

Executive Summary

Introduction

This Executive Summary is for the third annual report on the evaluation of the Arizona Abstinence Only Education Program conducted by LeCroy & Milligan Associates, Inc. This report marks a shift in focus from examining the program's implementation to answering the question of whether the program is affecting the program participants by looking at short-term changes in participants' attitudes, intentions and behaviors. It also examines whether the characteristics of the program are differentially affecting sub-groups of participants. Although the report's focus is on outcomes, results from the study of the program's process and implementation are also provided. The evaluation adds a valuable resource by compiling the most comprehensive data on risk behaviors in Arizona youth over multiple and consecutive years. This database contains over 30,000 subjects and is available to track trends in adolescent risk behaviors.

Another important component of the Arizona Abstinence Only initiative is a public media campaign. LeCroy & Milligan Associates, Inc. is also conducting an evaluation of this effort. A summary of the third year evaluation results are provided under a separate report.

Program Funding and Components

The State of Arizona was one of the 53 States and Territories that applied for and received approval for Title V, section 510(b) funding and has committed the required matching funds to continue implementing the program into its third year. The Arizona Department of Health Services (ADHS) is responsible for the program oversight and administration. In Fiscal Year 2001, \$2,354,845 was allocated to 17 program contractors to implement abstinence only education programs to school children ages 10 -17, adults who are at-risk for non-marital pregnancy, and parents.

A public media consultant, Cooley Associates, was awarded a total of \$1,364,629 to continue implementing a statewide media campaign to promote the abstinence only message to parents and school-age children. Each of the 17 programs are required to provide a monetary match of 5% in year two, increasing to 10% for the remaining years of the project. This monetary match is to permit ADHS to expand programs, fund additional program sites, and increase the programs' sustainability in their communities. At the end of March, 2001, 8 program contractors had obtained their required matches, and 8 programs were still working on obtaining this match. One contractor was not yet required to get a match because they were in their first year of programming.

The major component of the programs is the delivery of a curriculum over a short period of time which focuses on increasing knowledge and skills, and changing attitudes and values that are theorized to prevent participants' sexual risk-taking until marriage. In Fiscal Year 2001, 13 different curricula were used with children, teens and adults.

There are federal guidelines that all abstinence only education programs must adhere to if they are funded through Title V, Section 510(b). These are typically called the “A-H Guidelines” and a grantee had to identify at least one of the A-H guidelines to be the focus of their program. Arizona Department of Health Services has also outlined state program goals and performance measures. The federal and state program guidelines, goals, and performance measures can be found in previous evaluation reports and in the Appendix to the third year report.

Highlights of Program Implementation in Year Three

Significant Program Growth in the Third Year

The local program contractors for the Arizona Abstinence Only Program have increased their enrollment numbers significantly, from 11,891 individuals in the first year to 22,712 in Year Three. These increased numbers represent considerable effort to recruit school locations, parents and their children. Program contractors were in over 134 schools, 56 after-school and community locations, 3 juvenile probation departments, and 37 juvenile detention centers.

Preteen and teen participants comprise about 90% of the program participants served. The average age of these youth is 14, and 42% are Hispanic, 36% White, 6% Native American, 5% African American, 1% Asian, and 7% mixed descent. The majority of these youth are in the 6th through 9th school grades.

A majority (72%) of the program participants attend most of the program sessions (90-100%). After-school programs have lower rates of attendance because the attendance is strictly voluntary.

Abstinence Educators Have Experience Working with Children

The educators’ background shows that they are somewhat to very experienced in working with children. They have either taught or worked with elementary, middle school and high school youth. The majority (69%) have had prior teaching experience. The educators receive training in abstinence education either through on-the-job training, self-teaching, or a combination of formal and on-the-job training.

Increase in Recruitment Successes, except for Parent Involvement

Abstinence Only Education contractors report more successes in recruiting and retaining schools and a more positive response from the community than in previous years. This has developed a positive reputation and familiarity for the program in many communities around the state.

Parents are still a challenge to recruit into the program as shown by the decreased programming for this target group from a total of 445 last year, to a total of 293 in year three. There also have been difficulties getting parent involvement by way of their children’s participation in the program.

A Sharper Focus on the Education Process

The Arizona Abstinence Only Education programs are made up of seventeen local program sites that could be considered 17 different programs. These programs use different curricula and target groups of participants in various settings and communities. The curricula vary from ones focused on sexual activity to ones focused on general decision-making skills with minimal discussion of sexual decisions. In order to understand the diversity of programming and the participants' responses to it, four major areas guided the data collection efforts in the third year of the evaluation of the program's process. These were:

- C educators' perceptions about the teaching process
- C types of teaching methods
- C curriculum content emphasis
- C trends and differences in participants' reactions to the program.

Educators Value and Use Flexibility in the Teaching Process

Educators perceive they have a high degree of flexibility to change their teaching methods and curriculum content to respond to their students' needs. They also value this flexibility. These perceptions corroborate other sources of evidence which show that educators change their curricula or lesson plans frequently in order to accommodate their students. While educators report using a wide variety of teaching methods, up to fifteen different types, the most frequently used methods were lecture, large group discussion, individual activity, and use of audio-visual materials. Worthy to note is that student role plays were less frequently used, even though the teen pregnancy prevention "best practices" literature recommends using techniques to allow students to practice the skills they are taught in the program.

A Wide Array of Content is Emphasized in the Curricula

A closer look at what concepts are taught in the programs besides abstinence only until marriage was conducted in the third year. Complete lesson plans were obtained from Abstinence educators, and it was found that ten major content areas were emphasized across all of them. These content areas were used in the outcome analysis for identifying what program elements work best for students. The content areas ranged from teaching about sexually specific areas such as refusing sexual advances and identifying potentially risky situations, to non-sexually specific areas such as identifying personal strengths, and future life goals.

Educators Vary in How they Define Abstinence

Since the Title V federal program requires that abstinence from sexual activity until marriage is taught exclusively, it was important to know how this message was being conveyed at the local level, and how students from different backgrounds might respond to it. The educators both across and within the local program sites showed a wide variation in how they define abstinence. In particular, this variation was seen for how much they:

- C include the "until marriage" message,
- C emphasize the importance of marriage
- C how they define sexual activity.

Nine different definitions of abstinence were coded from the educators' responses, and 43% of the educators employed the most strict definition of abstinence: "No sexual activity until marriage."

Similarly, educators vary in how they define sexual activity within the context of abstinence. Educators were asked to indicate what eight different types of sexual behaviors--from hugging and kissing to anal, oral, and vaginal sex--they talk about with their students (categorized by age). The majority of educators talk about vaginal, anal, and oral sex primarily with teen and adult students, and they cover a wider range of sexual behaviors with the older age teen groups. Some educators reported that they only define what sexual activity is if students ask them. Given that Title V does not delineate sexual activity, it is not surprising that there is variation in the educators' definitions. This issue is becoming heightened among the national abstinence only program groups because there currently does not exist consensus on whether to specify what sexual activities to abstain from or not (Remez, 2000).

For example, some educators are committed to being as specific as possible so adolescents are clear about the abstinence message, and others insist that specifying behaviors violates a child's innocence and amounts to providing a "how-to" manual (Remez, 2000). It appears that Arizona abstinence educators also reflect this lack of consensus.

Students Want Specific Definitions of Sexual Activity

Students do want to know what specific sexual activities to abstain from, as indicated by the questions students ask about abstinence. That is, educators said that the most frequent questions students ask about abstinence have to do with specifying what behaviors are considered "sex." For example, students ask if anal and oral sex, and masturbation "count." Several educators report that students believe that these behaviors are not sex. This belief is not unusual given that there is growing evidence, largely gathered by journalists, not researchers, that adolescents might be turning to sexual behaviors other than vaginal intercourse that avoid pregnancy risk but leave them vulnerable to STDs including HIV (Remez, 2000).

Students with Different Backgrounds and Experience React Differently to the Abstinence Message

About 78% of the educators said that they notice ethnic differences among their students. Educators most frequently mentioned noticing differences for students with a Hispanic background. The differences some educators noted are that they think that Hispanics tend to value having a child whether one is married or not, and that the timing of sex and marriage is earlier. Some educators feel these differences make Hispanic students more receptive to the abstinence message while others do not. On the participant survey, Hispanic students, as compared to Whites, do not show any differences on their intentions to abstain from sexual activity over and above other characteristics, but they do show a significantly higher endorsement of the willingness to have a child as an unmarried teen.

Students' sexual experience also influences their reactions to the abstinence message. Educators most frequently report that sexually experienced students are usually less receptive to the abstinence message and are more vocal and open in class discussions about sexual activity. These students desire more specific

information about STDs, pregnancy, and contraceptive methods. On the other hand, students with less sexual experience are more open to abstinence but less comfortable talking about sexually related topics. The self-report data from the surveys also corroborate the educator reports. That is, students who self-report engaging in sexual behaviors, particularly sexual intercourse, are less interested in learning about abstinence, and have lower intentions to abstain from sex.

Students Continue to Report Moderate to High Satisfaction with the Program

Students' satisfaction with the program has remained high in the third year of programming. Children and preteen participants mean average satisfaction scores range from 3.3 to 3.8 on a scale of 1 to 4, with 4 being high satisfaction or endorsement. For teens and adults, the ratings are similar for satisfaction, with average satisfaction ratings of 3.3 and 3.5 respectively on a scale of 1 to 4. Teens and adults were also asked to rate how much the program changed their attitudes, values and knowledge about premarital sexuality, as well as the amount of communication about sexual topics with their friends and parents. On a 5-point scale with 1 being "much less" to 5 being "much more" teens and adults gave an average response rating of 4. This indicated they felt somewhat more in control of their behavior and decisions about sex and somewhat more clarity about their attitudes and values about sex. However, teens say the program did not help them communicate more with their parents about sexuality.

Characteristics of the Preteen and Teen Program Participants

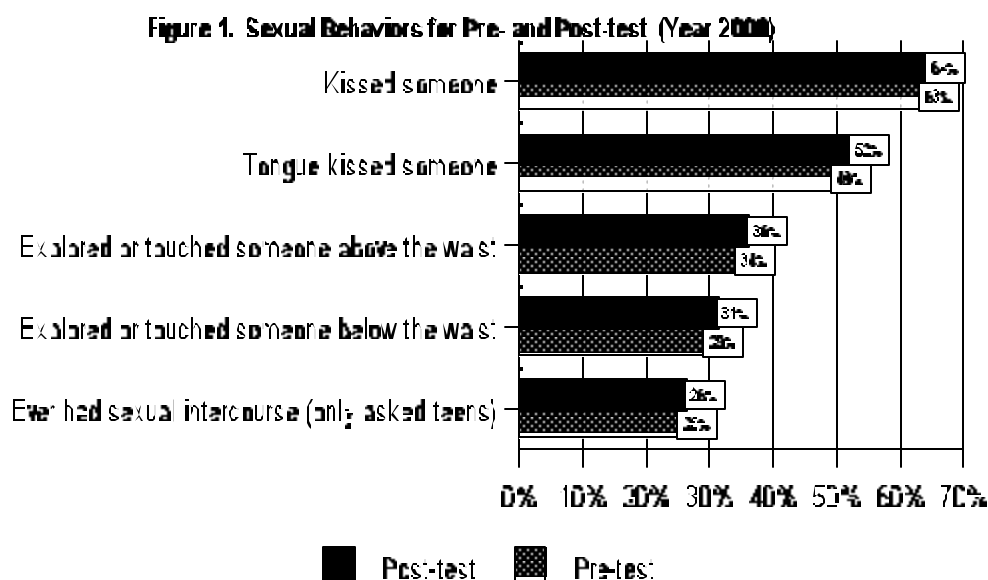
The number of preteens and teens who completed both a pre-program and post-program survey was 12,532. This sample is used for the descriptive and primary outcome analyses and findings. Table 1 below shows a comparison of the demographic characteristics over the past three years for preteens and teens combined. The largest changes include an increase of programming in school settings, a reduction of programming in residential facilities (for example, detention centers and group homes) and an increase in the percentage of participants who have received prior abstinence education.

Table 1. Demographic Comparisons From 1998 to 2000	1998	1999	2000
<i>Percent Hispanic</i>	50%	53%	42%
<i>Percent receiving program in school</i>	76%	84%	89%
<i>Percent receiving program in residential facility</i>	10%	7%	3.3%
<i>Percent female</i>	58%	54%	54%
<i>Percent in two parent household</i>	70%	68%	76%
<i>Percent with prior sex education</i>	67%	67%	71%
<i>Percent with prior abstinence education (teen only)</i>	30%	40%	48%

Site serving largest percentage of people	Passion and Principles (36%)	St. Joseph's Hospital (19%)	St Joseph's Hospital (17%)
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Preteen and Teen Sexual Activity Prior to Starting the Abstinence Only Education Program

Figure 1 shows the results of the sample's reported sexual behavior at the pre-test and post-test periods. All reported sexual behaviors increased from the pre-test to the post-test, however, the increases were small. These differences are most likely due to adolescents' normal developmental changes.



Prior to the Abstinence Only Education program 23% of 7,270 teens reported "ever having sexual intercourse." These teens were categorized as "non-virgins" and their backgrounds are summarized separately because they represent a high-risk group for continued sexual activity, STDs, pregnancy and non-marital births.

Similar to last year's sample, when compared to the virgin teens in the sample, the non-virgins were more frequently youth who resided in detention centers and group homes (17% of non-virgins in detention centers versus 1.6% of virgins in detention centers.)

Sexual activity increases with the age of the youth, with 9% of those in the 8th grade reporting they have had sex, increasing to 60% in the 12th grade. The table below shows these results. These percentages are similar to sexual activity rates reported for adolescents nationally.

Table 2. Sexual Activity Reported by School Grade Level (Year 2000)

Grade	Percent who have ever had sex	Percent had sex in last 30 days	Mean number of partners ever
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8	9	4	3.22
9	19	9	3.40
10	35	15	3.82
11	54	24	3.28
12	60	36	4.65

Sixty-six percent (66%) of the teens reported they used some form of contraception on their most recent sexual experience.

Twenty-one percent (21%) of non-virgin youth had been treated by a doctor for an STD. About 19% said they had been pregnant or got someone pregnant, and a total of 15% were a parent of at least one child. A total of 27 individuals (1.7% of sexually active youth) reported being currently married.

The Program Outcome Findings for Preteens and Teens

The analysis was conducted in three major steps and was based on answering five major evaluation questions. The following summarizes the answers to these questions.

- 1) *Does the abstinence only program model predict existing sexual attitudes, intentions and behavior before program participants enter the program?*

The program model was tested analytically using the participants' survey responses and it was found to adequately predict both intentions to abstain, and sexual behavior prior to students starting the program.

Since the program model adequately predicts intention to abstain from sexual activity and sexual behavior—the primary outcomes of interest—then it means that the Abstinence Only program is focusing on the right factors that could potentially have an effect on changing sexual behavior.

- 2) *Were there average changes in the participants' attitudes, beliefs and intentions after receiving the Abstinence Only program?*

Preteen and teen participants showed average changes in many areas after receiving the program. However, only teen participants showed average changes in intentions to abstain from sexual activity. The average changes found were small, but they were statistically significant and reliable, and in a positive direction.

- 3) *Was the abstinence only program responsible for any of the reported changes in the participants?*

The major outcome findings revealed there is differential change among the preteen and teen participants that were due to aspects of the program and participants' personal characteristics. The changes due to the program were very small, but statistically significant. These results were similar to last year's findings, with a few exceptions. Although the overall average score for intentions to abstain showed no changes for preteens, when the effects of the program were accounted for, it was found that some preteens did

change more than others. Also, preteens showed more change in their intentions to abstain due to the program than teens did. The program features that best predicted preteen's and teen's changes in their intentions to abstain from sexual activity were:

For Teens: Personal benefits of abstinence; Social networks and influences; and the use of a variety of teaching strategies.

For Preteens: Health benefits of abstinence; personal benefits of abstinence; topics about puberty; abstinence skill building; general efficacy and decision-making; social networks and influences; variety of teaching strategies; percent of program attended; smaller class size.

4) *What was the influence of participants' characteristics on their change in intentions to abstain?*

Participants who were "abstinent" prior to the program are more likely to endorse intentions to abstain from sexual activity.

Conversely, participants who have engaged in some form of sexual activity, are less likely to change their intentions to abstain from sexual activity.

In addition, a participants' age, gender, and ethnicity also influenced how they changed in their intentions to abstain from sexual activity.

5) *Were there any unintended effects of the program?*

There continues to be a finding which indicates that the program may have decreased the average ratings of the importance of birth control from pre-test to post-test. Examples of the items that teens were asked which indicates their beliefs about the importance birth control are: *Condoms are so ineffective it is not worth using them. If someone is planning to be abstinent, he or she doesn't need to know about other kinds of birth control.*

On the post-test, students showed a small but significant average increase in the endorsement of these items.

The Program Effects on Adults

A total of 151 adults completed both a pre- and a post-test survey in Year Three. Most of these adult respondents (97%) were from the Salvation Army residential substance abuse treatment facilities in Phoenix. Adults increased significantly in their acceptance of the abstinence message. Some of the program features, the participants' characteristics and past experiences with sexual abuse affected this change. Major limitations to these findings are that participants are primarily residents of a substance abuse program where there are high attrition rates. The results could be influenced by the fact that the participants who remain in the program are more favorable to abstinence, and could also be affected by the treatment they are receiving. Without a comparison group these findings must be interpreted with caution.

The Results from the Parent Workshops

Parents highly endorsed abstinence until marriage for their children. Similar to last year's results, the majority of parents had not before participated in such a program. The parents overall satisfaction with the program was high as in past years. The majority indicated that they felt more comfortable talking to their child about sexual abstinence, and 95% of the parents felt more willing to talk to their child about sexuality.

More Complete Answers are Yet to Come

The participants' satisfaction with the program remains positive. The students say they feel somewhat more knowledgeable about sexuality, more in control of their behavior and decisions about sex, and they have more clarity about their attitudes about sex. However, there is still more data that needs to be collected and examined in order to address the question of whether the program is delaying sexual activity until marriage, and reducing non-marital birth rates. Information will be available in the future for answering whether the program is effective for preteens and teens. For example, next year the delayed treatment comparison groups, the national comparison tables, and the 1998-2001 participant pre-surveys will provide data to be used as comparison groups. Also, the participants' post-program live birth data extracted from the ADHS Vital Records database will be an important outcome indicator that will be available in the future.

Recommendations for the Program

< **Encourage More Parent Involvement**

Research continues to show that parent involvement in their children's lives protects adolescents from engaging in risk behaviors. Arizona Department of Health Services and the program providers should continue to explore more effective ways for obtaining parent involvement.

< **Conduct Further Abstinence Only Educator Training on Best Practices for Prevention Programs**

The flexibility educators employ with their teaching material has advantages and disadvantages. The advantage is that the program may be more accessible and interesting for the students. The disadvantage is that it increases the chances that educators may stray too far from the original intent and goals of the program, resulting either in unintended or weaker program effects. For example, the finding that some students decrease their ratings of the importance of birth control may be the result of some educators over-emphasizing the failure rates of condoms. It is unclear at this point in the evaluation whether some students are seeing birth control methods as less important because they are choosing abstinence or whether students, regardless of their intentions and behavior, are viewing condoms as not having any protective capacity. Also, the lack of specificity in some educators' definitions of sexual activity may also increase students' confusion about abstinence and therefore decrease the program effects. Offering a state-wide training in best practices for pregnancy prevention programming may help to ensure consistency and accuracy in the program content.

< **Consider Using the Evaluation Database for Public Health Program Planning**

The evaluation has amassed a large database of over 30,000 Arizona adolescents. It could be used to track adolescent risk behavior over time which could in turn provide valuable information to public health program and policy planners.