2015

Teen Pregnancy Prevention Program

Year Five Outcome Evaluation Report for the Southern Nevada Health District

This is the Year Five Evaluation Report for the Southern Nevada Health District's Teen Pregnancy Prevention Program.

Nevada Institute for Children's Research and Policy
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Nevada Institute For Children's Research & Policy

NICRP

This report was prepared by the Nevada Institute for Children's Research and Policy through a contract with the Southern Nevada Health District

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About the Nevada Institute for Children's Research and Policy

The Nevada Institute for Children's Research and Policy (NICRP) is a not-for-profit, non-partisan organization whose primary goal is to advance the well-being of children in Nevada. As a research center in the School of Community Health Sciences at the University of Nevada, Las Vegas, NICRP is dedicated to conducting academic and community-based research that helps guide the development of policies, practices, and programs which serve to enhance the health and well-being of children and families. For more information about NICRP, please contact us or visit our website at http://nic.unlv.edu.

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1. Executive Summary

In the fall of 2010 the Southern Nevada Health District (SNHD) was awarded funding from the Federal Office of Adolescent Health to implement an evidence based teen pregnancy prevention curriculum. They partnered with the Department of Juvenile Justice Services, the Clark County Department of Family Services, and The City of Las Vegas to offer this curriculum to the youth in juvenile detention, probation, community centers, and life skills classes for youth aging out of the foster care system. The Nevada Institute for Children's Research and Policy (NICRP) was contracted to complete the outcome evaluation for this project and collected data to help measure the program's progress toward meeting its goals. The program was implemented over a five year period with the goal of reducing teen pregnancy and birth rates, as well as the rate of sexually transmitted infections among adolescents in Southern Nevada. To achieve these goals, the SNHD selected two evidence based curricula: Be Proud! Be Responsible! and ¡Cuidate!. Both are designed to educate youth about protecting themselves from sexual health risks. Adolescents who participated in the program also completed surveys to allow for an evaluation of the program's impact on their knowledge, attitudes, and behaviors related to sexual health.

Year One of this project was considered a "pilot" year to allow for adjustments in curriculum implementation, venues, and survey instruments. Therefore, the Year One Pilot data is not included in the analyses for the current report. The current report is based on the cumulative data collected during Year Two, Year Three, Year Four, and Year Five of the project.

During Years Two, Three, Four, and Five of the project, a total of 3060 youth were enrolled in the program (completed a pre-survey) and of those, 2565 (83.8%) completed the course. Youth from juvenile detention, probation, foster care, and The City of Las Vegas participated in the Teen Pregnancy Prevention Program. Data collection for this project ended August 31, 2015. At the time data collection ended, 2241 participants had become eligible for the 3-month follow-up survey of which 1053 were completed, for a 3-month follow-up survey response rate of 47.0%. In addition, 2091 participants had become eligible for a 6-month follow-up survey of which 866 were completed, for a 6-month follow-up survey response rate of 41.4%.

Findings through Year Five

The Southern Nevada Health District chose to focus on five measurable goals that serve as indicators of improved sexual health and safety for the target population and would likely help to reduce teen pregnancy and STI occurrence. Each of these goals, and SNHD's progress toward these goals, are discussed in more detail below.

For this project, the 3-month follow-up survey response rate was 47.0% (1053 surveys completed out of 2241 due) and the 6-month follow-up survey response rate was 41.4% (866 surveys completed out of 2091 due). It is important to note that the status of many of the outcome goals in this report is based on the survey responses of less than half of the overall program participants. This should be taken into consideration when evaluating the true impact of the program.

Following is a brief description of each goal, how it was measured, and the findings.

OUTCOME GOAL 1: *80% of program participants will report an increase in knowledge about HIV/AIDS transmission and prevention immediately following the curriculum*

Program participants were surveyed prior to and immediately following course completion. At both points of measurement, participants were administered a series of ten true/false statements designed to measure knowledge about HIV/AIDS transmission and prevention. Of the participants that completed the course and the entire series of questions both before and after the course:

- 78.4% demonstrated an increase in knowledge (answered at least one more question correctly after completing the course)
- 16.4% demonstrated no change in knowledge
- 5.2% demonstrated a decrease in knowledge of (answered at least one fewer question correctly after completing the course)

The Southern Nevada Health District came close, but did not meet the goal of having 80% of program participants demonstrate an increase in knowledge about HIV/AIDS transmission and prevention immediately following the curriculum.

OUTCOME GOAL 2: 65% of program participants will report an increase in intention to abstain from sex at least 6 months post-curriculum

This goal was assessed by comparing participant responses at pre-survey to the question, "Do you intend to have sexual intercourse in the next year, if you have the chance?" to participant responses to the same question at 3- and 6-month follow-up. Response options ranged from 1 ("Yes, definitely") to 4 ("No, definitely not"). Of the participants that completed the course, provided valid responses to the question on both surveys being compared, and at pre-survey did not answer, "No, definitely not" to the question, the intention to abstain score, when compared to pre-curriculum, increased for:

- 16.6% of participants immediately following course completion
- 29.1% of participants at 3-month follow-up
- 29.2% of participants at 6-month follow-up

The Southern Nevada Health District did not meet the goal of having 65% of program participants report an increase in intention to abstain from sex at least 6 months post-curriculum.

OUTCOME GOAL 3: 50% of program participants will report a reduction in sex partners as compared to pre-curriculum testing

To assess this goal, the question "During the last 3 months, with how many people did you have sexual intercourse?" was asked on the pre-survey and the 3-month and 6-month follow-up surveys. Participant responses to this question at pre-survey were compared to the responses at 3- and 6-month follow-up.

Participants were excluded from the analyses (1) if they did not have a valid pair of survey responses to compare (pre-survey and 3-month or pre-survey and 6-month), (2) if they indicated at pre-survey that they had never had sex, (3) if they reported "0" sex partners on the pre-survey and 3-month follow-up surveys or the pre-survey and 6-month follow-up survey, and (4) if they responded "illogically" regarding sexual activity (stated that they had never had sex, but then answered several questions about their sexual history or stated on the pre-survey that they were sexually active but at follow-up reported that they had never had sex). The number of reported sex partners "during the last 3-months" decreased for:

- 25.9% of participants from pre-curriculum to 3-months post-curriculum
- 22.7% of participants from pre-curriculum to 6-months post-curriculum

The Southern Nevada Health District did not meet the goal of having 50% of program participants report a reduction in the number of sex partners at follow-up as compared to pre-curriculum testing.

OUTCOME GOAL 4: 50% of program participants will report an increase in condom use at 3 months and 6 months compared to pre-curriculum testing

To assess this goal, the question "How often do you use condoms during sexual intercourse?" was asked on the pre-survey and on the 3- and 6-month follow-up surveys. Participant responses to this question at pre-survey were compared to the responses at 3- and 6-month follow-up. Response options ranged from "Never" to "Always" with a total of 7 response options. For analysis, response options were recoded to a scale of 0 – 4 (0 = never use condoms, 4 = always use condoms). The reported frequency of condom use increased for:

- 40.8% of participants from pre-curriculum to 3-months post-curriculum
- 39.7% of participants from pre-curriculum to 6-months post-curriculum

The Southern Nevada Health District did not meet the goal of having 50% of program participants report an increase in condom use at 3 months and 6 months as compared to pre-curriculum testing.

OUTCOME GOAL 5: 50% of program participants will report an increase in refusal skills as compared to pre-curriculum testing

Refusal skills were assessed by participant responses to two questions administered on each of the surveys. These questions were:

1. How easy or hard would it be for you to say "no" to sex?
2. If your partner wanted to have sex, how easy or hard would it be for you to get your partner NOT to have sex?

To calculate a refusal skills score, the responses to these two questions were numerically coded and averaged for each participant. Final refusal skills scores ranged from 1 – 5 (1 = very hard to refuse sex, 5 = very easy to refuse sex). Participant refusal skills scores at pre-survey were compared to the refusal skills scores at post-survey and 3- and 6-month follow-up. The refusal skills score increased for:

- 56.3% of participants from pre-survey to post-survey
- 57.5% of participants from pre-survey to 3-month follow-up survey
- 61.5% of participants from pre-survey to 6-month follow-up survey

The Southern Nevada Health District did meet the goal of having 50% of program participants report an increase in refusal skills as compared to pre-curriculum testing. This goal was met at each post-curriculum survey time point.

2. Introduction

In the spring of 2011, the Southern Nevada Health District began implementation of two evidence-based curricula with the goal of reducing pregnancy and birth rates, as well as the rate of sexually transmitted infections among adolescents in Southern Nevada. The negative consequences of teenage pregnancy are numerous for both teenage parents and their offspring (Assini-Meytin & Green, 2015; Salihu et al., 2011). However, teen pregnancy was not the only negative outcome the Southern Nevada Health District had hoped to alleviate with the implementation of these programs. In 2008, it was estimated that half of all new sexually transmitted diseases affected young people between the ages of 15 and 24 (Satterwhite et al., 2013; Weinstock, Berman, & Cates, 2004). The same behaviors that lower the risk of pregnancy – abstinence, consistent and correct use of condoms, and minimizing one's number of sex partners – also reduce the risk of HIV infection. By increasing abstinence and safe sex practices among youth, the Southern Nevada Health District hoped to lower the rate of sexually transmitted infections as well as unplanned pregnancies by 10% by the year 2015 in Southern Nevada.

Incarcerated youth are at exceptionally high risk for negative sexual health outcomes such as teenage pregnancy and HIV infection (Bryan, Schmiege, & Broaddus, 2009; Chartier et al., 2004; Magura, Kang, & Shapiro, 1994; Morris et al., 1995). Youth in foster care are also more likely to experience unplanned pregnancies than the general population (Hoffman & Maynard, 2008; McGuinness, Mason, Tolbert, & DeFontaine, 2002). The Southern Nevada Health District targeted these high risk youth by implementing the Teen Pregnancy Prevention Program in detention, probation, community centers, and foster care.

Selected Curricula

The Southern Nevada Health District used two evidence-based curricula (Be Proud! Be Responsible! and ¡Cuidate!) to achieve its goals. ¡Cuidate! is an adaptation of the Be Proud! Be Responsible! curriculum tailored for Hispanic and Latino youth.

Be Proud! Be Responsible!

Be Proud! Be Responsible! is a curriculum developed by Jemmott, Jemmott, and McCaffree. The curriculum was designed to modify behavior and increase knowledge about sexual issues while fostering a sense of responsibility about sexual health. The program is also intended to build a sense of community and instill pride in making safe and healthy decisions. The curriculum is taught in six modules that address knowledge, attitude, and skills regarding sexual decision-making. The curriculum is delivered through the format of role-play, group discussions, games, videos, and demonstrations.

This well-researched curriculum has been shown to increase knowledge about HIV and other sexual health issues as well as impact and increase the intention to abstain from risky behaviors and increase self-reported refusal and negotiation skills (Jemmott, Jemmot, & Fong, 1992; Jemmott, Jemmott & Fong; 1998; Morris, Ulmer, & Chimnani, 2003; Borawski et al., 2009).

¡Cuidate!

¡Cuidate!, meaning "take care of yourself," was adapted from the Be Proud! Be Responsible! curriculum by Villarruel, Jemmott, and Jemmott. The program incorporates important Hispanic and Latino cultural beliefs such as familialism and machismo to communicate the importance of risk-reduction and sexual health. The program is delivered in the same format as the Be Proud! Be Responsible! curriculum (Office of Adolescent Health, http://www.hhs.gov/ash/oah/oah-initiatives/tpp/programs-v1.html).

Although there is less research available for the ¡Cuidate! curriculum, one evidence-based study by Villarruel, Jemmott and Jemmott (2006) found that program participants were less likely than a control group to have sex, and more likely to use condoms consistently and another conducted by Villarruel, Yan, Gallegos, and Ronis (2010) reported an increase in

initial condom use compared to a control group . Based on the success of these programs with males and females and different racial/ethnic groups, these curricula were selected for the Southern Nevada Health District's Teen Pregnancy Prevention Program.

Timeline for Year Five

The Nevada Institute for Children's Research and Policy (NICRP) served as the outcome evaluator for the Southern Nevada Health District's Teen Pregnancy Prevention Program. NICRP used four surveys (pre-survey, post-survey, 3-month follow-up survey, and a 6-month follow-up survey) to assess whether the Southern Nevada Health District's Teen Pregnancy Prevention Program was meeting its stated program goals.

The pre-survey was completed prior to program participants receiving the curriculum in order to establish a baseline. The post-survey was administered immediately following the completion of the sixth and final module of the curriculum. Follow-up surveys were administered 3- and 6-months after the course completion date. Table 1 illustrates the reporting timeline for the Year Five outcome evaluation.

Table 1. Reporting Timeline for Year Five Outcome Evaluation

Month	Date	Activity
September	9/1/2014	Year 5 Reporting Period Begins
November	11/30/14	1st Quarter Reporting Period Ends
December	12/31/14	1st Quarter Report Due
February	2/28/15	2nd Quarter Reporting Period Ends
March	3/31/15	2nd Quarter Report Due
May	5/31/15	3rd Quarter Reporting Period Ends
June	6/30/15	3rd Quarter Report Due
August	8/31/15	Year 5 Reporting Period Ends
September	9/30/15	Year 5 Report Due

3. Outcome Evaluation Plan

Progress toward the outcome goals of the Southern Nevada Health District's (SNHD) Teen Pregnancy Prevention Program was measured using participant responses to questions on a series of surveys. The pre-survey served as the baseline measurement for participants and consists of a Sexual History Questionnaire and an Outcome Monitoring Tool. The Sexual History Questionnaire includes questions about participant sexual health and behavior. The Outcome Monitoring Tool includes questions about HIV/ AIDS knowledge, intention to abstain from sex, and self-efficacy in making sexual decisions. The post-survey and follow-up surveys include only the Outcome Monitoring Tool.

Pre-Survey

Prior to being exposed to any course modules or materials, the pre-survey was administered to the participating youth by the Nevada Institute for Children's Research and Policy (NICRP) staff. The pre-survey consists of a Sexual History Questionnaire and an Outcome Monitoring Tool which together measure baseline knowledge and participant attitudes and behaviors regarding sexual health.

NICRP staff began the pre-survey administration by reading the participants an informed consent/confidentiality statement which explains their participation in the entire program evaluation process including a discussion of follow-up surveys and the incentive schedule. Youth were asked to indicate whether or not they agree to participate in the evaluation and any questions they had about the evaluation process were answered. If a youth did not want to participate in the evaluation but did want to participate in the program, they were allowed to complete the curriculum and not required to complete any surveys.

After participants were read the informed consent/confidentiality statement and indicated whether or not they wanted to participate, NICRP staff read the pre-survey out loud to the participants. Upon initial testing of the survey, NICRP recognized great variability in literacy levels for program participants. Therefore, to ensure that all participants had the opportunity to complete the surveys, NICRP read the survey out loud and asked participants to follow along and mark their responses on the survey. This process also allowed NICRP staff to read all definitions for "sex" and "birth control" as indicated on the survey to help ensure consistency in question and response interpretation.

Post-Survey

NICRP staff administered the post-survey immediately following completion of the last module of the curriculum. The same procedure used for administering pre-surveys was used to administer post-surveys, including reading the informed consent/confidentiality statement and the survey out loud. The post-survey consists of only the Outcome Monitoring Tool and is used to identify changes in attitudes or knowledge from the pre-survey.

Contact Information/Demographic Form

All participants were asked to complete the demographic section of the Contact Information/Demographic Form. Participants who were willing to participate in the follow-up portion of the evaluation were asked to also complete the contact information section of the Contact Information/Demographic Form. This section of the form allowed participants to indicate their preferred method of contact for follow-up survey completion (e.g., phone numbers, addresses, email, and text messages). At the probation sites, the Contact Information/Demographic Form was completed by participants after post-survey administration. At all other sites, it was completed after pre-survey administration. This difference in administration was due to classroom scheduling constraints at the probation sites.

Follow-up Surveys

Those participants who agreed to participate in the follow-up evaluation of the program completed the contact information section of the Contact Information/Demographic Form. This information was used to contact participants for a courtesy call and to complete the 3- and 6-month follow-up surveys.

Participants were contacted one month after course completion for a courtesy call. The purpose of the courtesy call was to remind participants about the 3- and 6-month follow-up surveys, confirm or update participant contact information, and to identify invalid and out of date contact information in order to improve the 3- and 6-month follow-up survey response rates.

NICRP staff began to attempt to contact participants for their 3- and 6-month follow-up surveys 3 and 6 months after course completion. Although contact with the participants may have occurred via phone, text, email, or letter, all follow-up surveys were conducted over the telephone. Once a participant was reached by phone and agreed to take the survey, they were read the informed consent/confidentiality statement and asked to verify their date of birth. After 3-month follow-up survey completion, participants were asked to provide any updated contact information and were reminded about the 6-month follow-up survey.

Participants were eligible to receive an incentive gift card after completing the 3-month follow-up survey and after completing the 6-month follow-up survey. Prior to October 7, 2013, participants completing follow-up surveys were given the option to either pick-up their gift card from SNHD or have it mailed to them. On October 7, 2013, SNHD made the decision to no longer mail gift card incentives to participants that completed follow-up surveys. Participants that were required to pick up the incentive at the health district office located at Nellis and Stewart.

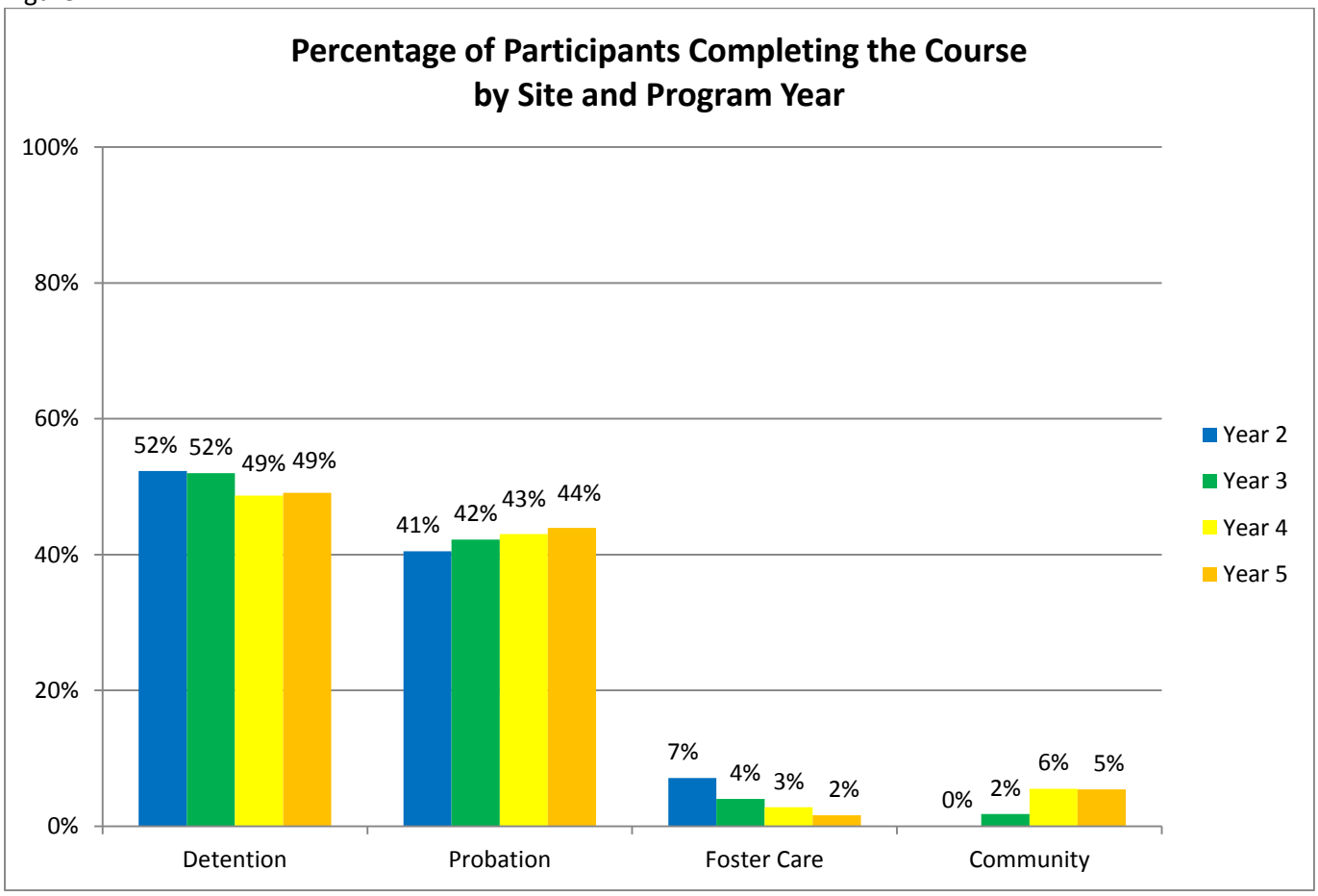
4. Participant Demographics

There were a total of 3060 youth enrolled (completed a pre-survey) during Years Two, Three, Four, and Five of the program and of those, 2565 (83.8%) completed the course. Following is an overview of demographics for those participants that completed the course. For more detailed information, see Appendix A.

Of the 2565 Year Two, Year Three, Year Four, and Year Five program participants that completed the course, 1873 reported that they were male (73.0%) and 692 reported that they were female (27.0%). The proportion of males to females completing the course has remained fairly consistent across each year of the project.

To date, most of the participants completed the course at detention as compared to probation, foster care, and the community. Figure 1 illustrates the percentage of participants completing the program at the different sites by project year.

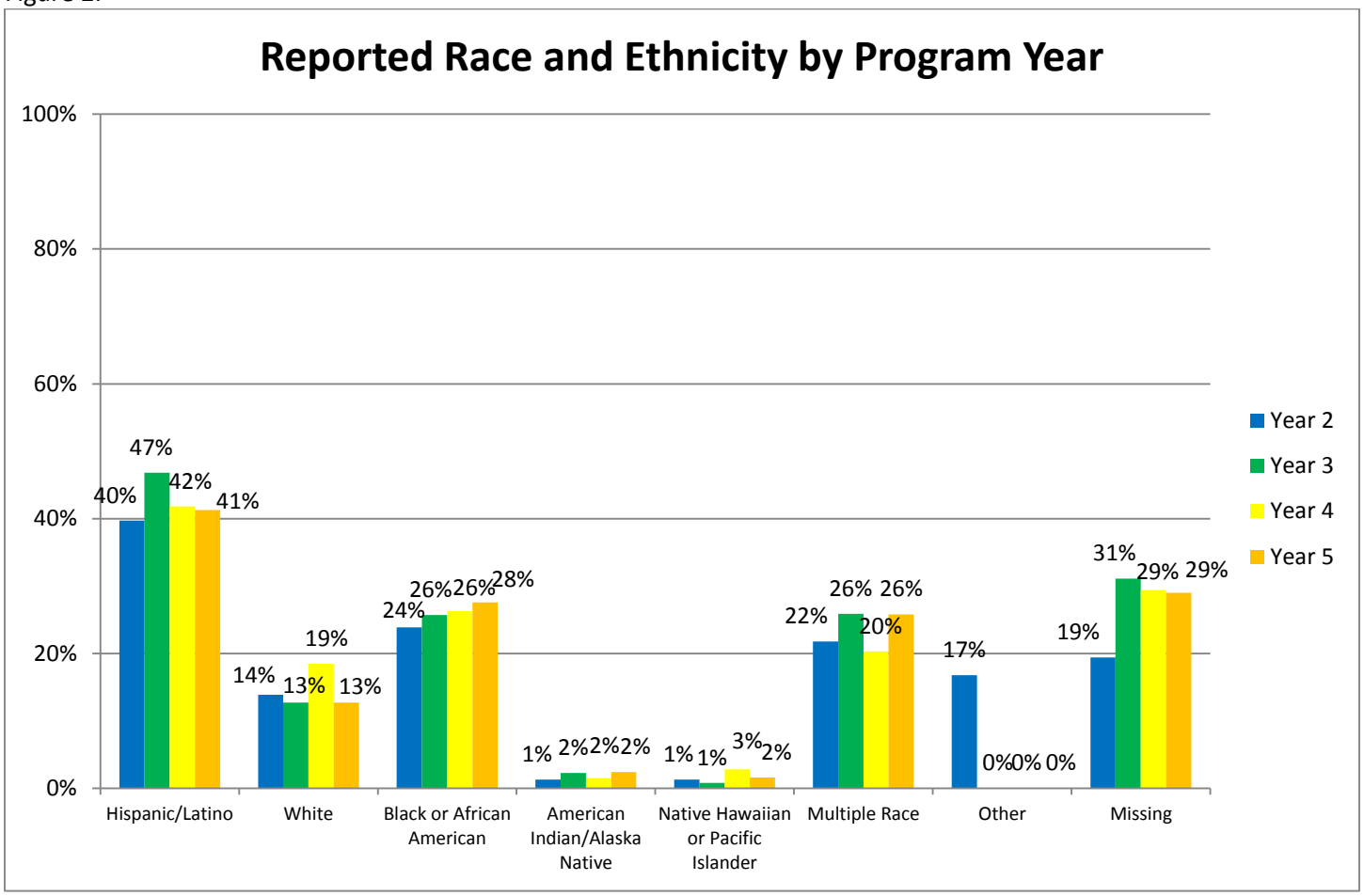
Figure 1.



Race and Ethnicity were asked separately on the questionnaire but are presented in one figure below. Of the 2565 participants that completed the course, 1861 participants provided data regarding race and 2450 participants answered the question about ethnicity. It is interesting to note that of the 1045 participants that reported that their ethnicity was Hispanic/Latino, 702 (67.2%) did not indicate their race. On the other hand, of the 1405 participants that indicated that they were not Hispanic/Latino, only 36 (2.6%) did not indicate their race. It is possible that those participants that indicated that they were Hispanic/Latino felt as though this sufficiently described their racial identity.

The reported race and ethnicity distributions of program participants across all project years are very similar. See Figure 2 for information regarding reported race and ethnicity by program year.

Figure 2.



Note: As of Year 3, the Race response codes were changed to reflect the coding changes made by OAH. Race responses of "Other" for Years 3, 4, and 5 were coded as "Missing/Unknown." Additionally, although race and ethnicity are presented together in one graph, they were separate questionnaire items.

Participants were also asked to report their current grade level in school. Of the 2565 participants that completed the program, 2381 (92.8%) provided a grade level or reported that that they were not currently enrolled in school. More participants reported being in the 11th grade as compared to any other grade. This trend has been consistent across all project years. See Appendix A for full results.

In an attempt to understand the proportion of participants who may be linguistically isolated, participants were asked about the language/languages most often spoken at home. Participants were able to indicate that multiple languages were spoken in the home. Of the 2565 participants that completed the course, 1673 (65.2%) participants indicated that they spoke English at home, 181 (7.1%) participants indicated that they spoke Spanish at home, 545 (21.2%) participants indicated that they spoke more than one language at home, and 13 (.5%) participants reported that they spoke languages other than English or Spanish at home. A small percentage of participants (6.0%) did not indicate which language they spoke when at home or with their family. See Appendix A for full results.

Family structure can be a risk factor associated with poor sexual health, therefore a question was asked about whether or not the participant lived in a single parent household. Of the participants completing the course and answering this question, roughly an equal number of participants reported living in a single parent household (52.2%) as those that did not live in a single parent household (47.8%). See Appendix A for full results.

5. Progress toward Outcome Goals

Progress toward the five outcome goals for the program is addressed in the sections that follow. Within each section, the outcome goal is stated, the methodology used to measure the goal is described, the results of the analyses are reported, and the progress toward the goal is summarized. In addition, within the goal summary, a comparison of the results is made across each year of the project.

In assessing the progress toward the outcome goals, only the Year Two, Year Three, Year Four, and Year Five data for those participants that completed the course were included in the analyses. If additional exclusion criteria were used to determine the outcome goal status, it is noted within that particular section.

Outcome Goal One

80% of program participants will report an increase in knowledge about HIV/AIDS transmission and prevention immediately following curriculum

Be Proud! Be Responsible! has been shown to increase participant knowledge about HIV and other STIs, including behaviors that increase risk. Morris, Ulmer and Chimnani (2003) found that the average score on an inventory similar to the one used in this evaluation increased from 62% to 84%. The true/false format has consistently been used by other researchers as well to demonstrate an increase in HIV knowledge resulting from the Be Proud! Be Responsible! curriculum (Jemmott, Jemmott, Braverman, & Fong, 2005; Jemmott, Jemmott, & Fong, 1998; Borawski et al., 2009; Jemmott, Jemmott, & Fong, 1992).

Methods

The first outcome goal was that 80% of program participants would demonstrate an increase in knowledge about HIV transmission and prevention immediately following the curriculum. Participant knowledge of HIV/AIDS transmission and prevention was measured through the administration of 10 true/false statements. The 10 true/false statements were administered to participants at pre-survey (prior to the start of the curriculum) and post-survey (immediately following the last module in the curriculum). An increase in knowledge was defined as correctly answering at least one additional question on the post-survey than was answered on the pre-survey.

A pre- and post-survey HIV/AIDS knowledge score was calculated for each participant based on the number of correctly answered true/false items. A "change in knowledge" score was then calculated by subtracting the pre-survey score from the post-survey score. The "change in knowledge" score indicates whether a participant's score increased, decreased, or did not change from pre- to post-survey and if it did change, by how much. This "change in knowledge" score is reported to indicate the percentage of participants that showed an increase, decrease, and no change in knowledge with regard to HIV/AIDS transmission and prevention. Additionally, a paired samples t-test was conducted to determine if there was a statistically significant difference between the pre- and post-survey scores.

Participants were only included in these analyses if they completed the course, had valid pre- and post-survey knowledge scores (i.e., answered the entire series of true/false statements on both the pre- and post-survey), and did not earn a perfect score (10/10) on the true/false statements at pre-survey.

Results

Of those participants that completed the course, 2288 had a valid pre-survey knowledge score, 2381 had a valid post-survey knowledge score, and 2151 had a valid score on both the pre-survey and the post-survey. Of those participants with a valid pre- and post-survey score, 221 earned a perfect score of 10/10 on the pre-survey and were excluded from the analysis. Therefore, 1930 participants (2151 minus 221) were included in the analysis of progress toward this goal.

Of the 1930 participants included in the analysis, 78.4% (1513) demonstrated an increase in knowledge about HIV/AIDS transmission and prevention following the course, 5.2% (100) of the participants demonstrated a decrease in knowledge following the course, and 16.4% (317) demonstrated no change in knowledge immediately following the course.

As seen in Table 2, 79.7% of participants completing the course at the detention sites demonstrated an increase in knowledge about HIV/AIDS transmission and prevention following the course. When this percentage is rounded to 80%, it indicates that Outcome Goal One was met by participants that completed the course at detention.

Table 2. Change in HIV/AIDS Knowledge from Pre-Survey to Post-Survey across All Sites

	All Sites (n = 1930)	*Detention (n = 1014)*	*Probation (n = 798)*	*Foster Care (n = 65)*	*City of LV (n = 53)*
Increase in Knowledge	78.4% (1513)	79.7% (808)	76.8% (613)	76.9% (50)	79.3% (42)
No Change in Knowledge	16.4% (317)	16.2% (164)	16.9% (135)	15.4% (10)	15.1% (8)
Decrease in Knowledge	5.2% (100)	4.2% (42)	6.3% (50)	7.7% (5)	5.7% (3)
Total	**100% (1930)**	**100% (1014)**	**100% (798)**	**100% (65)**	**100% (53)**

Note. Only those participants that completed the course, had valid pre- and post-survey scores, and did not receive a perfect score (10/10) on the pre-survey knowledge assessment were included in this analysis.

The average score out of ten for the HIV/AIDS true/false statements was examined for all sites. For all participants, regardless of the program site, the average score prior to the course across all sites was 78% (7.8 correct out of 10 possible points) and the average score after the course was 92% (9.2 correct out of 10 possible points). In addition, a paired samples t-test was performed on the total scores from the pre- and post-surveys. The average score improved by 1.41 (SD = 1.33), and the results from the paired samples t-test [t (1929) = 46.65, $p < .000$] show a statistically significant difference between the pre- and post-survey scores indicating that overall, participant scores significantly improved after participation in the course.

As seen in Table 3, program participants from each of the sites demonstrated a statistically significant increase in their knowledge of HIV/AIDS transmission and prevention from pre-survey to post-survey. Participants completing the course at detention demonstrated the largest increase in HIV/AIDS knowledge (1.45 points).

Table 3. Difference between Pre-Survey and Post-Survey HIV/AIDS Knowledge Scores

All Sites (n = 1930)	*Detention (n = 1014)*	*Probation (n = 798)*	*Foster Care (n = 65)*	*City of Las Vegas (n = 53)*
+1.41* (SD = 1.33)	+1.45* (SD = 1.27)	+1.40* (SD = 1.40)	+1.00* (SD = 1.31)	+1.32* (SD = 1.30)

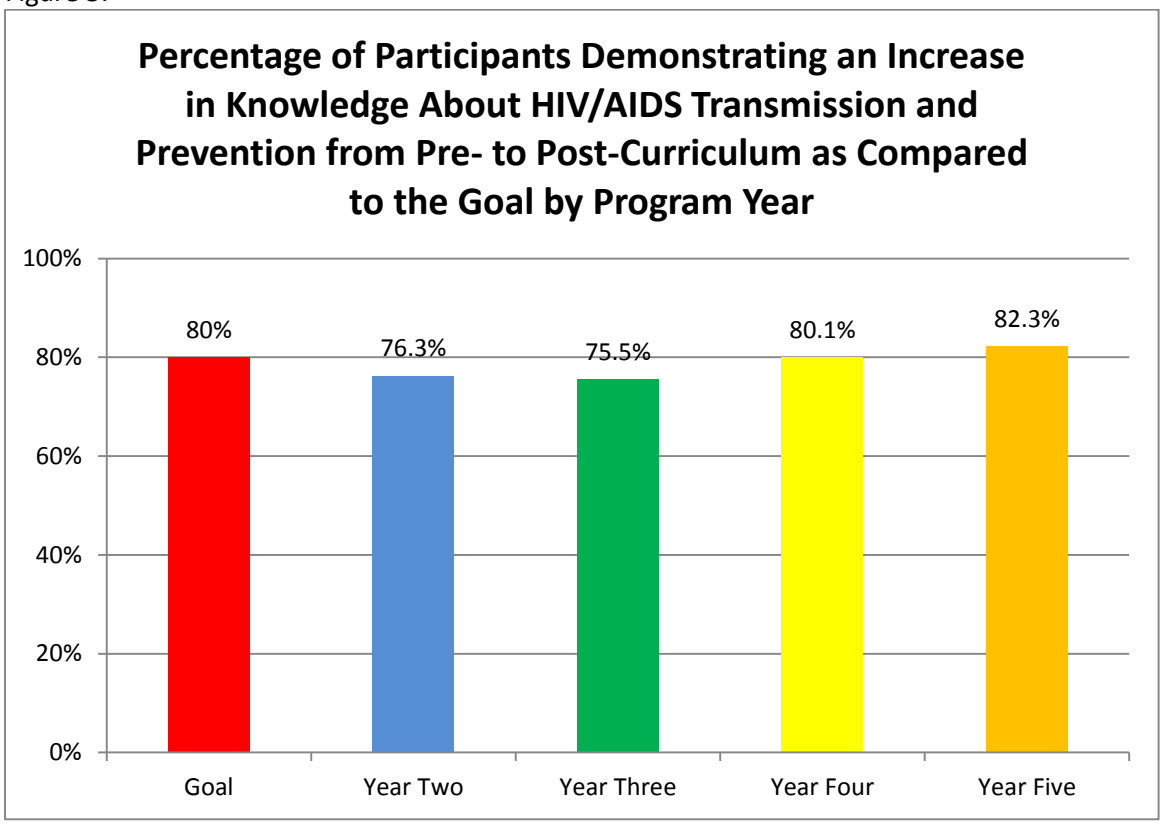
Note. Only those participants that completed the course, had valid pre- and post-survey scores, and did not receive a perfect score (10/10) on the pre-survey knowledge assessment were included in this analysis.
**Indicates that this difference is statistically significant at p<.01*

Progress Summary

With 78.4% of program participants demonstrating an increase in knowledge about HIV/AIDS transmission and prevention, the Southern Nevada Health District was close, but did not meet their goal of 80% of program participants reporting an increase in knowledge about HIV/AIDS transmission and prevention immediately following curriculum.

However, as seen in Figure 3, this goal was met by those participants completing the course in Year 4 (80.1%) and by those participants completing the course in Year 5 (82.3%). Additionally, as seen in Table 2, this goal was met with regard to the participants completing the course at the detention sites.

Figure 3.



Outcome Goal Two

65% of program participants will report an increase in intention to abstain from sex at least 6 months post curriculum

Both of the curricula used in the Teen Pregnancy Prevention Program have successfully increased intention to abstain from sex as evidenced in previous studies. Jemmott, Jemmott, and Fong (1992, 2010) showed that participants reported an increased intention to abstain following the Be Proud! Be Responsible! course, while Villarruel, Jemmott, and Jemmott (2006) had the same results when testing the iCuidate! curriculum. These studies have shown that the two curricula can successfully increase intention to abstain in treatment participants as compared to a control group which did not receive the program.

Methods

The second outcome goal was that 65% of program participants would report an increase in intention to abstain from sex at least 6 months post-curriculum as compared to pre-curriculum testing. This goal was assessed by comparing participant responses to the question, "Do you intend to have sexual intercourse in the next year, if you have the chance?" at pre-survey, to participant responses to the same question at 3- and 6-month follow up. Response options ranged from 1 ("Yes, definitely") to 4 ("No, definitely not").

A participant's change in intention to abstain was determined by subtracting the pre-survey response score from the post-survey, and follow-up survey response scores. A negative score was deemed an increase in intention to abstain (participant was LESS LIKELY to have sex in the year as compared to pre-survey) and a positive score was deemed a decrease in intention to abstain from sex (participant was MORE LIKELY to have sex in the next year as compared to pre-survey).

Results

Of the participants that completed the course, 2230 had valid responses to the intention question on both the pre- and post-survey, 980 had valid responses on both the pre-survey and 3-month follow-up survey, and 804 had valid responses on both the pre-survey and 6-month follow-up survey. Participants were excluded from the analyses measuring this goal if, at pre-survey, they responded "No, definitely not" to the question, "Do you intend to have sexual intercourse in the next year, if you have the chance?" They were excluded because their intention to abstain could not increase. This exclusion criterion eliminated 110 participants from the pre- to post-survey comparison, 55 participants from the pre-survey to 3-month follow-up survey, and 50 participants from the pre-survey to 6-month follow-up survey comparison.

As seen in Table 4, as compared to pre-survey, 16.6% (352) of the participants reported an increase in their "intention to abstain" at post-survey, 29.1% (269) reported an increase at 3-month follow-up, and 29.2% (220) reported an increase at 6-month follow-up.

Table 4. Change in Intention to Abstain from Pre-Survey

	Post (n = 2120)	*3-Months (n = 925)*	*6-Months (n = 754)*
Increase in Intention	16.6% (352)	29.1% (269)	29.2% (220)
No Change in Intention	70.5% (1494)	60.6% (561)	59.0% (445)
Decrease in Intention	12.9% (274)	10.3% (95)	11.8% (89)
Total	**100% (2120)**	**100% (925)**	**100% (754)**

Note. Participants were excluded from the analyses if they did not provide valid data on the pair of surveys being compared and responded "No, definitely not" when asked at pre-survey, "Do you intend to have sexual intercourse in the next year, if you have the chance?"

At post-survey, a larger percentage of participants who completed the curriculum through the City of Las Vegas, as compared to detention, probation, and foster care, reported an increase in intention to abstain. Additionally, a larger percentage of participants who completed the curriculum at probation, as compared to detention and foster care, reported an increase in intention to abstain at 3-months and 6-months. The City of Las Vegas was not included in the 3-month or 6-month comparisons because too few participants met the inclusion criteria necessary to be included in the analysis. See Table 5.

Table 5. Change in Intention to Abstain from Pre-Survey across Sites

	Detention			*Probation*			*Foster Care*			*City of Las Vegas*		
	Post	*3-Month*	*6-Month*	*Post*	*3-Month*	*6-Month*	*Post*	*3-Month*	*6-Month*	*Post*	*3-Month*	*6-Month*
Increase in Intention	16.0% (184)	26.9% (109)	27.6% (92)	17.6% (151)	31.8% (140)	32.4% (113)	13.4% (9)	13.6% (6)	20.5% (8)	18.2% (8)	n/a	n/a
No Change in Intention	72.0% (828)	64.5% (261)	62.0% (207)	69.3% (595)	56.8% (250)	55.3% (193)	62.7% (42)	70.5% (31)	56.4% (22)	65.9% (29)	n/a	n/a
Decrease in Intention	12.0% (138)	8.7% (35)	10.5% (35)	13.2% (113)	11.4% (50)	12.3% (43)	23.9% (16)	15.9% (7)	23.1% (9)	15.9% (7)	n/a	n/a
Total	**100% (1150)**	**100% (405)**	**100% (334)**	**100% (859)**	**100% (440)**	**100% (349)**	**100% (67)**	**100% (n=44)**	**100% (n=39)**	**100% (n=44)**	**(n=36)**	**(n=32)**

Note. Participants were excluded from the analyses if they did not provide valid data on the pair of surveys being compared and responded "No, definitely not" when asked at pre-survey, "Do you intend to have sexual intercourse in the next year, if you have the chance?"

A repeated measures ANOVA with a Greenhouse-Geisser correction indicated that there was a statistically significant difference among the pre-surveys, post-surveys, 3-month follow-up surveys, and 6-month follow-up surveys with regard to the intention to abstain score, $F\ (2.79, 1516.95) = 25.19$ at $p < .000$.

Interestingly, however, post hoc tests using the Bonferroni correction indicate that the intention to abstain from sex did not statistically significantly increase from pre-curriculum to post-curriculum. Rather, there was a statistically significant difference between participant intention to abstain at pre-survey and the 3- and 6-month follow-up survey time points and a statistically significant difference between the post-survey and the 3- and 6-month follow-up survey time points (see Table 6).

Table 6. Average Intention to Abstain Score across Survey Time Points

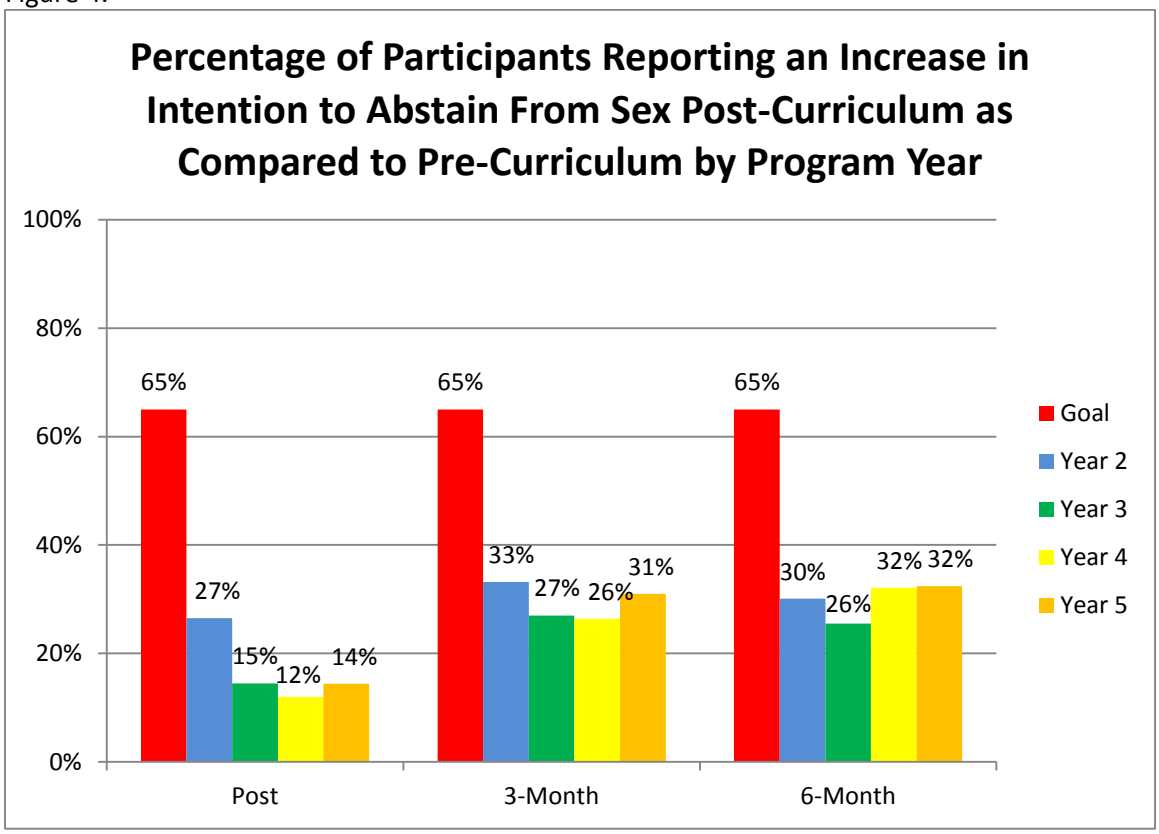
	Pre-Survey (n = 545)		***Post-Survey (n = 545)***		***3-Month Follow-Up Survey (n = 545)***		***6-Month Follow-Up Survey (n = 545)***	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Intention to Abstain Score	1.54^{ab}	.65	1.60^{cd}	.74	1.76^{ac}	.75	1.73^{bd}	.77
Note: Cells sharing the same superscript statistically significantly differ at p < .01; Averages and standard deviations given for only those participants that provided an answer to the question on all 4 surveys and excludes those participants who responded, "No, definitely not" when asked at pre-survey, "Do you intend to have sexual intercourse in the next year, if you have the chance?"								

Progress Summary

The Southern Nevada Health District did not meet the goal of having 65% of program participants report an increase in intention to abstain from sex at least 6 months post-curriculum. The largest percentage of participants reporting an increase in intention to abstain as compared to pre-survey was seen at 6-months post curriculum (29.2%).

As seen in Figure 4, during each year of the project, intention to abstain scores increased more at the 3-month and 6-month follow-up time points as compared to immediately post-curriculum.

Figure 4.



Outcome Goal Three

50% of program participants will report a reduction in sex partners as compared to pre-curriculum testing

In previous studies, participants who received the Be Proud! Be Responsible! curriculum reported having fewer sex partners 3 months after receiving the training as compared to the 3 months prior to the training (Jemmott, Jemmott, Braverman, & Fong, 2005; Jemmott, Jemmott, & Fong, 1992).

Methods

The third outcome goal was that 50% of program participants would report a reduction in sex partners post-curriculum as compared to pre-curriculum testing. To assess this goal, the question "During the past 3 months, with how many people did you have sexual intercourse?" was asked on the pre-survey and the 3-month and 6-month follow-up surveys.

Based on their survey responses, certain participants were excluded from the analyses used to assess this goal. The conditions for exclusion from analysis included (1) participants who did not have valid pre-survey and 3-month follow-up survey scores or pre- survey and 6-month follow-up scores, (2) participants who indicated at pre-survey that they have never had sex, (3) participants who reported "0" sex partners on the pre-survey and 3-month follow-up surveys or the pre-survey and 6-month follow-up surveys, and (4) participants who responded "illogically" regarding sexual activity (i.e., stated that they had never had sex, but then answered several questions about their sexual history or stated on the pre-survey that they were sexually active but at follow-up reported that they had never had sex).

Results

Of the participants that completed the class and met the inclusion criteria listed above, 378 had a valid response to the question, "During the past 3 months, with how many people did you have sexual intercourse?" on both the pre-survey and 3-month follow-up survey. A total of 309 participants met the inclusion criteria and had valid responses on both the pre-survey and 6-month follow-up survey.

As seen in Table 7, as compared to pre-survey, 25.9% (98) of participants reported a decrease in the number of sex partners "during the past three months" at 3-month follow-up, and 22.7% (70) of participants reported a decrease at 6-month follow-up.

Table 7. Change in Number of Sex Partners from Pre-Survey

	3-Months (n = 378)	*6-Months (n = 309)*
Decrease in Number of Partners	25.9% (98)	22.7% (70)
No Change in Number of Partners	51.1% (193)	57.3% (177)
Increase in Number of Partners	23.0% (87)	20.1% (62)
Total	**100% (378)**	**100% (309)**

Note. Participants were excluded from this analysis if they (1) reported at pre-survey that they have never had sex,(2) gave "illogical" responses, (3) did not have a valid pair of surveys needed for comparison, or (4) reported "0" sex partners on the pair of surveys being compared.

As seen in Table 8, a larger percentage of participants who completed the curriculum at detention reported a decrease in the number of sexual partners at both 3- and 6-months as compared to those completing the curriculum at probation. Too few participants from foster care and The City of Las Vegas sites met the criteria necessary to be included in this analysis; therefore neither of these sites was included in this comparison.

Table 8. Change in Number of Sex Partners from Pre-Survey Across Sites

	Detention		*Probation*		*Foster Care*		*City of Las Vegas*	
	3-Month	*6-Month*	*3-Month*	*6-Month*	*3-Month*	*6-Month*	*3-Month*	*6-Month*
Decrease in Number of Partners	29.6% (40)	26.8% (33)	23.4% (53)	20.9% (36)	n/a	n/a	n/a	n/a
No Change in Number of Partners	44.5% (60)	56.9% (70)	54.6% (124)	57.6% (99)	n/a	n/a	n/a	n/a
Increase in Number of Partners	25.9% (35)	16.3% (20)	22.0% (50)	21.5% (37)	n/a	n/a	n/a	n/a
Total	**100% (135)**	**100% (123)**	**100% (227)**	**100% (172)**	**(n=13)**	**(n=9)**	**(n=3)**	**(n=5)**

Note. Participants were excluded from this analysis if they (1) reported at pre-survey that they have never had sex,(2) gave "illogical" responses, (3) did not have a valid pair of surveys needed for comparison, or (4) reported "0" sex partners on the pair of surveys being compared.

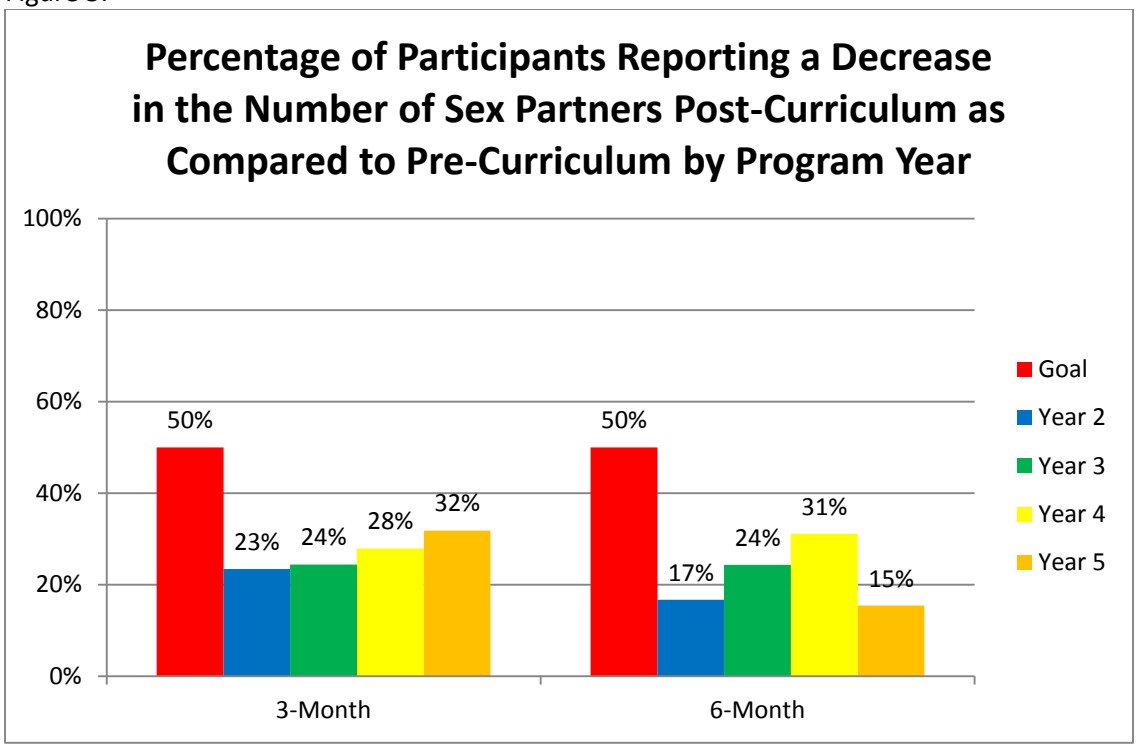
Two paired samples t-tests were conducted to determine if participants reported a significant decrease in the number of partners "during the past three months" at either of the follow-up intervals as compared to pre-survey. Although the mean number of partners decreased from pre-survey to both follow-up time points, results from the paired samples t-test indicate that there was not a statistically significant difference in the number of sex partners between the pre-survey (M = 1.70, SD = 1.01) and the 3-month follow-up survey (M = 1.68, SD = 1.27) time period, [t (377) = .270, p = *.79*]. Additionally, there was not a statistically significant difference between the pre-survey (*M = 1.66, SD = 1.68*) and the 6-month follow-up survey (*M= 1.65, SD = 1.45*) time period, [t (308) = .11, p = *.91*].

Progress Summary

The Southern Nevada Health District did not meet the goal of having 50% of program participants report a reduction in number of sex partners as compared to pre-curriculum testing. As compared to pre-survey, 25.9% of participants reported a decrease in the number of sex partners "during the past three months" at 3-month follow-up, and 22.7% of participants reported a decrease at 6-month follow-up.

As seen in Figure 5, the percentage of participants reporting a decrease in the number of sex partners at 3-month follow-up increased during each year of the project.

Figure 5.



Outcome Goal Four

50% of program participants will report an increase in condom use at 3 months and 6 months compared to pre-curriculum testing

Participants receiving either the Be Proud! Be Responsible! (Jemmott, Jemmott, & Fong 2010; Jemmott, Jemmott, Braverman, & Fong, 2005; Jemmott, Jemmott, & Fong, 1992; Jemmott, Jemmott, Fong & Morales, 2010) or the iCuidate! (Villarruel, Jemmott, & Jemmott, 2006) curricula have demonstrated an increase in condom use post-curriculum.

Methods

The fourth outcome goal was for 50% of the program participants to report an increase in condom use at 3 months and 6 months as compared to pre-curriculum testing. To assess this goal, the question "How often do you use condoms during sexual intercourse?" was asked on the pre-survey and on the 3- and 6-month follow-up surveys. Response options ranged from "Never" to "Always" with a total of 7 response options. For analyses, response options were recoded to a scale of 0 – 4 (0 = never use condoms, 4 = always use condoms). The response options of "Sometimes", "If

I have a condom available to me", and "Only if my partner asks me to use a condom" were collapsed into one response category representing the "sometimes" response category (2 = sometimes).

Participants were excluded from these analyses (1) if they reported at pre-survey that they have never had sex, (2) if their responses were "illogical" (i.e., stated that they had never had sex, but then answered several questions about their sexual history or stated on the pre-survey that they were sexually active but at follow-up reported that they had never had sex) (3) if they did not have a valid pre-, 3-, or 6-month follow-up survey score, and (4) if they reported on the pre-survey that they "Always" use condoms.

To determine if program participant condom usage increased, decreased, or did not change, the pre-survey response value was subtracted from the follow-up survey response value. Positive values indicated an increase in condom usage and negative values indicated a decrease in condom usage.

Results

Of those participants who completed the course and met the inclusion criteria as noted above, 544 had a valid response to this question on both the pre-survey and 3-month follow-up survey and 423 had valid responses on both the pre-survey and 6-month follow-up survey.

As seen in Table 9, as compared to pre-survey, overall 40.8% (222) of participants reported an increase in condom use at 3-month follow-up and 39.7% (168) of participants reported an increase in condom use at 6-months. Participants completing the curriculum at probation reported a larger percent increase in condom use than participants completing the program at detention at both 3-months (50.2%) and 6 months (46.5%) as compared to pre-survey. A full comparison across sites was not possible because there were too few participants from foster care and The City of Las Vegas that met the criteria to be included in the analyses.

Table 9. Change in Condom Use from Pre-Survey across All Sites

	All Sites		*Detention*		*Probation*		*Foster Care*		*City of Las Vegas*	
	3-Months	*6-Months*	*3-Months*	*6-Months*	*3-Months*	*6-Months*	*3-Months*	*6-Months*	*3-Months*	*6-Months*
Increase in Condom Use	40.8% (222)	39.7% (168)	31.2% (87)	32.6% (75)	50.2% (120)	46.5% (79)	n/a	n/a	n/a	n/a
No Change in Condom Use	45.6% (248)	46.1% (195)	53.8% (150)	51.3% (118)	38.5% (92)	41.8% (71)	n/a	n/a	n/a	n/a
Decrease in Condom Use	13.6% (74)	14.2% (60)	15.1% (42)	16.1% (37)	11.3% (27)	11.8% (20)	n/a	n/a	n/a	n/a
Total	**100% (544)**	**100% (423)**	**100% (279)**	**100% (230)**	**100% (239)**	**100% (170)**	**(n=20)**	**(n=17)**	**(n=6)**	**(n=6)**

Note. Participants were excluded from this analysis if they (1) reported at pre-survey that they have never had sex,(2) gave "illogical" responses, (3) did not have a valid pair of surveys needed for comparison, or (4) reported at pre-survey that they "always" use condoms.

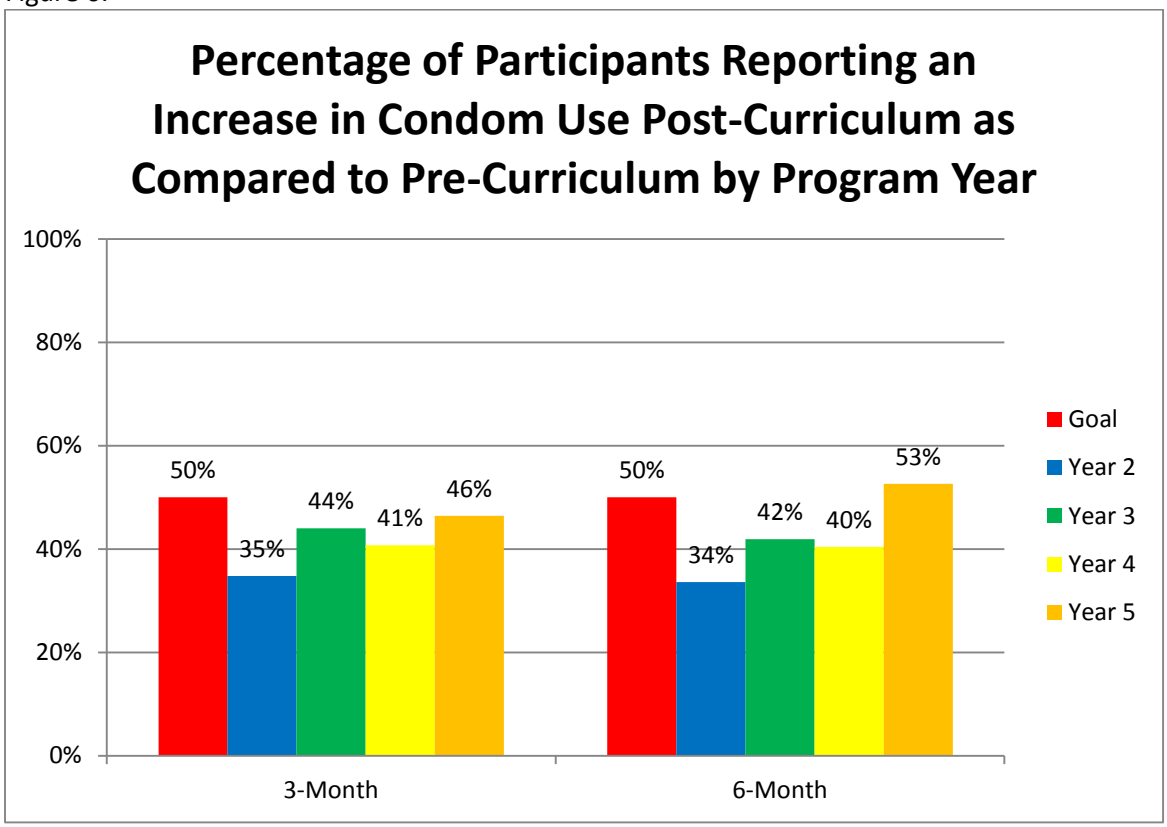
Two paired samples t-tests were conducted to determine if, overall, participants reported a statistically significant increase in condom use at either of the follow-up time points as compared to pre-survey. Results from the paired samples t-test indicate that there was a statistically significant difference in condom use between the pre-survey (M = 2.1, SD = .82) and the 3-month follow-up survey (M = 2.5, SD = .97) time period, [t (543) = 9.33, $p = .000$]. Additionally, there was a statistically significant difference between the pre-survey ($M = 2.1$, $SD = .82$) and the 6-month follow-up survey ($M= 2.5$, $SD = 1.02$) time period, [t (422) = 7.77, $p = .000$]. These results indicate that participants did report a statistically significant increase in condom use from pre-survey to both 3- and 6-month follow-up.

Progress Summary

The Southern Nevada Health District did not meet the goal of having 50% of program participants report an increase in condom use at 3-months and 6-months as compared to pre-curriculum testing. As compared to pre-survey, 40.8% of participants reported an increase in condom use at 3-months and 39.7% of participants reported an increase in condom use at 6-months.

However, as seen in Figure 6, this goal was met at the 6-month follow-up time point for Year 5 participants only.

Figure 6.



Outcome Goal Five:

50% of program participants will report an increase in refusal skills as compared to pre-curriculum testing

In a previous study by Morris, Ulmer, and Chimnani (2003), participants reported that their refusal skills increased "very much" as a result of the Be Proud! Be Responsible! curriculum. A later study by Jemmott, Jemmott, Braverman, and Fong (2005) demonstrated only a slight improvement in refusal skills. Another study found an increase in refusal skills (compared to control participants) lasting four months, but that increase disappeared one year following curriculum (Borawski et al., 2009).

Methods

The fifth outcome goal of the Teen Pregnancy Prevention Program was that 50% of program participants would report an increase in refusal skills at post-survey, 3-months follow-up, and 6-months follow-up as compared to pre-curriculum

testing. Refusal skills were assessed by using two questions administered on the pre-survey, post-survey, and the two follow-up surveys. These questions were:

- How easy or hard would it be for you to say "no" to sex?
- If your partner wanted to have sex, how easy or hard would it be for you to get your partner NOT to have sex?

A "refusal skills" score was calculated by averaging participant responses to these two items. Final "refusal skills" scores ranged from 1 – 5 (1 = very hard to refuse sex, 5 = very easy to refuse sex).

To measure this goal, "refusal skills" score differences were calculated between pre-survey and post-survey, pre-survey and 3-month follow-up survey, and pre-survey and 6-month follow-up survey. Participants were excluded from the analyses in measuring this goal if, at pre-survey, they had a refusal score of 5. These participants were excluded because their refusal score could not increase.

Results

Of those participants that completed the course and did not have a pre-survey refusal score of 5 (very easy to refuse sex), 2015 had a valid score on both the pre- and post-survey, 866 had a valid score on both the pre-survey and 3-month follow-up survey, and 706 had a valid score on both the pre-survey and 6-month follow-up.

As seen in Table 10, 56.3% of participants reported an increase in refusal skills from pre-survey to post-survey, 57.5% reported an increase from pre-survey to 3-month follow-up, and 61.5% reported an increase from pre-survey to 6-month follow-up.

Table 10. Change in Refusal Skills Score from Pre-Survey

	Post-Survey (n = 2015)	***3-Months (n = 866)***	***6-Months (n = 706)***
Increase in Refusal Skills Score	56.3% (1135)	57.5% (498)	61.5% (434)
No Change in Refusal Skills Score	26.7% (537)	20.6% (178)	20.7% (146)
Decrease in Refusal Skills Score	17.0% (343)	21.9% (190)	17.9% (126)
Total	**100% (2015)**	**100% (866)**	**100% (706)**

Note. Participants were excluded from this analysis if their pre-survey refusal skills score was 5 (very easy to refuse sex).

The largest increase in refusal skills scores was reported at the 3-month follow-up time point by those participants that completed the course in foster care (71.8%). Too few participants from foster care completed the 6-month follow-up survey and therefore could not be included in the analyses. See Table 11.

Table 11. Change in Refusal Skills Score from Pre-Survey across Sites

	Detention			Probation			Foster Care			City of Las Vegas		
	Post	3-Month	6-Month	Post	3-Month	6-Month	Post	3-Month	6-Month	Post	3-Month	6-Month
Increase in Refusal Skills Score	59.5% (656)	55.3% (209)	60.0% (186)	52.6% (422)	59.3% (243)	63.5% (210)	47.6% (30)	71.8% (28)	n/a	56.3% (27)	46.2% (18)	48.4% (15)
No Change in Refusal Skills Score	25.1% (277)	21.7% (82)	21.6% (67)	28.3% (227)	19.3% (79)	18.4% (61)	34.9% (22)	15.4% (6)	n/a	22.9% (11)	28.2% (11)	32.3% (10)
Decrease in Refusal Skills Score	15.3% (169)	23.0% (87)	18.4% (57)	19.1% (153)	21.5% (88)	18.1% (60)	17.5% (11)	12.8% (5)	n/a	20.8% (10)	25.7% (10)	19.4% (6)
Total	**100% (1102)**	**100% (378)**	**100% (310)**	**100% (802)**	**100% (410)**	**100% (331)**	**100% (63)**	**100% (39)**	**(n=34)**	**100% (48)**	**100% (39)**	**100% (31)**

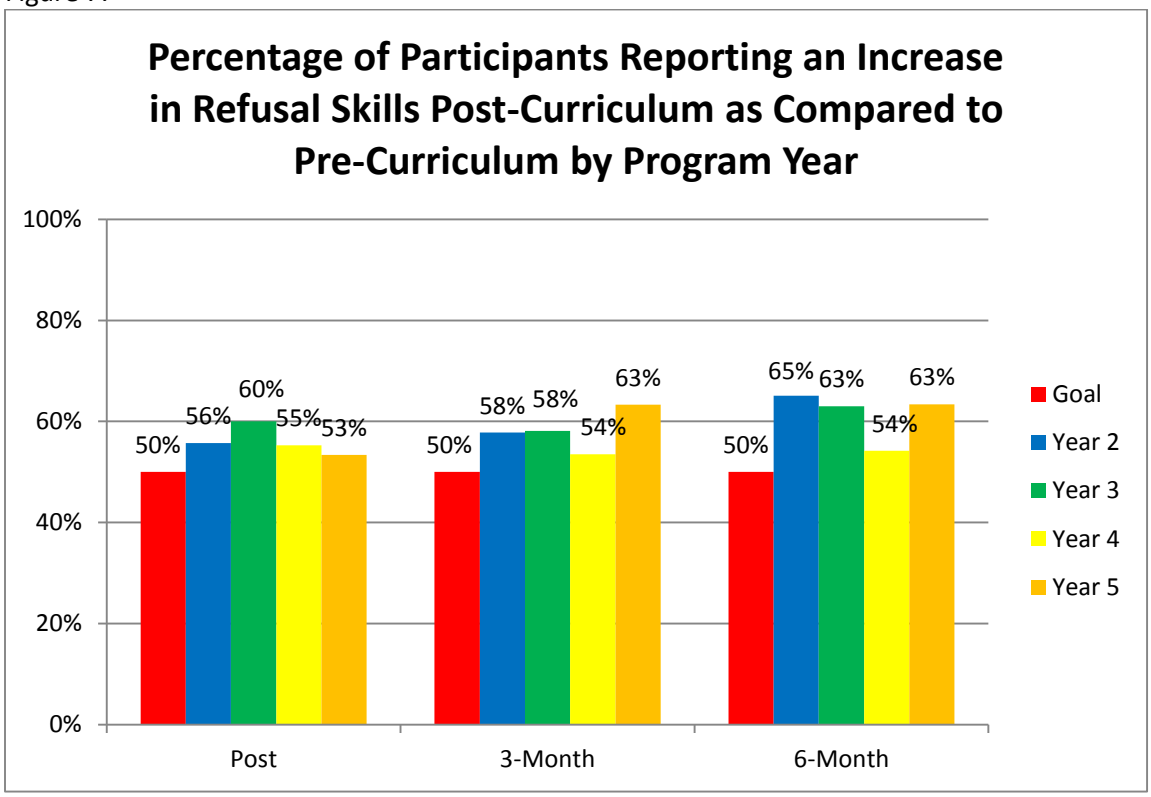
Note. Participants were excluded from this analysis if their pre-survey refusal skills score was 5 (very easy to refuse sex).

Progress Summary

The Southern Nevada Health District did meet the goal of having 50% of program participants report an increase in refusal skills as compared to pre-curriculum testing. As compared to pre-survey, 56.3% of participants reported an increase in refusal skills at post-survey, 57.5% of participants reported an increase in refusal skills at 3-month follow-up, and 61.5% of participants reported an increase in refusal skills at 6-month follow-up.

As seen in Figure 7, this goal was met during each year of the project at all measurement time points.

Figure 7.



6. Overall Project Impact

Through the implementation of the Teen Pregnancy Prevention (TPP) Program, the Southern Nevada Health District (SNHD) intended to lower the rate of sexually transmitted infections and unplanned pregnancies in Southern Nevada by 10% by the year 2015. To assess progress toward this overall project impact, annual statistics regarding the rate of sexually transmitted infections and teen births in Clark County are provided in the tables below. The first year reported in the tables, 2010, is being considered the baseline for this project because it is the year prior to implementation of the TPP Program.

As seen in Table 12, the annual rate of cases of Chlamydia, Gonorrhea, and Syphilis (primary and secondary) increased from 2010 to 2014. Data is not yet available regarding 2015.

Table 12. Clark County Sexually Transmitted Infection Statistics by Year

	Annual Total					*Annual Rate per 100,000*				
	2010	***2011***	***2012***	***2013***	***2014***	***2010***	***2011***	***2012***	***2013***	***2014***
Chlamydia	7362	8336	8589	8614	10312	374.1	423.4	433.9	428.9	502.5
Gonorrhea	1511	1740	1968	2090	2802	76.8	88.4	99.4	104.1	136.6
Syphilis (Primary and Secondary)	126	126	110	170	259	6.4	6.4	4.9	8.5	12.6

Data retrieved from the Nevada Division of Public and Behavioral Health website:
http://dpbh.nv.gov/Programs/STD/Docs/2014_STD_Fast_Facts_e_1_0_2015-07-28/
http://dpbh.nv.gov/Programs/STD/Docs/2013_STD_Fast_Facts_e_1_0_2014-09-03/
http://dpbh.nv.gov/Programs/STD/Docs/2012_STD_Statistics/
http://dpbh.nv.gov/Programs/STD/Docs/2011_STD_FastFacts/
http://dpbh.nv.gov/Programs/STD/Docs/2010_STD_FastFacts/

As seen in Table 13, the teenage (ages 15-19) birth counts and rates among Clark County residents have decreased annually from 2010 to 2013.

Table 13. Clark County Birth Counts and Rates for Ages 15-19 Years

Year of Birth	*Count*	*Rate*
2010	2,459	38.2
2011	2,244	35.1
2012	2,069	32.3
2013	1,861	28.7

Note: All counts and rates are not final and subject to change
Data provided by The Nevada Division of Public and Behavioral Health, Office of Public Health Informatics and Epidemiology, July, 2015.

The true overall impact of the SNHD TPP program on Clark County is difficult to isolate. Although the rates of sexually transmitted diseases have increased during the course of this project, the teen birth rates have decreased. Still, it seems logical that the program would have positively and not negatively impacted both rates. Additionally, it is difficult to determine how quickly the program would have influenced these rates. It is possible that although this project has ended, it will continue to impact the rates of sexually transmitted infections and teen birth rates in Clark County.

7. Year Five Summary

The Southern Nevada Health District's (SNHD) Teen Pregnancy Prevention Program was implemented to reduce the rate of teen births, pregnancy, and sexually transmitted infections in adolescents in Clark County, Nevada. This program was being implemented primarily with a population of youth at greatest risk for negative health outcomes: those involved in juvenile justice services and foster care. The program's target population was unique in that these youth differ significantly from youth in the general population in Clark County, Nevada in both the age of first sexual intercourse, and the proportion of the population who reports having ever had sex and having had sex in the past three months.

Of the 3059 participants that were enrolled in the SNHD Teen Pregnancy Prevention Program, 80.3% reported ever having sex, while according to the 2013 Nevada Youth Risk Behavior Survey (YRBS): Clark County Analysis (Frankenberger, Clements-Nolle, Zhang, Larson, and Yang, 2014), only 40.2% of adolescents in Clark County, Nevada reported ever having sex. SNHD Teen Pregnancy Prevention Program participants were also more likely to have had sex in the past three months (66.3%) as compared to 26.4% of Clark County's adolescents as reported by the 2013 YRBS. In addition, a larger percentage of program participants reported ever having been pregnant or gotten someone pregnant (18.4%) than that of the Clark County youth population (4.4%). The current project rates for these variables are presented in Table 14 and are compared to the 2013 Clark County Nevada YRBS rates.

Table 14. Comparison between SNHD TPP participants and 2013 Nevada YRBS results

	SNHD TPP participants (n = 3059)	***2013 Clark County, Nevada YRBS (n = 1185)****
Ever had sex?	80.3%	40.2%
Had sex in the past three months	66.3%	26.4%
Sexual intercourse before age 13	20.9%	5.7%
Ever been pregnant or gotten someone pregnant	18.4%	4.4%
** Data obtained from http://dhs.unr.edu/Documents/dhs/chs/yrbs/2013NevadaYRBSClarkCountyAnalysisUpdated.pdf*		

The comparisons in Table 14 confirm the assumption that the youth targeted for this project were indeed high risk. A review of the overall project progress (see below) suggests that although there were some successes with regard to goals and objectives being met, consideration might need to be given to adapting the program for this high risk group of youth.

Goal	Project Outcomes
1. **80%** of program participants will report an increase in knowledge about HIV/AIDS transmission and prevention immediately following curriculum (Knowledge)	**78.4%** of program participants demonstrated an increase in knowledge about HIV/AIDS transmission and prevention immediately following curriculum
2. **65%** of program participants will report an increase in intention to abstain from sex at least 6 months post curriculum (Motivation)	The intention to abstain score, when compared to pre-curriculum, increased for: • **16.6%** of participants immediately following course completion • **29.1%** of participants at 3-months • **29.2%** of participants at 6-months
3. **50%** of program participants will report a reduction in sex partners as compared to pre-curriculum testing (Behavior Change)	The number of reported sex partners "during the last 3-months" decreased for: • **25.9%** of participants from pre-curriculum to 3-months post-curriculum • **22.7%** of participants from pre-curriculum to 6-months post-curriculum
4. **50%** of program participants will report an increase in condom use at 3 months and 6 months compared to pre-curriculum testing (Decision-making)	The reported frequency of condom use increased for: • **40.8%** of participants from pre-curriculum to 3-months post-curriculum • **39.7%** of participants from pre-curriculum to 6-months post-curriculum
5. **50%** of program participants will report an increase in refusal skills as compared to pre-curriculum testing (Self-efficacy)	The "refusal skills" score increased for: • **56.3%** of participants from pre-survey to post-survey • **57.5%** of participants from pre-survey to 3-month follow-up survey • **61.5%** of participants from pre-survey to 6-month follow-up survey

During each year of the project, the Southern Nevada Health District (SNHD) exceeded Goal 5 (increase in refusal skills) and came close to meeting Goal 1 (increase in knowledge about HIV/AIDS). When analyzing the data by year, the SNHD did meet Goal 1 during Year 4 and Year 5.

Appendix A: Participant Demographics

	Year 2 (n = 602)		Year 3 (n = 734)		Year 4 (n = 616)		Year 5 (n = 613)		Total (N = 2565)	
Demographic Variable	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)
Gender	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
Male	451	74.9	531	72.3	450	73.1	441	71.9	1873	73.0
Female	151	25.1	203	27.7	166	26.9	172	28.1	692	27.0
Missing	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Age	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
11	0	0.0	2	0.3	2	0.3	0	0.0	4	0.2
12	6	1.0	13	1.8	8	1.3	9	1.5	36	1.4
13	32	5.3	34	4.6	29	4.7	28	4.6	123	4.8
14	58	9.6	87	11.9	57	9.3	85	13.9	287	11.2
15	112	18.6	150	20.4	128	20.8	123	20.1	513	20.0
16	167	27.7	173	23.6	161	26.1	170	27.7	671	26.2
17	190	31.6	226	30.8	198	32.1	169	27.6	783	30.5
18	33	5.5	40	5.4	30	4.9	26	4.2	129	5.0
More than or Equal to 19	2	0.3	9	1.2	2	0.3	2	0.3	15	0.6
Missing	2	0.3	0	0.0	1	0.2	0	0.0	3	0.1
Grade Level	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
6th Grade	2	0.3	9	1.2	5	0.8	1	0.2	17	0.7
7th Grade	15	2.5	25	3.4	19	3.1	29	4.7	88	3.4
8th Grade	61	10.1	76	10.4	40	6.5	47	7.7	224	8.7
9th Grade	84	14.0	105	14.3	93	15.1	86	14.0	368	14.3
10th Grade	123	20.4	130	17.7	120	19.5	121	19.7	494	19.3
11th Grade	145	24.1	163	22.2	160	26.0	140	22.8	608	23.7
12th Grade	107	17.8	121	16.5	99	16.1	101	16.5	428	16.7
GED	7	1.2	14	1.9	10	1.6	8	1.3	39	1.5
College	5	0.8	8	1.1	6	1.0	3	0.5	22	0.9
Not Currently in School	21	3.5	38	5.2	16	2.6	18	2.9	93	3.6
Missing	32	5.3	45	6.1	64	7.8	59	9.6	184	7.2
Ethnicity	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
Hispanic or Latino	219	36.4	327	44.6	249	40.4	250	40.8	1045	40.7
Not Hispanic or Latino	333	55.3	371	50.5	346	56.2	355	57.9	1405	54.8
Missing	50	8.3	36	4.9	21	3.4	8	1.3	115	4.5
Race	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
American Indian/Alaska Native	8	1.3	17	2.3	9	1.5	15	2.4	49	1.9
Asian	9	1.5	11	1.5	8	1.3	5	0.8	33	1.3
Black or African American	144	23.9	189	25.7	162	26.3	169	27.6	664	25.9
Native Hawaiian or Pacific Islander	8	1.3	6	0.8	17	2.8	10	1.6	41	1.6
White	84	14.0	93	12.7	114	18.5	78	12.7	369	14.4
Multiple Races	131	21.8	190	25.9	125	20.3	158	25.8	604	23.5
Other	101	16.8	0	0.0	0	0.0	178	29.0	101	3.9
Missing	117	19.4	228	31.1	181	29.4	0	0.0	704	27.4

Participant Demographics (continued)

	Year 2 (n = 602)		Year 3 (n = 734)		Year 4 (n = 616)		Year 5 (n = 613)		Total (N = 2565)	
Demographic Variable	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)	Count (N)	Percent (%)
Home Language	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
English	383	63.6	475	64.7	415	67.4	400	65.3	1673	65.2
Spanish	49	8.1	52	7.1	30	4.9	50	8.2	181	6.7
Multiple Languages	122	20.3	174	23.7	132	21.4	117	19.1	545	21.9
Other	4	0.7	3	0.4	2	0.3	3	0.7	13	0.5
Missing	44	7.3	30	4.1	37	6.0	42	6.9	153	6.0
"Single Parent" Household?	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
Yes	282	46.8	344	46.9	299	48.5	317	51.7	1242	48.4
No	270	44.9	351	47.8	273	44.3	244	39.8	1138	44.4
Missing	50	8.3	39	5.3	44	7.1	52	8.5	185	7.2
Program Location	**602**	**100%**	**734**	**100%**	**616**	**100%**	**613**	**100%**	**2565**	**100%**
Detention	***315***	***52.3***	***382***	***52.1***	***300***	***48.7***	***301***	***49.1***	***1298***	***50.6***
Unit E-1	0	0.0	15	2.0	0	0.0	0	0.0	15	0.6
Unit E-2	107	17.8	113	15.4	121	19.6	122	19.9	463	18.1
Unit E-3	100	16.6	143	19.5	112	18.2	108	17.6	463	18.1
Unit E-5	85	14.1	105	14.3	67	10.9	71	11.6	328	12.8
Unit E-7	23	3.8	0	0.0	0	0.0	0	0.0	23	0.9
SMYC	0	0.0	6	0.8	0	0.0	0	0.0	6	0.2
Probation	***244***	***40.5***	***310***	***42.2***	***265***	***43.0***	***269***	***43.9***	***1088***	***42.4***
Martin Luther King, Jr.	76	12.6	92	12.5	71	11.5	49	8.0	288	11.2
Stewart	71	11.8	86	11.7	61	9.9	87	14.2	305	11.9
Charleston	57	9.5	91	12.4	87	14.1	73	11.9	308	12.0
Flamingo	40	6.6	41	5.6	46	7.5	60	9.8	187	7.3
Foster Care (SAFY)	***43***	***7.1***	***29***	***4.0***	***17***	***2.8***	***10***	***1.6***	***99***	***3.9***
City of Las Vegas	***0***	***0.0***	***13***	***1.8***	***34***	***5.5***	***33***	***5.4***	***80***	***3.1***

Note. Demographic information only provided for those participants that completed the course (N=2565). The total number of enrolled participants was 3060.

Appendix B: References

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