeted behaviors themselves.

Many, probably most, prevention programs implemented at the community level have simply never been thoroughly evaluated, and some of these *may* be effective. However, our aim here is to identify those where we can say with some confidence, "it works." On the one hand, our selection criteria (described above) are rigorous, so we run the risk of overlooking some worthwhile prevention activities. On the other hand, it can be useful to narrow the field to a few exemplary programs. Therefore, these booklets do not contain an exhaustive list of effective and promising programs; rather, they provide a number of illustrative examples.

Much has been learned in recent years about the strategies and characteristics, the "best practices," that underlie successful prevention programs. The best strategies are **intensive**, rather than brief or superficial; **comprehensive**, rather than focusing on a piece of the problem; and **flexible**, rather than assuming the same approach will work for everyone. There is also research that supports the importance of a strengths-based approach which recognizes, nurtures, and builds on the resiliency and strengths present in young people (Werner & Smith, 1992; Benson, 1997). A separate booklet in this series (*What works: Promoting resiliency and youth asset development*) describes this approach in detail. Other common characteristics or approaches of successful programs are described in each booklet.

One word of caution: No program, however effective in its original setting, can be transplanted to a new setting without modification, although it is possible that such alteration could weaken its effectiveness. However, any program must be sensitive to the unique attributes and needs of a particular community; there are no "cookie-cutter" programs here. Rather, we hope the information presented in the *What Works* series will provide communities with inspiration for new efforts and validation for those that are ongoing.

Booklets in the *What Works* series will be published periodically as the steady stream of new research informs us. This is what we know today; we will know more tomorrow.

*The best
strategies are
intensive,
comprehensive,
and flexible.*

Until we can address some of these underlying issues, for adults as well as for youth, we will not be likely to achieve lasting progress in prevention efforts.

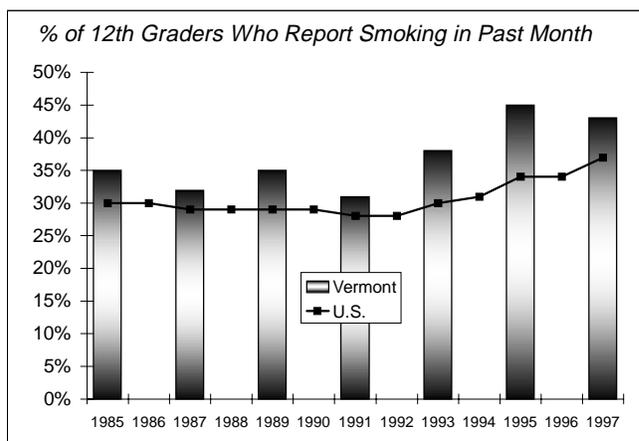
Smoking is the greatest single cause of avoidable death in our society.

THE CONTEXT FOR YOUTH SUBSTANCE ABUSE

The reasons for alcohol and other drug abuse are complex and deeply embedded in culture. They include issues of personal and family history, socioeconomic conditions, and media/advertising messages, among many others. This is as true in Vermont as it is anywhere. Until we can address some of these underlying issues, for adults as well as for youth, we will not be likely to achieve lasting progress in prevention efforts. The statistics on youth substance abuse, both nationally and in Vermont, are disturbing.

Cigarette smoking among Vermont youth is highest in a decade

Smoking is the greatest single cause of avoidable death in our society. Addiction to cigarette smoking commonly begins in the early teens, and the earlier

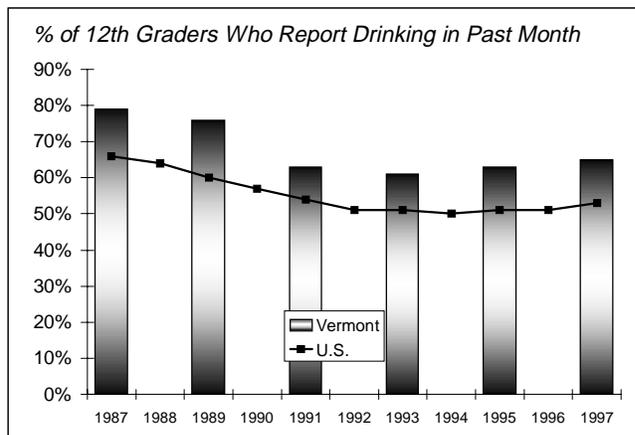


smoking begins, the more difficult it is to quit. The prevalence of smoking among Vermont youth is higher now than it's been at any time in the past 10 years. Overall, in 1997, 36 percent of Vermont 9th-12th graders reported smoking cigarettes in the past 30 days. In a national sample, 34 percent of 9th-12th graders in 1996 reported smoking in the past 30 days. According

to the Vermont Youth Risk Behavior Survey from 1995, adolescent smokers were two to 13 times more likely to engage in other risky behaviors, such as use of alcohol, marijuana, and other drugs; physical fighting; and sexual intercourse (Vermont Agency of Human Services, 1998). To the extent that adolescent smoking is a precursor to other dangerous behaviors, smoking prevention efforts may pay off in multiple areas.

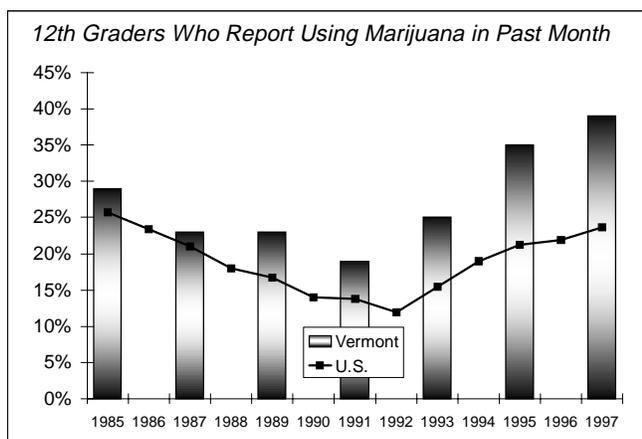
Half of Vermont high schoolers report drinking in the past month

Alcohol abuse is a major problem in Vermont, and teens are no exception. In 1996, 50 percent of motor vehicle crash deaths of teens (the leading cause of death in this age group) involved alcohol—the highest percentage in the nation. In many of those deaths, alcohol was a major contributing factor. Adolescent drinking is also associated with other problem behaviors: physical fighting, destruction of property, problems in school and on the job, and involvement with law enforcement authorities. In 1997, 50 percent of Vermont 9th-12th graders reported that they drank alcohol in the last 30 days, while 31 percent reported "binge" drinking in the last 30 days (Vermont Agency of Human Services, 1998).



Youth marijuana use in Vermont is on the rise

After cigarettes and alcohol, marijuana is the most-used illicit drug among teens. The health risks associated with marijuana usage are now well-known: damage to the lungs and cardiovascular system; and short-term loss of coordination, reasoning, and alertness. Youth marijuana use in Vermont is on the rise. In 1997, nearly



one-third of Vermont students (32 percent) reported using marijuana in the last 30 days. This is a significantly higher proportion than that reflected in national statistics (25 percent—Vermont Office of Alcohol and Drug Abuse Programs, and Vermont Department of Education, 1997).

A useful perspective for prevention may be an ecological approach that recognizes that there are more similarities than differences among different types of substance abuse behaviors.

For this reason, many effective programs target multiple substances, and multiple risk indicators. For instance, some prevention programs may focus on the use of tobacco, alcohol, inhalants, and marijuana, as well as on associated factors such as family functioning or academic achievement.

What follows is a summary of recent successful programs targeting adolescent alcohol, tobacco, and/or marijuana use. You may notice that some popular prevention programs are absent from this review. In some cases (e.g., teen centers), this is because there is to date no published research demonstrating their effectiveness in preventing or reducing substance abuse. In other cases (e.g., Project D.A.R.E.), research has shown they are *not* effective (Emmett et al., 1994). Such programs may make other valued contributions to a community, including playing a role in more-comprehensive approaches to substance abuse prevention.

In order to identify effective programs, a computer-aided literature search was conducted. The PsycLit electronic database was searched, using the following key words: "substance abuse," "teen," "adolescent," "prevention," "intervention," "smoking" and "alcohol." The Educational Resources Information Clearinghouse (ERIC) electronic database was also searched, using the key words: "substance abuse," "teen," "prevention," and "intervention."

Other useful resources may be accessed through the Internet

Office on Smoking and Health, Centers for Disease Control and Prevention:

www.cda.gov/hccdphp/osh/tobacco.htm

Center for Substance Abuse Prevention: www.samhsa.gov/csap/index.htm

National Institute on Drug Abuse, National Institutes of Health: www.health.org

National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov

National Clearinghouse for Alcohol and Drug Information:

www.health.org/survey.htm

Many effective programs target multiple substances, and multiple risk indicators.

COMPONENTS OF A COORDINATED COMMUNITY EFFORT: AN OVERVIEW

Successful community strategies to prevent youth substance abuse are likely to include some or all of the following components:

- ☆ **Opportunities for leadership by youth** in prevention programs, including teaching younger children or same-age peers, and other skill-building opportunities. (See pp. 7-16, 19.)
- ☆ **Active involvement of parents**, which may include forming mutual-support groups, assisting with school curricula, monitoring youths' activities, and otherwise participating in the lives of young people. Recent research shows that adolescents who feel emotionally connected with parents and family are less likely to use cigarettes, alcohol, and marijuana (Resnick, D. M., et al., 1997). In addition, parents' own behaviors of using, quitting, or cutting back on cigarettes, alcohol, and other drugs are powerful models for young people. (See pp. 11-14, 17-20.)
- ☆ **A K-12 substance abuse prevention curriculum** that reflects the research on "what works," and for which teachers receive specific, ongoing training. (See pp. 8-16.)
- ☆ **School policies and school-based services that serve all youth¹**, including those currently using substances, as well as those who may be contemplating use, and those worried about others' use. Student Assistance Programs that offer prevention, assessment, cessation strategies, and referral are one example of an effective school-based service. Recent research suggests that youths' feeling of connectedness with school is a protective factor against risky behavior (Resnick, D. M., et al., 1997).
- ☆ **Policies that restrict youth access to alcohol, tobacco, and other drugs**. These include enforcing existing laws regarding underage use, taking steps in homes and businesses to reduce young people's access and exposure to these substances, as well as legislative action to limit access—for example, by raising prices, removing advertising, or restricting points of sale. (See pp. 11-12.)
- ☆ **Engagement of the local media**—for example, in sponsoring and promoting alcohol-free events, carrying prevention messages, and contributing to changing community norms. (See pp. 11-13.)
- ☆ **Community-wide engagement** (including businesses, faith communities, health care providers, and civic organizations) in changing norms regarding substance use, developing youth assets², and providing youth with links to opportunities in careers, further education, and service to community. (See pp. 11-13, 17.)

Recent research shows that adolescents who feel emotionally connected with parents and family are less likely to use cigarettes, alcohol, and marijuana.

¹ For more-detailed guidance in designing school-based prevention programs, see Vermont Department of Health, Guidelines for EPSDT School-Based Health Access Programs, "Tobacco Use Prevention and Intervention Programs," and "Alcohol and Other Drug Abuse Prevention."

² For more on this approach, see *What Works: Promoting Resiliency and Youth Asset Development* in this series.

Big Brothers/Big Sisters of America

The underlying conviction of the program is that children and youth need caring adults in their lives, and that mentoring is one way to fill this need, especially for at-risk youth. There is no one model for the Big Brothers/Big Sisters (BB/BS) program, which has been implemented and adapted in many communities.

Generally, program components from BB/BS programs that have been shown to prevent or reduce substance abuse are as follows: (1) High level of contact between child and mentor (typically 3 times per month for 4 hours each meeting); (2) relationships that define the mentor as friend, not as teacher or authority; and (3) activities that take into account the preferences of the youth and the youth's family. In addition, thorough volunteer screening, and training that includes communication and limit-setting skills, have been identified as important factors in the program's success.

The Results

In comparison to a control group, based on self-reported data gathered prior to and 18 months following implementation, mentored youth in the BB/BS program were

- ✓ 46 percent less likely than youth in the control group to initiate drug use during the study period. An even stronger effect was found for minority youth, who were 70 percent less likely to initiate drug use than were minority youth in the control group.
- ✓ 27 percent less likely than control-group youth to initiate alcohol use during the study period.

*See also *What Works: Preventing Youth Disruptive or Violent Behavior*, in this series, for additional results from this program.

For more information

Tiemey, J.P., and Jean Grossman. November 1995. *Making a difference: An impact study*. Philadelphia, PA: Public/Private Ventures.

*Activities
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Life Skills Training

This program is designed to teach 7th grade students cognitive and behavioral skills for building self-esteem, resisting advertising pressure, managing anxiety, communicating effectively, developing personal relationships, and asserting rights. The program is also designed to teach skills and knowledge specifically related to resisting social influences to use tobacco, alcohol, and other drugs.

For example, students are taught the application of general assertiveness skills to situations in which they might experience pressure to smoke. These skills are taught using a combination of techniques, including demonstration, feedback and reinforcement, and behavioral "homework" assignments for outside of class. In contrast with traditional prevention approaches, only minimal information concerning the long-term health consequences of drug use is provided. Instead, information more immediately relevant to adolescents is presented, including the short-term negative consequences of drug use, the decreasing social acceptability of drug use, and actual prevalence rates among adults and adolescents.

The prevention program consists of 15 class periods taught in the 7th grade, ten booster sessions in the 8th grade, and five booster sessions in the 9th grade. Each class is designed with a specific goal and measurable student objectives. All sessions are led by regular teachers who have attended a one-day training workshop.

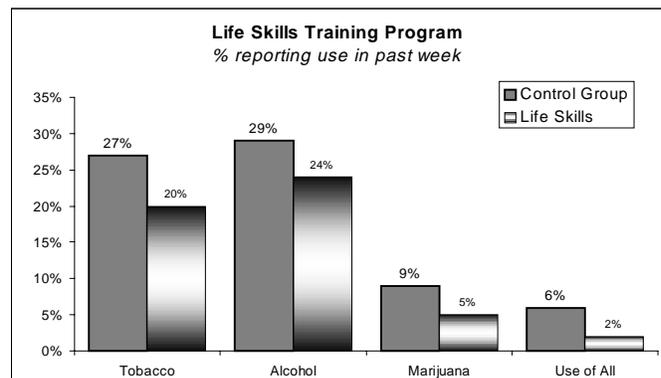
Students are taught assertiveness skills to resist pressures to smoke.

The Results

To test the effectiveness of the program, students who received the training were compared to a no-training control group, both before training and at six years following training.

Drug use was assessed using anonymous student self-report on frequency of drug use. Among students who attended at least 60 percent of program courses, at a six-year follow-up Life Skills students had:

- ✓ Significantly lower rates of monthly and weekly cigarette smoking as well as heavy (pack-a-day) smoking.
- ✓ Significantly lower rates for weekly, heavy, and problem drinking.
- ✓ Significantly lower rates for both monthly and weekly marijuana use.



For more information

Botvin, G. J., Baker, I., Dusenbury, L., Botvin, E. M., & Diaz. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association*, 273, (14), 1106-1112.

Life Skills Training Adapted: Culturally Focused Intervention

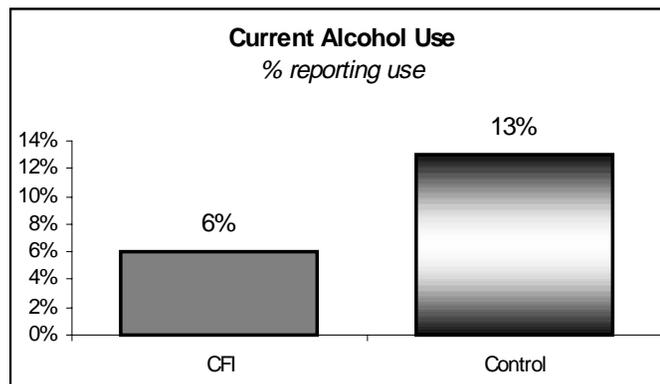
An adaptation of the previously described Life Skills Training Program, the focus here is on a "culturally focused intervention" (CFI). Although it may be possible to develop a preventive intervention that is effective with a relatively broad range of students, the rationale of the program (supported by the results) is that tailoring interventions to specific populations can increase effectiveness.

The CFI curriculum utilizes multi-cultural mythic and contemporary stories to teach life skills through live storytelling, video, and peer leaders. The myths are from ancient Greek, African, and Spanish traditions; the contemporary stories represent inner-city culture (the target population in the study reviewed here). Each story models different skills through the use of characters and context that are representative of a particular culture, and includes a main character who gradually overcomes obstacles and achieves goals by using the various skills (for greater detail, see Botvin et al., 1994). Leaders from outside the school, of the same ethnic background as the students, are hired to teach the curriculum.

The Results

At a two-year follow-up, using as a control group students who received substance abuse information only, students in the CFI group:

- ✓ Experienced significant reductions in both drinking behaviors and intentions to drink. Specifically, students in the CFI drank less often, consumed less alcohol per drinking occasion, were drunk less often, and had lower rates of reported intention to drink beer or wine than students in the control group.



For more information

Botvin, G. J., Schnike, S. P., Epstein, J. A., & Diaz, T. (1994). The effectiveness of culturally focused and generic skills training approaches to alcohol and drug abuse prevention among minority youths. *Psychology of Addictive Behaviors, 8*, 116-127.

Botvin, G. J., Schnike, S. P., Epstein, J. A., Diaz, T., & Botvin, E. M. (1995). Effectiveness of culturally focused and generic skills training approaches to alcohol and drug abuse prevention among minority adolescents: Two-year follow-up results. *Psychology of Addictive Behaviors, 9*, (3), 183-194.

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Project ALERT

The program is designed for 7th graders from urban, suburban, and rural communities. Project ALERT is based on the idea that peer pressure and peer acceptance of substance use influence young people to begin using.

Project Alert helps students develop reasons not to use drugs, identify pressures to use them, counteract pro-drug messages, learn how to say no to external and internal pressures, understand that most people do not use drugs, and recognize the benefits of resistance. The 7th grade curriculum consists of eight lessons taught one week apart. The following year, three 8th grade "booster" lessons reinforce the 7th grade program. The program is highly participatory and makes extensive use of question/answer techniques, small group exercises, role modeling, and skills practice. Teachers adjust program content to diverse classrooms where students have different levels of information and previous exposure to drugs.

The Results

In the evaluation, three groups were tested prior to and following the project: a teen-led group, an adult-led group (adults were also educators), and a control group.

- ✓ Project ALERT's most consistent results were for marijuana. For students who had not tried marijuana or cigarettes prior to the start of the program, at 15 months following the project, participants were one-third less likely to have initiated marijuana use, and were 50 to 60 percent less likely to be current users, compared to students the control group.
- ✓ For cigarette smoking, Project ALERT had little effect for those students who were nonusers prior to the program, but did have favorable effects for students who were identified initially as "experimenting" with cigarettes. Current smoking among initial "experimenters" declined 17 percent in teen-leader schools (where trained teens led the sessions) and 27 percent in health-educator schools (where adult health educators led the sessions). The number of cigarette users who used "monthly" declined by more than one-fourth in teen-led groups, while "weekly" cigarette use was reduced by almost 50 percent in the teen-led group and by one-third in the adult-led group.

For more information

Ellickson, P.L., & Bell, R. M. (1990). Drug prevention in junior high: A multi-site longitudinal test. *Science*, 247, 1299-1305.

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Project Northland

Project Northland is an example of a comprehensive, community-wide prevention strategy to reduce youth substance abuse in rural, lower-to-middle-class communities. The intervention programs follow one group of children as they move through sixth, seventh, and eighth grades. The programs include parent-involvement/education, behavioral curricula, peer participation, and community task force activities.

Each year of the intervention has an overall theme that uniquely identifies the project's programs and is tailored to the group's developmental level and school organization. The 6th grade curriculum consists of the "Slick Tracy Home Team Program," a six-session classroom- and home-based program that focuses on alcohol-use prevention. The 7th grade curriculum, "Amazing Alternatives!," consists of eight peer-led class-based lessons designed to teach students skills to resist influences to use alcohol and to encourage alcohol-free activities. The 8th grade curriculum, "PowerLines," focuses on introducing students to "power" groups (individuals and organizations within their communities (e.g., law enforcement personnel, alcohol retailers) that influence adolescent alcohol use and availability, and teaching community action/citizen participation skills (For a complete description of activities for each year, see Perry et. al., 1996).

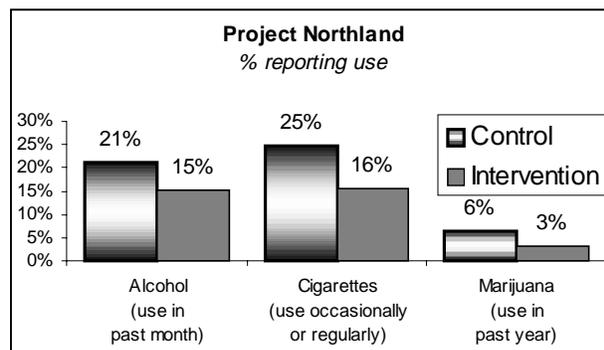
Students are taught skills to communicate with their parents about alcohol, to deal with peer influence and normative expectations about alcohol, and to understand methods that bring about community-level changes in alcohol-related programs and policies.

At the same time, changes are sought in how parents communicate with their children, how peers influence one another, and how the communities respond to alcohol use among young adolescents.

The Results

Districts participating in Project Northland were compared to nonparticipating school districts (with similar demographic characteristics). Self-report surveys before and immediately after the program indicated that, *for all students*:

- ✓ Alcohol use in the past month or week, as well as overall tendency to use alcohol, were significantly lower in the Project group at the end of the eighth grade.
- ✓ There were no significant differences between Project and control-group students in the percentages reporting cigarette, smokeless tobacco, or marijuana use.



Each year has an overall theme that uniquely identifies the project's programs.

For students who did not use prior to the intervention (baseline nonusers):

- ✓ By the end of the eighth grade, students in the Project group had significantly lower scores on the "tendency to use alcohol scale," as well as lower self-reported alcohol use in the past month and the past week, than students in the control districts.
- ✓ At the end of eighth grade, Project students reported significantly less cigarette and marijuana use than students in the control districts.
- ✓ No effects were found for smokeless tobacco use.

For students who used prior to the intervention:

- ✓ There were no differences between students in the intervention and control districts for any outcome measure

For more information

Perry, C. L., Williams, C. L., Veblen-Mortenson, S., Toomey, T. L., Komro, K. A., Anstine, P. S., McGovern, P. G., Finnegan, J. R., Forster, J. L., Wagenaar, A. C., & Wolfson, M. (1996). Project Northland: Outcomes of a communitywide alcohol use prevention program during early adolescence. *American Journal of Public Health, 86*, (7), 956-965.

Project STAR

Designed for 6th and 7th graders, the Project STAR (Students Taught Awareness and Resistance) program employs a comprehensive community-based approach, including schools, parents, mass media, and community organization strategies.

Major components of Project STAR include: (1) a 10-session school-based program emphasizing drug-use resistance skills training, delivered at 6th and 7th grade, with homework sessions involving active interviews and role plays with parents and family members; (2) a parent group that reviews school prevention policy and trains parents in positive parent-child communication skills; (3) initial training of community leaders in the organization of a drug abuse prevention task force; and (4) considerable mass media coverage of the program.

The Results

The Project was assessed at a three-year follow-up, in comparison with control groups who received mass media and community organization strategies only.

- ✓ Although tobacco, alcohol, and marijuana use increased for both Project STAR and control groups, Project STAR participants had rates of increase for marijuana and tobacco use that were significantly lower than control-group students (marijuana: program schools=12.3 percent, control schools=19.7 percent; tobacco: program schools=24.8 percent, control schools=30.5 percent).

For more information

Johnson, C.A., Pentz, M.A., Weber, M.D., Dwyer, J.H., Beer, N., MacKinnon, D.P., Hansen, W.B., & Flay, B.R. (1990). Relative effectiveness of comprehensive community programming for drug abuse prevention with high-risk and low-risk adolescents. *Journal of Consulting and Clinical Psychology, 58*, (4), 447-456.

Pentz, M. A., Dwyer, J. H., MacKinnon, D. P., Flay, B. R., Hansen, W. B., Wang, E. Y., & Johnson, C. A. (1989). A multi-community trial for primary prevention of adolescent drug abuse: Effects on drug prevalence. *Journal of the American Medical Association, 261*, 3259-3266.

Project STAR participants had rates of increase for marijuana and tobacco use that were significantly lower than those of control-group students.

Project Success

Project Success is a comprehensive, middle school program for early intervention in alcohol, tobacco, and other drug (ATOD) use by high-risk youth. It aims to reduce risk factors and increase resiliency across environmental domains.

For six to 12 months, students participate in a variety of individual and group interventions (e.g., counseling, tutoring, and community service). Interventions with parents (e.g., periodic contact, counseling, and parent education) also are conducted by project staff. Environmental interventions (e.g., training school staff in risk and resiliency strategies, developing intervention teams to access school resources, and forming links with the community to offer positive alternatives to ATOD use) are also included.

These interventions are in turn based on research that supports the following strategies: positive social interventions to reduce antisocial and problem behaviors; education about "gateway" drug use and perceived adolescent norms; community-service interventions to create positive peer experiences and community bonding; academic support to increase bonding with school; and parent training and counseling to develop clear rules and other effective management techniques.

The Results

The design included a pretest (beginning of academic year); post-test (end of academic year), and follow-up (6 months later). Results for the intervention group were compared against normative data for a similar population.

- ✓ Although all students, regardless of assignment, increased their use of drugs, increases for Project Success students were not statistically significant between pre- and post-test. Control-group students, however, did show significantly more drug use. This indicates that the program worked to hold the line against the increases in drug use between seventh and eighth grade, particularly for high-risk populations (52 percent of Project students used at least once in the past six months at follow-up, compared to 58 percent of students in the normative sample).
- ✓ Project Success kept drug abuse down. Moreover, in the case of extremely dangerous substances, such as inhalants, students in the intervention group reduced their use. (At follow up, 4.8 percent of project students used, compared to 13.9 percent of students in the normative sample.)
- ✓ Implementation of Project Success was also accompanied by reduced risk levels (as measured by a 26-item self-report) and fewer failing grades.

For more information

Richards-Colocino, N., McKenzie, P., & Newton, R. R. (1996). Project Success: Comprehensive intervention services for middle school high-risk youth. *Journal of Adolescent Research, 11*, (1), 130-163.

Project Success aims to reduce risk factors and increase resiliency across environmental domains.

Schnike & Tepavac (*No title*)

The program is designed for 3rd through 6th graders. This program is based on the idea that multiple factors are linked to drug use (e.g., low self-esteem, lack of knowledge, etc.). The program's goals are to increase student self-esteem and self-responsibility; to promote positive social skills; to inspire students to stay in school and develop enthusiasm for learning; to develop their critical thinking and decision-making skills; to train students to protect themselves from drugs and other harmful influences; and to empower them to take charge of themselves and of the planet's future

Children and teachers are given detailed curriculum materials and lesson plans to use in the classroom and at home. Information about health, warnings about drug use, and building resistance skills are central to the curriculum. Lessons aim to enable students to successfully resist the social pressures associated with substance abuse. The content is age-specific. The K-3, and 4-6 graders attend separate presentations.

The Results

At six-month follow-up,

- ✓ Third-graders who participated in the program demonstrated significantly less actual and potential substance use (i.e., intended tobacco smoking, tobacco chewing, and snuffing as assessed through an attitudes and behaviors survey) than control-group students. These students also reported significantly higher scores on self-respect and responsibility at follow-up, compared to the control group.
- ✓ Fourth graders who participated in the program also reported less actual and potential drinking time and demonstrated greater self-respect and responsibility.

No data were reported for fifth and sixth graders.

For more information

Schnike, S. P., & Tepavac, L. (1995). Substance abuse prevention among elementary school students. In C. G. Luekefeld and T. T. Clayton (Eds.), *Prevention practice in substance abuse*. New York: NY. The Haworth Press, pp. 15-27.

Lessons aim to enable students to successfully resist the social pressures associated with substance abuse.

Adolescent Alcohol Prevention Trial

Implemented with 5th graders, the Adolescent Alcohol Prevention Trial (AAPT) assesses the effectiveness of two strategies for preventing adolescent drug use.

The first strategy, resistance skills training (RT), is designed to give adolescents the behavioral skills necessary to refuse explicit offers of drugs. This strategy is based on the assumption that the reason many adolescents begin using drugs is that they lack the appropriate social skills to refuse drug offers made by peers, older siblings, and others.

The second strategy, normative education (NORM), is designed specifically to combat the influence of passive social pressures (i.e., social modeling and overestimation of friends' use). The normative education program focuses on correcting erroneous perceptions about the prevalence and acceptability of adolescent substance use and on fostering healthy attitudes regarding drug use. In addition, both programs include instruction about the social and health consequences of adolescent drug use. This component is called "information about consequences of use" (ICU). These programs are designed for 5th graders, with booster sessions conducted in the 7th grade.

Resistance training by itself may not be effective as a prevention strategy.

The Results

The effectiveness of these programs was assessed by comparing four groups: (1) an RT group, (2) a NORM group, (3) a RT+NORM group and, (4) an ICU-only control group. Resistance skills, and beliefs about prevalence and acceptability—factors understood to mediate youth marijuana, alcohol, and tobacco use—were measured by anonymous self-report questionnaires.

Results, post-program, showed that:

- ✓ The RT+NORM program was the most effective in impacting the identified mediators of adolescent drug use. The NORM-only program was also highly effective in this regard.
- ✓ The RT-only and ICU-only programs were not significant predictors of subsequent drug use.

The findings suggest that implementing resistance training and normative education programs in the 5th grade (followed by booster programs in the 7th grade) may be successful strategies for developing resistance skills and for correcting misperceptions about the prevalence and acceptability of adolescent drug use. The findings also imply that efforts to combat passive social pressures to use drugs are effective components of adolescent drug prevention curricula. Resistance training only may have the unintended effect of leading adolescents to believe that drug and alcohol use among their peers is prevalent, and, by itself, may not be effective as a prevention strategy.

For more information

Donaldson, S. I., Graham, J. W., & Hansen, W. B. (1994). Testing the generalizability of intervening mechanism theories: Understanding the effects of adolescent drug use prevention interventions. *Journal of Behavioral Medicine*, 17, (2), 195-216.

Creating Lasting Connections

Creating Lasting Connections (CLC) is a comprehensive alcohol and drug abuse prevention and family enrichment program for high-risk youth ages 11-15 and their families. It is a community-based approach that can be implemented through churches, schools, recreation centers and a wide variety of community organizations that reach youth and family. Because churches already have support systems in place, they are selected as the pivotal community agency from which to implement this program.

The CLC program is composed of two integrative components: (1) involvement with church and church activities and, (2) parent- and youth-training modules. Specifically, the church component mobilizes communities for prevention/early intervention programming that targets substance use and abuse among high-risk youth and their families. Church staff and community volunteers (who are members of the church) advocate for substance abuse prevention services and alternative activities for high-risk youth.

The second component, training of parents and youth, is quite extensive. Parents participate in three training modules, each lasting 8 to 20 hours. The curriculum focuses on the history of substance abuse prevention, and an examination of personal and group beliefs concerning alcohol and other drug use. Lessons also include skills-training to help parents develop and implement expectations and consequences for children in a number of areas. Parents and youth participate in role-playing in order to illustrate various communication styles.

The approach highlights wellness, health promotion, and existing strengths, rather than problems or family "dysfunction."

The results

The program was implemented in five church communities. It was assessed by comparing parents and youth in CLC communities to those in control communities prior to, at midpoint, and at the completion of the one-year intervention. While the CLC program showed no effects on actual drug use, the program was effective at increasing "protective factors" for both parents and youth in areas relevant to alcohol and other drug use (e.g., more-regular family meetings for discussions, less family conflict, better family communication, etc.). Other research (Hawkins, Catalano, and Miller, 1992) has shown that such protective factors are correlated with lower levels of drug and alcohol use.

For more information

Johnson, K., Strader, T., Berbaum, M., Bryant, D., Bucholtz, G., Collins, D., & Noe, T. (1996). Reducing alcohol and other drug use by strengthening community, family, and youth resiliency: An evaluation of the Creating Lasting Connections Program. *Journal of Adolescent Research*, 11, (1), 36-67.

Because churches already have support systems in place, they are the pivotal community agencies to implement this program.

Preparing for the Drug Free Years (PDFY)

PDFY is a parenting curriculum based on a social development model. It seeks to reduce risks and enhance protection against early initiation of substance use initiation by addressing patterns of parental behavior and family interaction associated with childhood substance use.

PDFY is a five-session, multimedia, skills-training program designed for rural, economically distressed parents of children aged 8 to 14. Each weekly parenting session lasts two hours.

Session 1 provides an overview of the program and of risk factors for substance abuse. Session 2 focuses on improving family management (communication, decision-making, etc.) and on how to handle early or first drug use. Session 3 focuses on friends who use drugs and on antisocial behavior in early adolescence. Session 4 is aimed at reducing the risks related to family conflict, negative interaction, poor family management, and alienation and rebelliousness. In Session 5, parents explore ways to expand opportunities for children's involvement in the family, and are reminded of the importance of expressing positive feelings and love with teenagers in order to enhance family bonding.

The Results

In comparison to a no-program control group:

- ✓ The PDFY intervention was effective in promoting proactive communication from parent to child and in improving the quality of parent-child interactions.
- ✓ PDFY also reduced mothers' negative interactions with their children.

For more information

Kosteman, R., Hawkins, J. D., Spoth, R., Haggerty, K. P., & Zhu, K. (1997). Effects of a preventive parent-training intervention on observed family interaction: Proximal outcomes from Preparing for the Drug Free Years. *Journal of Community Psychology, 25*, (4), 337-352.

The curriculum addresses patterns of parental behavior and family interaction associated with childhood substance use.

The Safe Haven Program

The goal of the program is to reduce the risks for substance use in families where one parent is a substance abuser. The Safe Haven Program uses a family skills training model, modified for an African-American urban population.

It is composed of 12 weekly structured sessions, designed to enhance parenting efficacy, parent-child bonding, the child's positive behavior, the child's school performance, the child's associations with positive peers, family cohesion, family communication, and family expressiveness and organization.

The Safe Haven Program consists of three self-contained courses, conducted concurrently to have maximum impact on risk factors. The courses are parent training, children's skill-training, and family skills-training. The parent-training program teaches appropriate methods to cope with children's problem behaviors, and ways to create more positive interactions. The children's skills-training teaches prosocial skills such as coping with loneliness, making choices, controlling anger, recognizing feelings, and coping with peer pressure. In family skills-training parents learn to set appropriate limits and to reward desired child behaviors. For a detailed description of the Safe Haven Program, including the target population, participation recruitment, program setting, and program content, see Aktan (1995).

The Results

The Safe Haven Program was evaluated using a "non-equivalent comparison" design (families with high amounts of drug use vs. families with low amounts of drug use), with pre- and post-tests.

The results included selected pre- and post- intervention (at 16 months) data on three groups of families. The results showed that the program had significant positive effects on parents, children, and whole families. However, more improvements in the children's risk and protective factors were noted for children whose parents were heavy drug users. The parents in both groups (heavy and light users) reported significant drops in illegal drug-using in the family, and significant reductions in their own drug use.

For more information

Aktan, G. B., Kumphier, K. L., & Turner, C. W. (1996). Effectiveness of family skills training program for substance use prevention with inner city African-American families. *Substance Use & Misuse*, 31, (2), 157-175.

This program enhances parent-child bonding, the child's positive behavior, school performance, and associations with positive peers.

Zucker & Noll (*No title*)

Designed for 3- to 6-year-old boys who have alcoholic fathers or alcoholic fathers and mothers, this program has been proven effective at reducing conduct disorders and is currently being tested for its effectiveness at reducing drug abuse.

The goals of the work are (1) to immediately reduce conduct problems, and (2) to improve parents' capacity to monitor and effectively discipline their children. The longer-term anticipated goals are (3) to delay onset of alcohol and other drug-related exposure and problems, and (4) to reduce school and community misbehavior.

The strategy involves a 10-month-long interaction with the family that systematically focuses on children's noncompliance, problems with parental discipline, and antisocial interactions with parents, siblings and others outside of the family. The first phase involves four months of work at weekly intervals, and phase two involves six more months of sessions every other week.

During the two phases, families are systematically taught how to monitor their child's behavior, how to contract with the child (as the basis for a rewards system), how to use time-out as a disciplinary technique, and how to solve problems. During both phases, contact with families is maintained between sessions by phone.

For more information

Zucker, R. A., & Noll, R. B. The interaction of child and environment in the early development of drug involvement: A far ranging review and planned very early intervention. In *Drugs & Society*, (1987), New York: Haworth Press, (pp. 57-97).

This program reduces conduct disorders and is being tested for its effectiveness at reducing drug abuse.

COMMON CHARACTERISTICS OF SUCCESSFUL SUBSTANCE ABUSE PREVENTION PROGRAMS

*What Works:
Preventing Youth
Substance Abuse*

Most programs addressing risky behaviors focus on a specific domain such as substance abuse, teen-pregnancy, or delinquency

However, some adolescents who take risks in one of these areas also engage in other risky behaviors (Dryfoos, 1991, 1993).

Often programs use similar strategies to prevent or reduce a number of different problem behaviors. Even interventions that target a specific problem behavior or outcome are, more often than not, multifaceted and employ a variety of interventions. Therefore, when a program is effective, we cannot always be certain what exactly it is about the program that works.

Dryfoos (1991, 1993) has identified common components of successful interventions, based on a review of programs that represent 100 different combinations of program components. "These components might be compared to the ingredients of a cake which when put together provide a satisfactory culinary experience, but taken separately might not be so satisfactory" (p. 135). What follows are those components common to successful programs that are aimed at preventing or reducing adolescent substance abuse.

☆ Intensive individual attention

Young people need a number of caring adults—not just parents—in order to thrive. Sometimes someone from outside the family can help improve family functioning and be an advocate in dealing with community institutions, particularly schools.

Especially for those children with weaker parental resources, someone may need to provide "surrogate parenting," help with school work, friendship, and counseling. For example, in one model substance abuse program, a student assistance counselor is available full-time for individual counseling and referral for treatment. Programs may use mentors, counselors, teachers, social workers, case managers, psychologists, older peers and/or community aides. The Big Brothers/Big Sisters of America programs, reviewed in this booklet, illustrate how intensive individual attention can prevent initiation of drug and alcohol use.

☆ A focus on schools

Schools are natural sites for prevention programs targeting substance abuse. In fact, sometimes an important component of prevention of high-risk behavior is the remediation of students' basic academic skills. In other cases, the social aspects of school present an opportunity for intervention. Individual and group counseling at school also have been shown to be effective in reducing rates of substance abuse. School-based clinics have been effective in helping some teens address a variety of health issues, including those related to substance abuse.

☆ Youth have a well-defined role in the program

Give adolescents "real" responsibility in peer interactions. For example, hire them and train them to teach younger children or involving them in program implementation. This approach consistently produces positive changes in participants as well as leaders.

☆ **Resistance skills and social skills training**

Children often need help developing the social competence necessary for dealing with peers, family, teachers, and the expectations of the community.

New curricula are emerging that teach children about their own risky behavior; give them the skills to cope with and, if necessary, resist the influences of their peers in social situations; and help them make healthy decisions. Improved decision making and assertiveness skills clearly lead to better outcomes. Programs based on the "social influence" model appear to delay the initiation of high-risk behaviors in general. These use techniques such as role-playing, rehearsal, peer instruction, and analyzing media messages.

☆ **Changing perceived norms**

Beliefs about prevalence and social acceptability (often inaccurate) have been shown to be important risk factors for the onset of adolescent drug use.

Many successful programs target adolescent overestimation of drug use. The curricula focus on correcting erroneous perceptions about the prevalence and acceptability of substance abuse, and on establishing healthier group norms.

☆ **Provision for training**

Many of the successful programs provide staff—professional and nonprofessional—with specific training to implement a program. Without adequate provision for training, many replications of successful programs fail.

☆ **Link to the world of work**

Life-planning curricula that show students the relationships among career choice, educational completion, and family planning, and that offer volunteer or paid jobs in community agencies, help connect youth to the "opportunity structure" of the wider community.

☆ **Comprehensive, multi-agency, community-wide programs**

The rationale for community-wide programs is that, in order to change the behavior of young people, a number of different kinds of programs and services must be in place.

It has been demonstrated consistently that comprehensive substance abuse programs are more effective than programs that implement only one strategy. The effects of including parents, teachers, peer groups, small group counseling, and role-playing seem to be mutually reinforcing. Project Northland (see pp. 11-12) is one example of a multifaceted, comprehensive prevention program for reducing adolescent drug abuse.

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