

Executive Summary

This is the fifth and final report on the evaluation of the Arizona Abstinence Only Education Program. The purpose of this report is twofold: 1) to present new findings from data collection activities in the fifth year of program implementation (July 1, 2002 to June 30, 2003) and 2) to review important findings from the preceding four years (1998–2002). Highlights from the prior evaluation reports are included to provide a developmental perspective on the program. New findings from Year 5 evaluation data (Jan 1, 2002 to Dec. 31, 2002) include the results of a follow-up survey administered to teens from four Arizona counties, Year 5 satisfaction data, a one-time stakeholder survey, information on 2001 live births in Arizona from Vital Statistics, and an update on implementation from a survey of program contractors and state-level officials. This report is organized into five parts. Part 1 provides an introduction. Part 2 and Part 3 address the who, what, and where of the program that allow for the findings to be considered in the context of what occurred. Part 4 and Part 5 answer the question “What occurred as a result of the Abstinence Only Education Program?” Part 6 presents process and outcome information on the media campaign.¹ Four supporting appendixes are also included.

The Abstinence Only Education Program

The values and norms communicated to youth by popular culture and modeled by significant adults have left youth to question when and under what circumstances sexual activity is appropriate. The templates for boy/girl relationships have undergone radical change over the past 40 years. The old movie progression of boy meets girl, boy asks girl out on a date, and, at the end of the movie, boy and girl kiss on top of the Ferris wheel has been replaced by a less defined and more ambiguous understanding of opposite sex relationships. The consequences of this shift in sexual norms have been revealed in growing rates of teen pregnancies, births, and sexually transmitted diseases that ushered in the 1990s and are described in greater detail in Part 1 of this report. In response to the problem of teen pregnancy and nonmarital births, Arizona embarked on a multicomponent, community-based Abstinence Only Education Program in May 1998—primarily targeting school children in grades four through 12, and also including parents and other adults at high-risk of nonmarital pregnancy.



Implementation Findings

Implementation findings from the five year evaluation are as follows:

- **The Abstinence Only Education Program was a major school initiative implemented broadly throughout Arizona to diverse groups.**

Over a five-year period (May 1998 to May 2003) the targeted portion of Arizona's Abstinence Only Education Program reached over 123,000 individuals, most of them preteens and teens. Several program participants have received the program more than once, fulfilling early programmatic objectives that communities and cohorts would be saturated with the abstinence-only message. Over the life of the federal grant, Arizona's Abstinence Only Education Program has grown from 13 contractors providing programming in seven of Arizona's 15 counties in 1998 to as many as 17 contractors covering 18 local program sites in 12 Arizona counties in 2001. Appendix B provides a listing of all program contractors, initial contract dates, and program budgets. In its first year, the targeted program was offered in a total of 39 schools, 30 after-school settings, and 22 live-in or residential settings and at the height of implementation, in its fourth year, reached as many as 175 middle and high schools, 42 detention and residential facilities, and 32 community and after-school locations.²

- **Arizona's Abstinence Only Education Program is marked by diversity—in target population, program delivery setting, curricula, and supplemental activities.**

The flexibility to create diverse programs was considered necessary by the ADHS to respond to the unique needs of communities throughout the state. The major component of the targeted programming across all settings is the delivery of a curriculum over a brief period of time. Most often the program is offered as part of the regular health program in school settings, and less commonly as an elective or in a physical education course. The common message delivered by these curricula was *sexual abstinence until marriage*. Programs differed, however, in their emphasis. Whereas some curricula focused on the consequences of sexually transmitted diseases and on health reasons to abstain from sex, others emphasized refusal skills and communication. Although curricula delivery is the primary service mode, some programs have implemented supplemental activities and services such as signing abstinence pledges and joining abstinence support groups. In some counties, parents are offered workshops in their local community to provide consistency in the information and the values promoted in both home and school. Additional youth programs are offered after school, in community settings, and in group homes and detention centers. High-risk adult populations



are served in residential substance abuse facilities, adult homeless shelters, and jails. This diversity is detailed in Part 3.

- **The media campaign extended the reach of the targeted portion of the program through television, radio, and other non-broadcast forms of advertising, making abstinence-only education in Arizona a truly statewide initiative.**

In addition to the targeted program component, a statewide media campaign was launched to promote the abstinence-only message to parents and school-age children. The statewide media campaign is detailed in Part 6. Media campaign highlights follow Part 6 and Appendix D describes in detail the television and radio ads.

- **State-level administrators and program contractors creatively met implementation challenges.**

The politically charged nature of abstinence, its newness as an approach to the problem of teen pregnancy and nonmarital births, and the limited experience of many of the program contractors in the abstinence area made implementation particularly challenging in the early stages. Part 2 provides tested strategies for building community support, participant recruitment and retention, contractor reimbursement, staff recruitment and retention, evaluation, classroom management, adapting curricula to local needs, addressing transportation needs, and coalition building. The lessons learned in meeting the nine challenges to program implementation are important in terms of future abstinence programming.

- **The overall satisfaction with the program among all participant groups indicates that program contractors were successful in implementing a program sensitive to all participants.**

Previous literature questioned whether or not an abstinence-only approach could be all encompassing, i.e., sensitive to those who have experienced sexual intercourse on a voluntary or involuntary basis. Information on satisfaction with the program from all groups—children, preteens, teens, parents, high-risk adults, school stakeholders, and program contractors—attests to the successful implementation of the program. Part 5 presents greater detail on participant and stakeholder satisfaction.



Program Impact Findings

The question all program stakeholders want to answer through evaluation is: “Was the program successful in motivating participants to choose abstinence?” Although a comparison or control group is needed to fully comment on the question of effectiveness, barriers to implementing this type of design prevented its use. To assess the evidence on program impact, three methods were used: a follow-up study, a vital statistics comparison, and an examination of pre-program trends in attitudes toward abstinence and sexual behaviors. Results from these three methods are highlighted below.

- **Program participants who were virgins at the completion of the program had a 95% abstinence success rate at follow-up; their sexually experienced counterparts had a 52% abstinence success rate.**

A follow-up study of 737 unmarried teen program participants from four counties examined self-reported sexual behavior, ranging from three to 13 months post participation. At the completion of the initial program, 13.5% of the teens were sexually experienced; this increased to 18.5% at the end of the follow-up period. In the absence of a comparison sample, or published findings from similar programs serving similar groups of teens, it is difficult to judge the merit of these successes. The findings are consistent with the literature that suggests abstinence-only programs work best for sexually inexperienced youths.

- **For 2001, live birth rates among program participants were lower than comparable state rates; some of the difference appears to be attributable to the program.**

Birth certificate data from Vital Statistics for 2001 permitted the comparison of live birth rates of Year 2 female program participants age 15 to 18 years and their age mate counterparts in the state of Arizona. The state live birth rates of *non-program* participants were consistently higher than those of the program participants: the state rate was 19% higher for 18 year olds, 15% higher for 17 year olds, 22% higher for 16 year olds, and 11% higher for 15 year olds. Factors that may have contributed to underestimation of the number of births in the sample of program participants include errors in recording names and birth dates and due to attrition (when program participants move out of state so that births are not recorded in Arizona). Selection bias, i.e., the equivalence of the groups in ways that might impact pregnancy and birth, was examined and population differences appear likely to counterbalance one another. Because this data



represents only participants in Year 2, the comparison of live birth rates should be followed over the next few years to determine if this is an isolated or sustained impact.

- **Over time, attitudes toward abstinence and risk-taking behavior among those entering the program have become more favorable, and this has coincided with increased exposure to abstinence-only programming.**

Indications exist of more favorable pre-program attitudes toward abstinence and an increased awareness of health reasons to abstain sexually for all teens, regardless of program location. With regard to sexual activity, there has been no change in the proportion of teens coming into the program sexually experienced; this holds true for school, after-school, and community programs as it does for teens with high-risk sexual behaviors served in probation, residential, and detention centers. There has been a significant shift toward less risky sexual behaviors among sexually experienced school, after-school, and community teens, i.e., less alcohol and drug use accompanying sex, proportionately fewer teens reporting diagnosis of STDs, greater condom and birth control use, and fewer reported pregnancies. A similar trend toward less risky sexual behaviors was not observed for probation, residential, and detention center teens.

- **Factors significantly increasing the likelihood of choosing abstinence over time are virginity, not participating in dating, and increased intentions to abstain.**

The availability of follow-up data on teen sexual behavior has allowed the examination of the factors that influence the likelihood of abstaining from sex in the post-program period. The good news for program stakeholders is that the three factors identified as significant are reasonable targets for change, rather than unchangeable characteristics such as age, ethnicity, and gender, or factors outside the realm of program influence such as family structure, religiosity, and income status. The program should be able to positively impact adolescent sexual behavior to the extent that it can impact the three key factors through 1) intervening early to prevent sexual intercourse; 2) delaying early and frequent dating behavior, increasing monitoring by adults, and encouraging alternative pro-social activities; and 3) influencing intentions to abstain.

- **The Abstinence Only Education Program positively influenced the risk and protective factors related to the long term outcomes of pregnancy and sex before marriage.**

Success is demonstrated by significant gains in short-term outcomes in a direction consistent with the program's message. Significant short-term gains have been observed among children, preteens, teens, and high-risk adults and these gains



have been demonstrated to be reliable. Significant changes on short-term outcomes were found regardless of whether the program was received in school, after-school, and community locations or in conjunction with probation, detention, and residential treatment.

- **Short-term outcomes that were maintained at follow-up include improvement in refusal skills, an increase in teens' personal value exploration, and increased endorsement of the health benefits of abstinence.**

If the short-term outcomes are to impact sexual behavior, as the literature suggests, then it is important to determine if the gains attributed to the program are maintained over time rather than lost shortly after the program ends. At least one study of an abstinence-only program reported that short-term gains disappeared after three months.³ The follow-up study of teens allowed for the assessment of short-term outcomes three to 13 months post-program. In addition to the three short-term outcomes that were maintained, taking a subsequent abstinence class had a maintenance effect for three outcomes that otherwise showed significant decline: attitudes about abstinence, norms about teen sexuality, and social information seeking. Two of the eight short-term outcomes examined, birth control attitudes and intent to pursue abstinence, showed significant decline from post-test to follow-up. The average scores on birth control attitudes at follow-up returned to pretest levels. The decline in scores on intent to abstain can largely be attributed to those having sex post program who bring their intentions in line with their behavior. Subsequent abstinence education between post-test and follow-up did not influence the decline in attitudes toward birth control or intentions to abstain.



Recommendations

The recommendations presented here are based on 1) a synthesis of findings from the five-year evaluation and 2) research and theory on adolescent sexual behavior. Recommendations specific to each part of the report are included in the first pages of each section. Overall recommendations are as follows:

1. Early intervention is important to prevent the first occurrence of sexual intercourse.

Our findings, and the findings of other researchers, have told us in many ways and repeatedly (short-term outcomes and sexual behavior) that nonvirgins are at much greater risk. Virgins had greater changes on short-term outcomes with increased intentions to abstain, and were less likely to initiate sex after having the program. This implies that the abstinence-only message is likely to have a greater impact on youth in grades seven through 10 where fewer of the teens have initiated sexual intercourse. This is also an age range where there is little disagreement among adults (even those who do not support the concept of abstinence until marriage) that postponing sexual activity is a healthy choice.

2. Prevention programs should be designed based on what is known about the factors that influence adolescent sexual behavior as revealed in theory and research.

Researchers who study the prevention of delinquent behaviors have recognized that school-based programs work best when they coexist with community-based and family-based programs, when they target at-risk students, and when they strive for early prevention.⁴ The program, as it is currently implemented, focuses primarily on the individual, touching on the psychological and cognitive domains related to adolescent sex. This limited focus excludes several relevant risk and protective domains. For instance, school-related protective factors, are a well established domain of influence on adolescent sexual behavior that is not currently addressed, or emphasized to any great extent, in the program. The Seattle Social Development Project, although not initially designed to impact sexual behavior positively impacted a range of sexual risk behaviors based on follow-up of students at ages 18 and 21. Given in grades one through six, it was designed to promote strong bonds to family and school. It included intervention with teachers, students, and student's parents and contained no "sex education" at all. In contrast, self-esteem, which is a popular target of many programs addressing children and teens, has not been linked to preventing adolescent sexual activity in the literature, and should not be a target of abstinence programs. Appendix C presents a summary of the literature on risk and protective factors related to adolescent sex.



3. Increased attention needs to be given to parents in assisting them with the sexual education of their children including helping parents articulate pro-abstinence values and expectations for their children in a clear and direct manner.

It is time for the programs to move beyond parent/child communication and address issues of parenting style and parental monitoring. Parents are in the best position to understand their own child's developmental needs and to reinforce consistent messages about abstinence and responsible sexual behavior. Research has shown that an authoritative parenting style, one that holds children accountable and sets firm and consistent expectations, is more likely to be successful at preventing youth risk behaviors than indulgent or neglectful approaches. Parental monitoring has been shown to be fundamental in decreasing a wide range of risk behaviors including sex. Finally, parents need help understanding how and why divorce and single parenthood impacts adolescent sexual behavior. The program could help unmarried parents resolve the conflict they feel when they hold one expectation for themselves and a different expectation for their children with regard to sex outside of marriage. The structure of future programming should include incentives for creative ideas that would involve parents on a variety of levels. Part 2 of the report provides specific recommendations for improving the recruitment and retention of parents.

4. Programs should specifically address dating relationships and dating expectations with youth and parents.

Despite abstinence-related knowledge and skills, dating presents a significant risk for a range of sexual behaviors up to and including intercourse. Teens who considered themselves as having a girlfriend or boyfriend at follow-up were more likely to have sex post-program. Parental expectations and parental monitoring can play a significant role in shaping expectations of youth around dating.

5. While the program was clear that its goal was sex within marriage, the presentation of this message was often perceived as moralistic. Change to an approach that aims to develop moral reasoning skills is recommended.

Over the first four years of programming some 83% of teens and 64% of high-risk adults reported a perception that the Abstinence Only Education Program teachers talked too much about what was right and wrong. Programs that present the message in a fashion that cultivates skills and practice are more likely to be effective than programs that are perceived as saying, "Do this because it is right." The educational approach should interweave the cognitive (thinking), affective (feeling), and behavioral (doing) in ways that are perceived to benefit both the self and others. Reasoning based on principles of justice or fairness as opposed to the



promotion of a rule-oriented reasoning (i.e., do what I say or equating morality with conforming to a set of “right” rules) has been demonstrated to be effective in preparing youth for the moral dilemmas they encounter. The topic of sex presents young people with a tremendous opportunity for developing their moral reasoning skills. The classroom setting presents an ideal setting for the advancement of moral reasoning because the necessary conditions are present, i.e., students are likely to be at different stages of moral reasoning, social interaction is part of normal classroom activity, and opinions are naturally divergent. When a skilled teacher provides a nonjudgmental climate combined with the ability to promote reasoning at adjacent stages the optimal setting for growth in ability to reason beyond a rule-based orientation exists. This applies to a variety of risk behaviors.

6. Some sites were more successful than others in building and maintaining coalitions. Factors related to successful coalition building should be identified and promoted.

Preventing adolescents from engaging in sexual behavior requires more than an individual and family approach, it requires a coalition of many partners. There is no question that any attempt to reduce nonmarital births in Arizona will be enhanced by collaboration with multiple community partners. In the early stages of program implementation, coalition building was difficult. Conditions are now much more favorable for successful coalition building and collaboration.⁵ For instance, the program has established abstinence-only educators as legitimate voices in the community and over the five years of the program they have gained expertise. Movement at a national level in the public health community has included an increased acceptance of the importance of abstinence as a legitimate and appropriate choice for risk avoidance. This is seen in both statements by the American Academy of Pediatrics and the Centers for Disease Control. These conditions present a favorable political and social climate for growing successful collaborations with others who are interested in addressing the problem of adolescent pregnancy as well as collaboration with a variety of others who are addressing adolescent risk behaviors.



¹ The evaluation of the media campaign in Year 3 and Year 4 of the program was presented in separate reports from the evaluation of the targeted programming: LeCroy & Milligan Associates, Inc. (2002). *Abstinence Only Education Program media and public relations campaign evaluation report June 2002*. Phoenix, AZ: ADHS, Office of Women's and Children's Health; LeCroy & Milligan Associates, Inc. (2001). *Abstinence Only Education Program public relations campaign evaluation June 2001*. Phoenix, AZ: ADHS, Office of Women's and Children's Health.

² In year five the targeted program was offered in a total of 168 schools, 9 after-school settings, 10 community, three probation, and 43 detention and residential settings.

³ Donahue, M. J. (1987, September). *Promoting abstinence: Is it viable?* Paper presented at an Office of Adolescence Pregnancy Programs technical workshop. Washington, DC.

⁴ Araki, Y., Braunschweig, S., Conant, A., & Dabel, R. (2003). Delinquency prevention: The U.S. and Great Britain. *LaFollette Policy Report*, 13(2), 9–19.

⁵ Mattessich, P. W., Murray-Close, M., & Monsey, B. R. (2001). The twenty success factors. *Collaboration: What makes it work* (2nd edition). Saint Paul, MN: Amherst H. Wilder Foundation.

