

RAND OUTCOME STUDIES

PROJECT ALERT WORKS: IT'S IN THE NUMBERS

Project ALERT works. That's not just marketing hype. Empirical research tells us so.

Statistics and long-term survey research define Project ALERT's success. Unlike most other programs, Project ALERT has been and continues to be thoroughly tested in multi-year, multi community studies. This scientific validation means that administrators and teachers know what the program can deliver, whom it can impact and the effort involved in making its results last.

What has Project ALERT achieved?

Project ALERT buys time for youth. Every year of forestalled substance use makes teens that much more mature and savvy when confronted with internal and external pressures to smoke, drink or use drugs.

Project ALERT is now used in schools in all 50 states, reaching more than a million adolescents each year. In brief, Project ALERT's middle-school drug prevention curriculum

- teaches adolescents how to resist social pressures to use harmful substances;
- reduces marijuana and cigarette initiation, weekly cigarette use, and alcohol misuse;
- helps high-risk early smokers and drinkers, the kids who need help the most;
- is equally effective in a variety of socioeconomic school settings.

What makes Project ALERT's scientific foundation so strong?

By some estimates, more than 2,000 drug prevention curricula are found in school classrooms and resource libraries but only a handful have undergone the kind of thorough testing that Project ALERT has. And only a small number of programs have received national recognition for their scientific soundness.

The RAND Corporation is behind Project ALERT. This world-famous public policy research institute is known for strictly adhering to independent, objective analysis. Two rigorous evaluations by RAND and two independent assessments currently underway mean that Project ALERT's curriculum is up-to-date and relevant.

- Starting in the mid-1980s, the pre-release version of Project ALERT was validated in 30 middle and junior high schools in California and Oregon.
- In the late 1990s, after the revised Project ALERT was released to schools, the curriculum's effectiveness was evaluated in 55 middle schools in South Dakota.
- A 4-year study by Pennsylvania State University seeks to replicate Project ALERT in eight middle schools using community program leaders hired through the Cooperative Extension Service instead of teachers.
- A 5-year study by the Pacific Institute for Research and Evaluation will implement and evaluate Project ALERT in 28 middle schools not now using any evidence-based drug prevention programs.

Project ALERT's curriculum has garnered national recognition for its scientific soundness:

- In 2001, the U.S. Department of Education awarded Project ALERT its Exemplary Program rating. One of only nine programs to receive this top status, Project ALERT was recommended for its quality and effectiveness by a panel of national experts.
- In 1999, the Substance Abuse and Mental Health Services Administration reviewed the design and outcomes of Project ALERT and designated it a Model Program, its highest ranking based on the agency's strict criteria.

These empirical underpinnings are all the more important today. School budgets are tighter than ever, increasing demands on teachers and school districts. Schools need to know that the drug prevention program they choose is backed by solid science and is nationally recognized as a gold standard.

How were the RAND studies conducted?

Pre-release validation study

The Project ALERT curriculum was validated between 1984 and 1986 in 30 middle and junior high schools in California and Oregon, encompassing urban, suburban, and rural communities representing widely diverse socioeconomic environments. For this study, more than 6,500 seventh-grade students were initially surveyed to provide Project ALERT with baseline measures of substance use before the study began. More than half of these students stayed with the study, and they were surveyed again during and after the validation study ended.

Based on their survey answers, students were assigned to one of three risk groups for each substance: low-risk *nonusers*; moderate-risk *experimenters*; and high-risk *users*.

Project ALERT, which is based on the social influence model, uses videos and interactive teaching methods, such as guided classroom discussions, small group activities, and intensive role-playing, to:

- keep low-risk *nonusers* from starting to use harmful substances;
- keep moderate-risk *experimenters* from escalating substance use;
- help high-risk *users* to reduce substance use.

For the validation study, students in 20 of the participating schools were assigned to receive Project ALERT's 11-lesson curriculum: eight lessons in seventh grade, followed by three booster lessons in eighth grade. Students in the remaining 10 schools served as the study's controls. They continued to receive whatever drug information programs their schools offered.

To find out how well Project ALERT worked, the RAND researchers surveyed students about their drug use and drug-related attitudes before, during, and after the 2-year study. They then compared the results from Project ALERT students with those from the control students.

The validation study showed that Project ALERT effectively prevented or reduced both cigarette and marijuana use among eighth-grade students, curbing the marijuana initiation rate by 30 percent and keeping over 40 of the early cigarette experimenters from becoming regular smokers. However, the lessons did not help committed cigarette smokers. Also, the program's modest effects on drinking had disappeared by the end of eighth grade. Approximately 75 percent of all students had already tried alcohol by seventh grade, indicating limited potential for preventing kids from starting to drink.

Post-release evaluation study

The RAND researchers used the results from the validation study to revise the Project ALERT curriculum before releasing it to schools in 1995. They added three more lessons in seventh grade aimed primarily at curbing alcohol misuse (such as binge drinking) rather than any drinking; helping the more-confirmed smokers; and involving parents.

This revised curriculum was then evaluated from 1997 to 1998 with more than 4,000 students in 55 middle schools in South Dakota, chosen to broaden the program's applicability to the Midwest. Students in 34 of the participating schools took part in Project ALERT, while students in the remaining 21 schools served as controls. All students were surveyed about substance use and drug-related attitudes in the fall of seventh grade before the lessons started, and in the spring of eighth grade after the lessons ended.

The results of this study not only replicated but in some areas even improved on the pre-release program's effectiveness, especially for the higher-risk early smokers and drinkers.

How well does Project ALERT work?

Key findings from the evaluation study of the Project ALERT curriculum currently used in the nation's schools include:

Project ALERT's Impact On Marijuana Use

- Although Project ALERT helped reduce marijuana use, it worked best at keeping kids from starting in the first place.
- Among the students who hadn't used marijuana or cigarettes at the start of the evaluation, Project ALERT reduced the proportion of new marijuana users by 38 percent compared to the control group.
- Among the moderate-risk students (those who had smoked cigarettes at baseline), Project ALERT reduced the proportion of new marijuana users by 26 percent compared to the control group.

Project ALERT's Impact on Cigarette Use

- Project ALERT kept students from starting to smoke and curbed smoking by students who had already started at the beginning of the evaluation.
- The proportion of new smokers in the Project ALERT group was 19 percent lower than that of the control group.
- The proportion of weekly smokers dropped by 23 percent among all students in the Project ALERT group.
- Project ALERT also kept about 40 percent of students who had experimented with cigarettes from becoming regular smokers.
- Instead of the more-committed smokers reacting negatively to Project ALERT, as they did in the pre-release study, they now responded by cutting back on their cigarette use.

Project ALERT's Impact on Alcohol Misuse

- Project ALERT reduced risky alcohol use, such as binge drinking, as well as drinking-related troubles, such as drinking that led to fights. These effects were measured by overall alcohol misuse scores.
- The alcohol misuse scores for all students were 24 percent lower in the Project ALERT group compared to the control group.
- Project ALERT was most successful for the highest-risk early drinkers, reducing their alcohol misuse scores by 20 percent.

What happens when students enter high school?

Project ALERT continues to enhance anti-drug attitudes after students enter high school, including:

- Intentions not to use harmful substances within the next six months
- Beliefs that one can successfully resist pro-drug pressures
- Beliefs that drug use is harmful and has negative consequences
- Perceptions that few peers use or approve of using harmful substances.

However, the positive outcomes on drug use seen in seventh and eighth grades erode once the Project ALERT lessons are discontinued. As other studies have shown, maintaining the effects of classroom prevention efforts requires booster programs after adolescents make the transition into high school. To address this issue, RAND has developed and is currently testing a combination middle school and high school curriculum, called ALERT Plus, that aims to sustain the program's positive effects over time.

Why are Project ALERT's results important for longer-term outcomes for youth?

Other RAND studies show that early smoking and drinking are linked to multiple public health problems later in life, underscoring the importance of confronting substance use early. For example:

- Keeping young people away from cigarettes—or at least delaying their initiation can substantially reduce tobacco addiction later on. Eighty percent of seventh graders said they only experimented with cigarettes, yet more than 25 percent of them were daily smokers by twelfth grade, compared to only 6 percent who had never smoked at baseline.
- Early drinking, even only experimenting with alcohol, is associated with problem behaviors that many young people don't outgrow. Seventh-grade drinkers were at higher risk for involvement in a wide range of problem behaviors, including substance use, violent behavior, and illegal activities when they reached their early twenties.

References

Ellickson, Phyllis L., McCaffrey, Daniel F., Ghosh-Dastidar, Bonnie and Longshore, Douglas L., "New Inroads in Preventing Adolescent Drug Use: Results from a Large-Scale Trial of Project ALERT in Middle Schools," *American Journal of Public Health*, Vol. 93, No. 11, 2003, pp.1830-1836.

Ellickson, Phyllis L., Tucker, Joan S. and Klein, David J., "Ten-Year Prospective Study of Public Health Problems Associated with Early Drinking," *Pediatrics*, Vol. 111, No. 5, 2003, pp. 949-955.

Tucker, Joan S., Ellickson, Phyllis L. and Klein, David J., "Five-Year Prospective Study of Risk Factors for Daily Smoking in Adolescence Among Early Nonsmokers and Experimenters," *Journal of Applied Social Psychology*, Vol. 32, No. 8, 2002, pp. 1588-1603.

Bell, Robert M., Ellickson, Phyllis L., and Harrison, Ellen R., "Do Drug Prevention Effects Persist into High School? How Project ALERT Did With Ninth Graders," *Preventive Medicine*, Vol. 22, 1993, pp. 463-483.

Ellickson, Phyllis L., Bell, Robert M. and McGuigan, Kimberly, "Preventing Adolescent Drug Use: Long-Term Results of a Junior High Program," *American Journal of Public Health*, Vol. 83, No. 6, June 1993, pp. 856-861.

Ellickson, Phyllis L. and Bell, Robert M., "Drug Prevention in Junior High: A Multi-Site Longitudinal Test," *Science*, Vol. 247, 16 March 1990, pp. 1299-1305.

Ellickson, Phyllis L. and Bell, Robert M., *Prospects for Preventing Drug Use Among Young Adolescents*, Santa Monica, CA, The RAND Corporation, R-3896-CHF, 1990.

For further information

Project ALERT is administered by the BEST Foundation for a Drug-Free Tomorrow: I-800-ALERT-10.