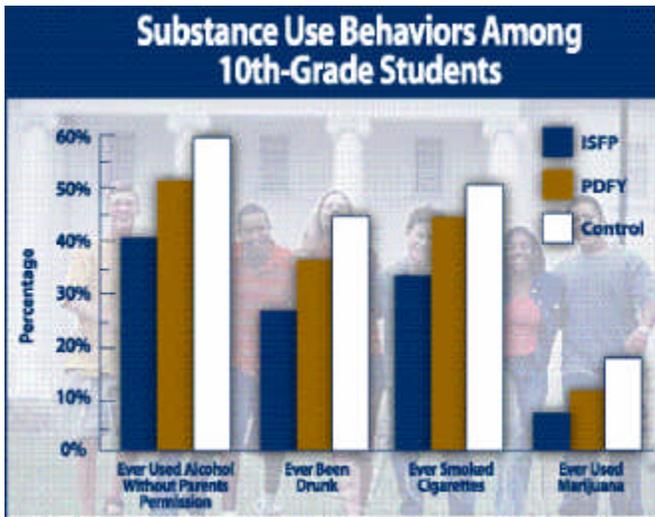


## RESEARCH FILE



### Shortened Family Prevention programs Yield Long-Lasting Reductions in Adolescent Drug Abuse

Two brief family-focused drug abuse prevention programs have produced long-term reductions in substance abuse among adolescents in rural Iowa public schools who were assigned to the programs in the sixth grade, a study funded by National Institute on Drug Abuse (NIDA) and the National Institute of Mental Health has shown. The programs may offer communities a practical approach to effective family-based drug abuse prevention.

The longer of the two programs reduced the proportion of students who used any marijuana, tobacco, or alcohol in grades six through 10 as well as students' current use of alcohol and tobacco. The shorter program significantly decreased alcohol use among 10th-graders, and reduced lifetime substance use behaviors.

“The study demonstrates that brief family interventions can reduce drug use among young people during the high-risk years when they are making the transition from childhood to adolescence,” says Dr. Richard Spoth of Iowa State University in Ames, who led the study. Reducing the number of children who begin substance use during these years may have important

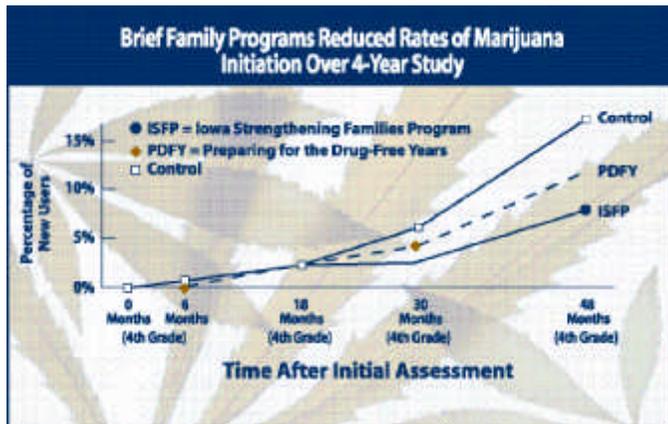
public health benefits because early initial use is associated with higher rates of substance dependence in later adolescence and young adulthood, he says.

A total of 667 families of sixth-graders from 33 public schools in Iowa were recruited for the study. The children's schools were randomly assigned to either a five-session program called Preparing for the Drug Free Years (PDFY), a seven-session Iowa Strengthening Families Program (ISFP), or a control group. The two programs were designed for families with young adolescents. The ISFP was adapted from a more extensive program that had previously been evaluated in a variety of settings and with several racial and ethnic groups.

“The purpose of modifying longer programs and trying to replicate their results in new settings is to make them more practical for communities to implement and for families to participate in them,” notes Dr. Elizabeth Robertson of NIDA's Division of Epidemiology, Services and Prevention Research. “The fact that the adapted programs achieved very positive results indicates they can be whittled down and still maintain their effectiveness,” she says.

Staff members from the Iowa Cooperative State Research, Education, and Extension Service of the U.S. Department of Agriculture worked with community facilitators to implement either PDFY or ISFP in a total of 22 schools with 459 families whose family, school, and community characteristics had previously been assessed. Eleven schools with 208 comparable families were assigned to a control group that was mailed leaflets on adolescent development and parent-child relationships. The programs were delivered in weekly evening sessions to participating families at the schools. Parents in PDFY attended four sessions and were joined by their children for a final joint session. In the relatively more intensive ISFP, parents and children attended both separate and joint sessions for six weeks and a final joint session. The weekly PDFY and ISFP sessions sought to improve how parents and children functioned individually and as a family in a variety of situations. Both programs taught skills such as effective parenting, appropriate

management of family conflicts, and how to resist peer pressure. The development of such skills has been linked to delayed onset or reduction of substance abuse.



Four years after the sixth-grade students had received the programs, researchers interviewed them. They found that significantly lower percentages of ISFP than control 10th-graders had ever initiated any of five substance abuse behaviors. Specifically, lower percentages of ISFP students than controls had begun to use alcohol, cigarettes, or marijuana; had ever used alcohol without parental permission; or had become drunk. The proportion of new marijuana users in the control group was 2.4 times greater than it was among ISFP youths.

Similarly, the proportion of controls who had been drunk or smoked cigarettes were 1.7 and 1.5 times greater than they were among ISFP youths. Participants in the PDFY program also showed lower rates of initiation of all five substance use behaviors than controls, but only the differences in lifetime drunkenness and marijuana use approached statistical significance. Nevertheless, the rates of new marijuana use and ever getting drunk were 1.5 and 1.2 times greater for controls than they were for PDFY youths. Actual rates of substance use behaviors among 10th-graders in all three groups are shown in Figure 2.

Among those 10th-graders in the three groups who had begun to use alcohol, tobacco, or marijuana, the study found lower proportions of PDFY and ISFP students than controls had used alcohol and tobacco in the preceding month and marijuana

during the preceding year. For example, frequency of past-month alcohol use among PDFY and ISFP students was about two-thirds that of controls. Among ISFP students, past-month cigarette use was approximately half that of control group students.

“Developmental timing is an important factor in the long-term effects of these interventions,” Dr. Spoth says. “Intervening at this time, in the sixth grade when kids are experimenting with substances, probably contributes greatly to the positive effects,” he says. The careful design of the interventions with their theory-based focus on parenting and family interactions also is important, he adds.

The critical element affected by both programs is the parent component, says NIDA’s Dr. Robertson. “When you provide parents with information about what to expect of children at that age, what is typical and what is not, and how to deal with some of the problems, you are shaping how parents relate to their children. Changing the family context can have a long-lasting effect because you are positively influencing the day-to-day environment of the child over a long period of time,” she says. Whether the findings of this study would apply to more diverse populations in other settings remains an open question, Dr. Robertson says. However, the original programs from which the critical elements in these programs were derived have been successfully tested in a variety of settings, she notes. In addition, the ISFP has been adapted for and is now being tested with urban and rural African-Americans and Native American families.

*Source:* Spoth, R.L.; Redmond, C.; and Shin, C. Randomized trial of brief family interventions for general populations: Adolescent substance use outcomes four years following baseline. *Journal of Consulting and Clinical Psychology* 69(4):627-642, 2001.

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