



Institute of Public Policy  
Harry S Truman School of Public Affairs  
University of Missouri

# MISSOURI TEEN PREGNANCY PREVENTION: A LONGITUDINAL ANALYSIS OF THE PERSONAL RESPONSIBILITY EDUCATION PROGRAM

Prepared by: Kristi Ressel, Gwendolyn Sams, and Kendal Lowrey

*Prepared for the Missouri Department of Health & Senior Services*

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## Missouri Teen Pregnancy Prevention: A Longitudinal Analysis of the Missouri Personal Responsibility Education Program

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### EXECUTIVE SUMMARY

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In the United States, teen birth rates have been steadily declining since 1991.<sup>1</sup> For childbearing teenagers between 15 and 19, the birth rate has declined 61 percent since 1991. Yet, teen birth rates remained at 250,000 births in 2014.<sup>2</sup> Even with the decline in the teen birth rate, the United States has a higher teen birth rate than many developed countries, including Canada and the United Kingdom.<sup>3</sup> In order to address rates of teen pregnancy in the United States, teen pregnancy prevention programs have been implemented nationwide.

For the state of Missouri, teen pregnancy prevention programming is implemented through the Missouri Department of Health and Senior Services (DHSS). Funding was awarded to DHSS to implement evidence based teen pregnancy prevention programming focusing on sexually transmitted infection (STI) and HIV prevention programs. Since 2011, DHSS has contracted with the Institute of Public Policy (IPP) to serve as external evaluators for prevention programming.

This report provides a longitudinal analysis of the Missouri Personal Responsibility Education Program (PREP). The analysis serves as an overview of PREP from the 2011 implementation to the most recent program year ending in 2017. Policy analysts at IPP, hereafter referred to as the Evaluation Team, provide this analysis as a summary of PREP's performance in Missouri. Data collected from the six program years identifies longitudinal results that determine the performance of the program. The Evaluation Team reviews overall program implementation and criteria such as: stakeholder relationships, outcomes, community and location, sustainability, and lessons learned.

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<sup>1</sup> United Nations Statistics Division. (2014). Demographic Yearbook 2013. New York, NY: United Nations. Retrieved September 11, 2017, from <http://unstats.un.org/unsd/demographic/products/dyb/dyb2013/Table10.pdf> - PDF

<sup>2</sup> [https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64\\_12.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_12.pdf)

<sup>3</sup> Ibid.

**Summary of Findings**

<b>Table 1: Key Findings in the Missouri Teen Pregnancy Prevention: A Longitudinal Analysis of the Missouri Personal Responsibility Education Program</b>	
<b>Contractors</b>	<ul style="list-style-type: none"> <li>The total number of contractors that implement PREP fluctuates from year to year. Years one through five saw an average of 13 contractors and year six saw an increase to 15 contractors.</li> </ul>
<b>Technical Assistance</b>	<ul style="list-style-type: none"> <li>Facilitator post survey responses have remained consistent for technical assistance needs between years one and six. Recurring issues are: retaining students, student attendance, training facilitators, and keeping the youth engaged.</li> <li>Years two, five, and six also identified youth behavioral problems as a recurring issue.</li> </ul>
<b>Youth Self-Efficacy</b>	<ul style="list-style-type: none"> <li>Half of students report they are able to share ideas with a parent or guardian and that they are able to manage conflict.</li> <li>35 percent of all student participants report having had sex on the pre-survey.</li> </ul>
<b>Longitudinal Results</b>	<ul style="list-style-type: none"> <li>170 students were identified as participating in two or more years of PREP.</li> <li>Knowledge response questions have a low percentage of correct answer responses with 59 percent of longitudinal students answering 7 out of 10 correctly on post survey.</li> <li>53 percent of longitudinal students answered correctly on the pre-survey showing evidence of knowledge gained through the program.</li> <li>Longitudinal results show black/African American students are more likely to feel that they care about doing well in school and that they can resist or say no to peer pressure.</li> <li>Results show female students are more likely to state that they could share ideas that matter with a parent or guardian and male students are more likely to say that they know how to manage stress.</li> <li>Results show younger students state they can manage money carefully.</li> <li>Results show black/African American students and younger students are more likely to state that they are respectful towards others, and that they will get more education after high school.</li> </ul>
<b>Curriculum</b>	<ul style="list-style-type: none"> <li>TOP represents 41 percent of PREP clubs.</li> <li>MPC represents 44 percent of PREP clubs.</li> <li>BART represents 15 percent PREP clubs. BART participation is consistently declining between years one and six.</li> <li>Half of BART counties have switched curricula preference to TOP or MPC curricula.</li> </ul>
<b>Attendance</b>	<ul style="list-style-type: none"> <li>MPC has better attendance rates than BART and TOP.</li> <li>Fidelity attendance scores for all curricula have significantly decreased throughout years one to six.</li> </ul>

	<ul style="list-style-type: none"> <li>• Although lower overall, the curricula with the shortest program length, MPC, has the greatest attendance rates and the curricula with the longest length, TOP, has the lowest attendance rates.</li> <li>• Between 2011 and 2016 program years, 3,956 youth were served by PREP and 2,574 youth completed program.</li> </ul>
<b><i>PREP Locations</i></b>	<ul style="list-style-type: none"> <li>• In Missouri, several communities have been identified as high-risk but are not implementing PREP.</li> <li>• The analysis outlines potential contractors/communities in Sullivan, Buchanan, Wright, Henry, Wayne, Barry, and Daviess Counties.</li> </ul>
<b><i>Community Readiness</i></b>	<ul style="list-style-type: none"> <li>• The average stage of readiness is at the Preparation level where there is modest support of efforts and active planning around teen pregnancy prevention.</li> </ul>
<b><i>PREP Delivery</i></b>	<ul style="list-style-type: none"> <li>• Years two through four observed 55 percent of youth participants completing CSL hours.</li> <li>• Year five saw an increase to 90 percent of youth completing CSL hours.</li> <li>• The analysis revealed an overall downward trend in averages for program fidelity with an 89 percent year one fidelity score to a 79 percent year six fidelity score.</li> </ul>

## INTRODUCTION

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The Personal Responsibility Education Program (PREP) was established through the Patient Protection and Affordable Care Act of 2010. The goal of the program is to implement preventative health care programs to youth throughout the United States. Funding was awarded to the Missouri Department of Health and Senior Services (DHSS) to implement PREP in Missouri.

DHSS identified three PREP curricula for contractors to implement: Becoming a Responsible Teen (BART), Making Proud Choices (MPC), and the Teen Outreach Program (TOP). Below is a description of each of the programs and the rationale for selection:<sup>4</sup>

- Becoming a Responsible Teen (BART) is a comprehensive sex education program consisting of eight lessons taught over an eight week period. The target population is African American youth between the ages of 14 and 18. The curriculum focuses on the prevention of teen pregnancy, STIs, and HIV/AIDS through effective communication, negotiation, and problem-solving. The curriculum also stresses proper use of condoms for those who are sexually active. BART was selected to provide a comprehensive program over a short time span to middle and high school age youth.
- Making Proud Choices (MPC) is also a comprehensive sex education program consisting of eight lessons. The eight lessons can be implemented in as little as one day or over 8 weeks. MPC targets youth between the ages of 11 and 13. The curriculum focuses on abstinence and safe sex practices. The curriculum also discusses condom use as an option for reducing risks for sexually active teens. This program was selected as a more flexible alternative to BART.
- Teen Outreach Program (TOP) is an adult preparation curriculum that stresses youth development and community service learning. TOP is an extremely flexible program that is implemented over a 9-month period. TOP prevents youth risk behaviors by helping participants establish healthy activities, life skills, and a sense of purpose. The program is focused on both curriculum-based lessons as well as 20 hours of community service learning. TOP was selected for PREP because the curriculum had previously been successful in the state. The program also offers a different approach to teen pregnancy prevention, which provides partners with a wide selection of adult preparation topics.

DHSS developed and released a Request for Proposal (RFP) in September of 2011 to distribute the funds to Missouri organizations to implement the program. DHSS utilized the results of a needs assessment to target funding in regions of the state with the highest risk for teen pregnancy. The needs assessment originally identified 25 high-risk counties based on teen pregnancy and birth rates, STIs, and other related indicators. In 2016, an updated assessment

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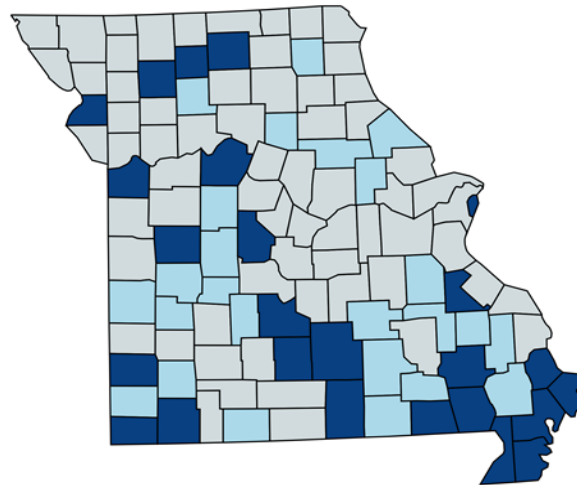
<sup>4</sup> Missouri Department of Health and Senior Services. (2010). Personal Responsibility Education Program (PREP) Post Award State Plan

included an additional 25 counties for program implementation. Figure 1 shows the high-risk counties identified in Missouri.

**Figure 1: Counties in Missouri with the Highest Risk for Teen Pregnancy**

**Missouri High-Risk Counties**

- Top 25 High-Risk Counties
- Expanded High-Risk Counties (25)



The objective of this analysis is to assess the PREP program and compare overall goals and projected outcomes. Projected outcomes include: reducing teen pregnancy, increasing knowledge regarding pregnancy, STI, and HIV prevention, and increasing community capacity to offer education classes to achieve these goals. Specific outcomes from the Missouri PREP logic model are as follows:

*Short-Term Outcomes:*

- 1) Increase in knowledge regarding pregnancy, STI, and HIV prevention.
- 2) Decrease in intention to have sex.
- 3) Increase in intention to remain abstinent.
- 4) Increase in intention to use contraception/condom when sexually active.

*Intermediate Outcomes:*

- 1) Abstinent youth maintain abstinence (delay sexual activity).
- 2) An increase in self-efficacy to use skills learned in evidence-based programs.
- 3) An increase in the reported frequency of condom/contraceptive use among sexually active youth.
- 4) A decrease in rate of failure of any school course.
- 5) A decrease in rate of suspension from school.

The full logic model can be found in Appendix A.

The sixth year of implementation saw the addition of the Abstinence Education Grant Program (AEGP). This program provides an alternative teen pregnancy prevention approach and offers contractors the ability to tailor their programming to fit the needs of the community through PREP's comprehensive sex education approach or through AEGP's abstinence approach. The analysis makes special note where the addition of the AEGP program in year six has impacted the longitudinal review of PREP.

## OVERVIEW OF THE EVALUATION

The Evaluation Team developed an assessment of the program by looking into five overall characteristics, including: stakeholder relationships, outcomes, location, program implementation, and discussion of findings. Below is a description of each area of the evaluation. The data are collected from outcomes and final reports, including various surveys and stakeholder information.<sup>5</sup>

### STAKEHOLDERS

For the analysis, PREP stakeholders consist of contractors, facilitators, and students. Contractors are contracted by the grant awardee (Missouri DHSS) to provide the program in their area. Facilitators are those who contractors designate and DHSS train to deliver the program. Students are those who participate in the teen pregnancy prevention programming.

The evaluation of the contractors describes the contractors, the organization type, organizational changes throughout the program, and the average number of contractors per year. The facilitator evaluation includes the number and trend of facilitators, credibility with the youth, and their level of program fidelity. The evaluation of the students discusses student demographics, number of youth served by the program, completion rates, student living arrangements, attitudes toward school, and grades and behavior.

### OUTCOMES

This section of the analysis discusses program outcomes and curricula choice information. The analysis addresses the geographic location and curricular type of the clubs included in the program. Additionally, this section discusses club changes over time, fidelity attendance, and responses to surveys in which knowledge and perceptions related to the program are identified.

In addition, a longitudinal dataset is provided to monitor students that have participated in PREP for more than one consecutive year. The Evaluation Team analyzes the longitudinal information for an increase in knowledge or additional benefits rendered to the youth.

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<sup>5</sup> Data from the 2016-2017 program year was pulled on August 8, 2017. Missing data notations are included in the footnotes.



## LOCATIONS

The analysis reviews the location of programs and evaluates whether they are being implemented in target communities identified by the risk assessment. The community itself is also analyzed through a review of a Community Readiness Assessment and an evaluation of community attitudes toward pregnancy prevention. The Assessment measures teen pregnancy awareness and identifies mechanisms to improve efforts to prevent teen pregnancy in the community. The Assessment also identified foster youth as a target population for contractors. It is the expectation of the funder that contracted agencies work in their communities to raise awareness of the issues addressed in PREP. Increasing the capacity of communities to address teen pregnancy is one of the outcomes on the Missouri PREP logic model (Appendix A).

To better understand a community's readiness to address teen pregnancy, the Evaluation Team conducts online surveys with key stakeholders using the Community Readiness Model.<sup>6</sup> This model is designed to evaluate the community's stage of readiness to address the issue of teen pregnancy based on six dimensions that are key factors in the ability to take action. Site-coordinators are the first respondents to take the Community Readiness Assessment survey in communities implementing BART, MPC and TOP curriculums. They are asked to list stakeholders in the community whom they feel play a role in the teen pregnancy prevention discussions. Those stakeholders are then invited to take a Community Readiness Survey. The results from the surveys are then aggregated for each community to determine a readiness score for each of the six community readiness dimensions as well as a total community readiness score.

Community attitude results are derived from an online survey of stakeholders asking a variety of questions about the community and perceptions regarding teen pregnancy prevention in the area.<sup>7</sup> Missouri communities have differing standpoints on the topic and have differing levels of acceptance for the program.

## PROGRAM DELIVERY

This portion of the analysis assesses PREP program delivery by reviewing curricular options and locations. Additionally, the analysis includes fidelity components and average Community Service Learning (CSL) hours completed. CSL hours are a TOP curriculum requirement and require 20 hours of service learning for students. The analysis focuses on the overall sustainability of the

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<sup>6</sup> Plested, B.A., Edwards, R.W., & Jumper-Thurman, P. (2006). Community Readiness: A handbook for successful change. Fort Collins, CO: Tri-Ethnic Center for Prevention Research

<sup>7</sup> Questions asked were: 1) What is the best part about working to reduce teen pregnancy in your community? 2) Who in your community has been instrumental in your programming success? 3) What types of obstacles have you encountered? 4) Tell me about the general community climate regarding teen pregnancy? 5) How have you made your efforts publically known within the community? 6) Tell me about the leadership in your community, this could include your stakeholders.

program and provides information on program retention, attitudes over time, and stakeholder changes.

#### DISCUSSION OF FINDINGS

The purpose of this section is to discuss considerations and lessons learned within PREP implementation. This includes aspects such as constituent input, location, community attitudes, fidelity, survey results, problems and solutions, sustainability, and challenges. Observations collected from the six program years provide a comprehensive overview of the program and recommendations for future implementation.

# FINDINGS

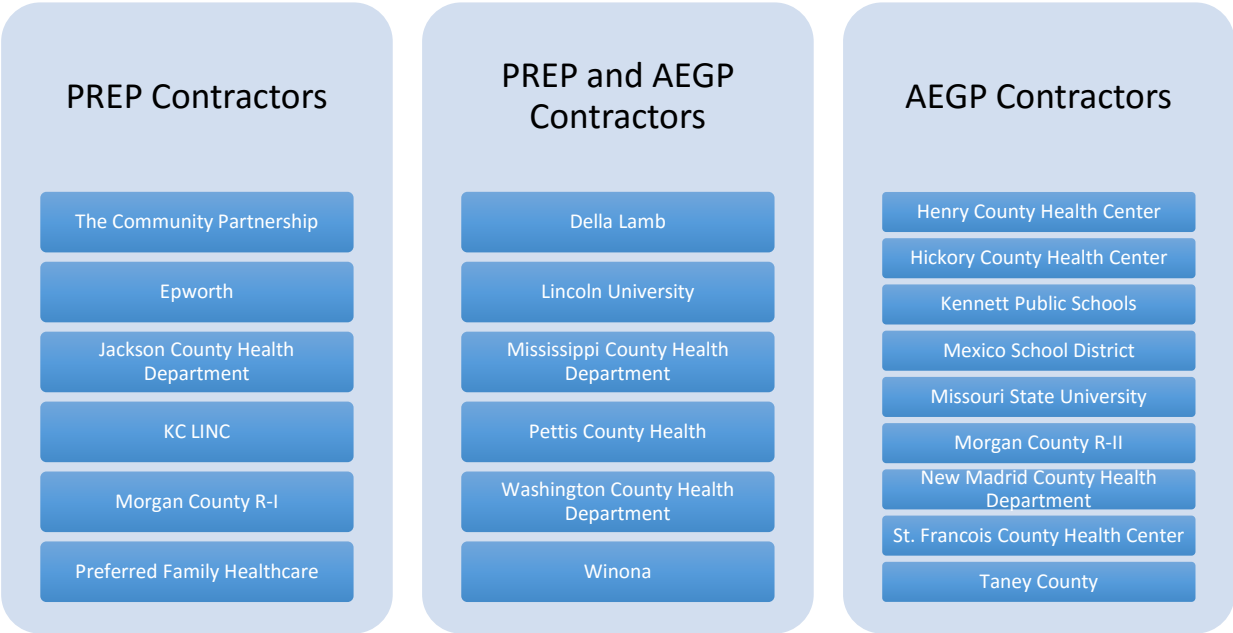
## CONTRACTORS, FACILITATORS, AND STUDENTS

### Contractors

Contractors are agencies that have contracted with DHSS to provide sex education programming in their area. The number of contractors and their corresponding geographical locations have expanded over the six years of Missouri PREP. The addition of AEGP further increased the number of contractors and locations able to provide teen pregnancy prevention programming.

The majority of PREP contractors have continuously implemented the program in their area although a few contractors have dropped over time. By looking at contractor participation trends and the addition of AEGP, future growth is expected among contractors. Years one through five saw an average of thirteen contractors per year. Year six, with the addition of the AEGP program, saw an increase to a new average of fifteen contractors.<sup>8</sup> Additionally, 24 percent of contractors have continuously implemented PREP since year two.<sup>9,10</sup> Figure 2 shows the list of contractors for both PREP and AEGP in year six.

**Figure 2: 2016-2017 PREP and AEGP Contractors**



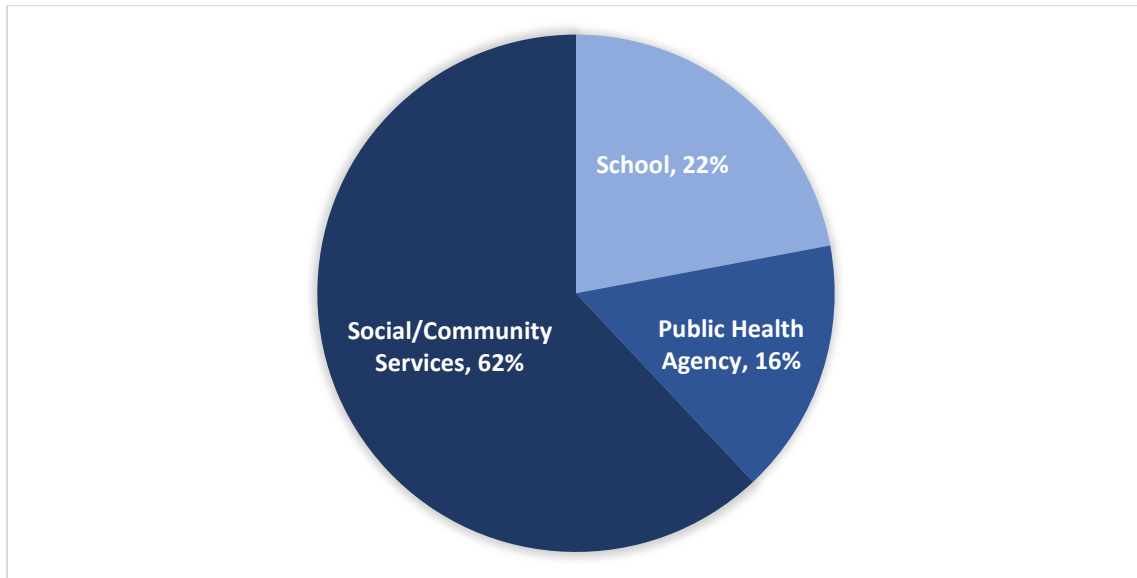
<sup>8</sup> There were 20 total contractors in year six, 21 contractors began year six but one contractor dropped mid-year.

<sup>9</sup> Out of the 17 contractors who were in PREP in year two, four of those remain currently in PREP.

<sup>10</sup> Year two was the first year not designated as a pilot year.

It is interesting to note that the majority of programs are not implemented in a school setting rather they are implemented with contractors categorized as social service or community service organizations (Figure 3).

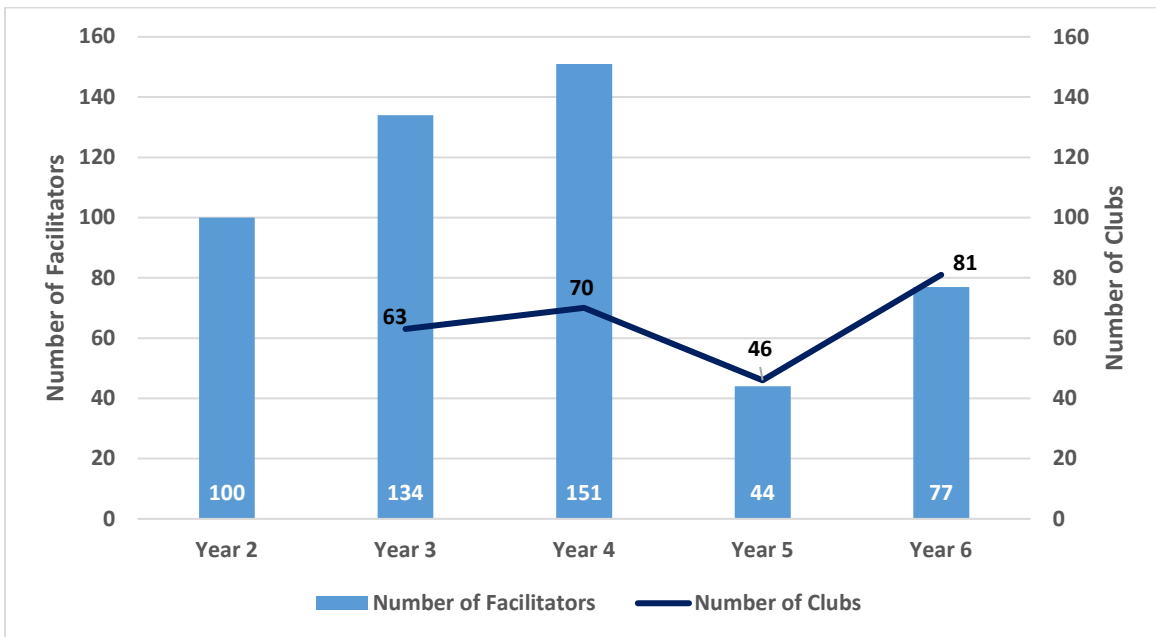
**Figure 3: Contractor Organization Category for Years 1-6**



***Facilitators***

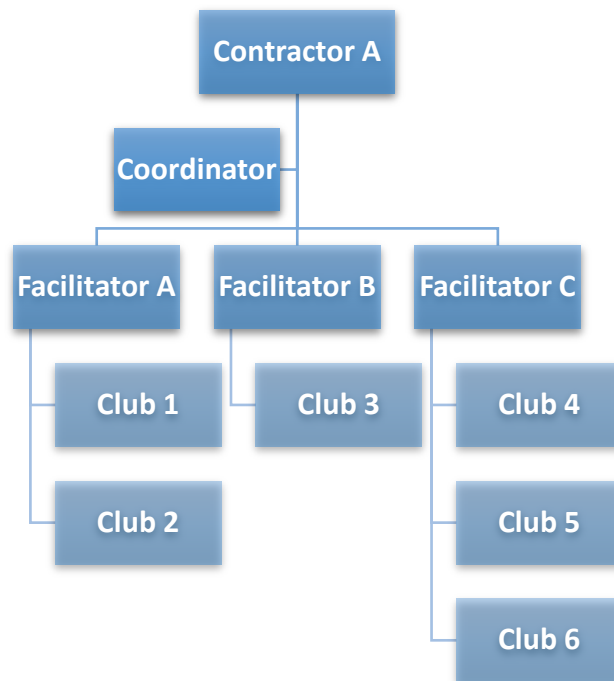
Facilitators are individuals employed by the contractor and trained by DHSS to provide PREP to students. The number of facilitators was greatest in year four of the program. The program saw a steady increase throughout the first several years as facilitators were trained to implement the program. In years five and six this number has since decreased as shown in Figure 4 below. Although the exact reason for this decrease is unknown, the Evaluation Team have identified the following factors which contribute to the trend: fewer PREP classes are offered, facilitators are teaching more than one class, and fewer facilitators are necessary in well-established programs.

**Figure 4: Number of Facilitators and Clubs Participating in PREP by Year**



As programming has progressed, facilitators may teach several different clubs under their contractor. For example, in year six, 42 percent of facilitators taught more than one club. Figure 5, displayed below, demonstrates an example of program layout for facilitators who teach more than one club.

**Figure 5: Example Hierarchy of PREP**



To assess the overall ability of the facilitators to deliver the curricula correctly, program fidelity is measured numerically. Measures for each program are listed below in Table 1 and an explanation of key components per curricula follows. Fidelity scoring is rated on a scale from 0-100 percent and are combined from years one to five for an overall assessment.<sup>11</sup>

**Table 1: Curricula Requirements for Facilitator Fidelity**

Curricula Requirements	MPC	BART	TOP
<b>Modules Taught in Sequence</b>	Modules taught in sequence	Modules taught in sequence and one week apart	
<b>Lessons Completed</b>			Required lessons completed
<b>Class Size Requirement</b>	Class size between 6 and 12	Class size between 5 and 15	
<b>Facilitator Guidelines</b>	Facilitator had credibility with the youth Two facilitators	Facilitator had credibility with the youth One male & one female facilitator	Facilitator credibility with the youth (taken from post-program surveys) Two facilitators Same facilitator throughout
<b>Designated Meeting Space</b>	Class met in a private setting	Class met in a private setting Class implemented in non-school setting	
<b>Program Length</b>	Each session was at least 60 minutes		Program lasted approximately 9 months At least 25 meetings
<b>Students Feelings</b>	Students felt safe and secure	Students felt safe and secure	
<b>Additional Requirements</b>		Participants received t-shirt	
<b>Student Age Requirements</b>		Participants between 14-18 years old	

### *MPC Facilitators*

The highest fidelity scores for MPC are classes having two facilitators and meeting in a private setting.<sup>12</sup> The lowest MPC fidelity scores are class sizes between 6 and 12 and each session lasting 60 minutes.<sup>13</sup>

<sup>11</sup> Year six fidelity scores were unavailable at the time of assessment.

<sup>12</sup> Scores of 99% and 100% respectively.

<sup>13</sup> Scores of 72% and 79% respectively.

### *BART Facilitators*

Perfect scores of 100 percent were received for meeting in a private setting and participants receiving a t-shirt. The lowest BART scores are 53 percent for modules taught in sequence and modules taught one week apart. The requirement of having one male and one female instructor receives a score of 63 percent. The only other score under an 80 percent is having a class size between 5 and 15 students.<sup>14</sup>

### *TOP Facilitators*

The highest fidelity score for TOP are clubs having the same facilitator throughout the duration of the program, receiving a score of 99 percent. For TOP, the lowest score of 84 percent are for the program not lasting the full nine months and for facilitator credibility with the youth. The majority of TOP scores were above 92 percent.

An important aspect within the components of all curricula types is facilitator credibility with the youth. Among all three programs, reported combined credibility is 88 percent. Another important result is that students report feeling safe and secure 91 percent of the time.

At the end of each program year, facilitators complete an online survey to assess feedback and measure success. In the survey, facilitators are asked which criteria poses a problem that affects their ability to implement the program or evaluation successfully. With each potential problem suggested, the facilitator selects whether the issue was either a) not a problem, b) somewhat of a problem, or c) a serious problem. The overwhelming majority of issues are listed as “not a problem”. The most common issue selected as a “serious problem” are obtaining parental consent forms, regular youth attendance, and recruiting youth to the program. These issues marked as serious represent 5 percent of the responses received between program years two through six.<sup>15</sup>

### **Students**

Between 2011 and 2017 program years, 328 PREP clubs were implemented. Those programs served a total of 3,956 youth.<sup>16</sup> Of those students 2,574 completed the program giving an overall completion rate of 65.1 percent.<sup>17</sup>

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*2,574 students  
completed PREP  
from 2011-2017*

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Figure 6 displays the average racial demographics of the students participating in PREP with almost half of students identifying as white and just less than half of students identifying as black or African American. Average student grade levels varied among the programs. TOP clubs are serving younger youth primarily in grades 6-8. BART clubs are serving older youth in grades 9-12. MPC student grade levels vary across all clubs.

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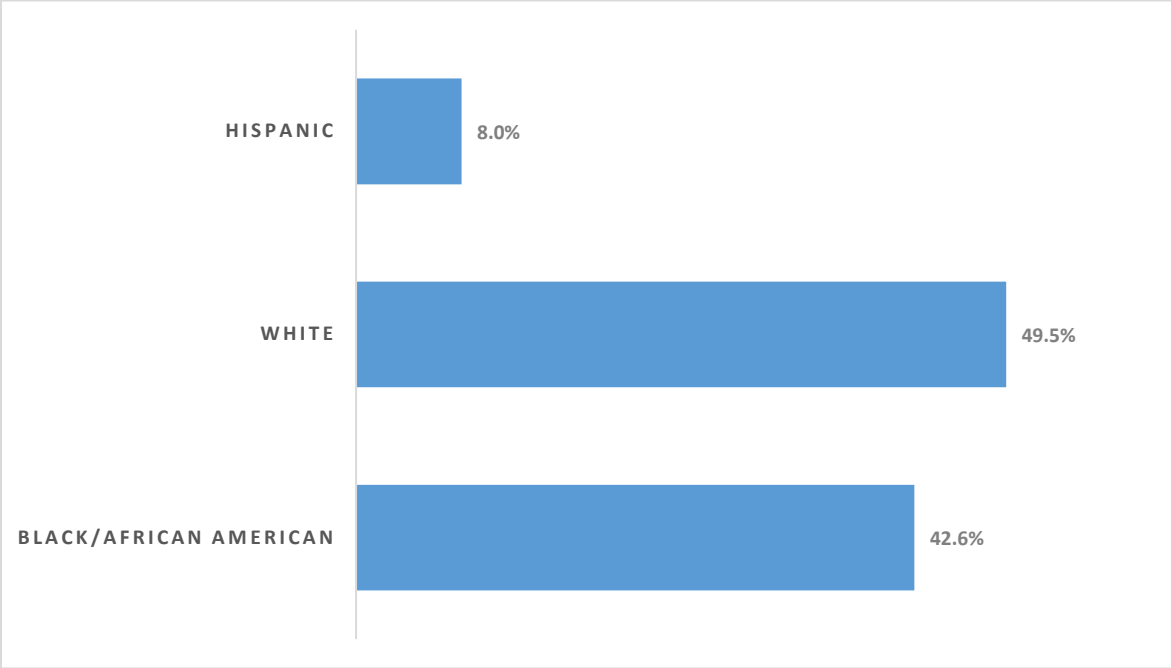
<sup>14</sup> Score for class size between 5 and 15 was 76%.

<sup>15</sup> 4.2%, 5.6%, and 5.1% respectively.

<sup>16</sup> The number that attended at least one session.

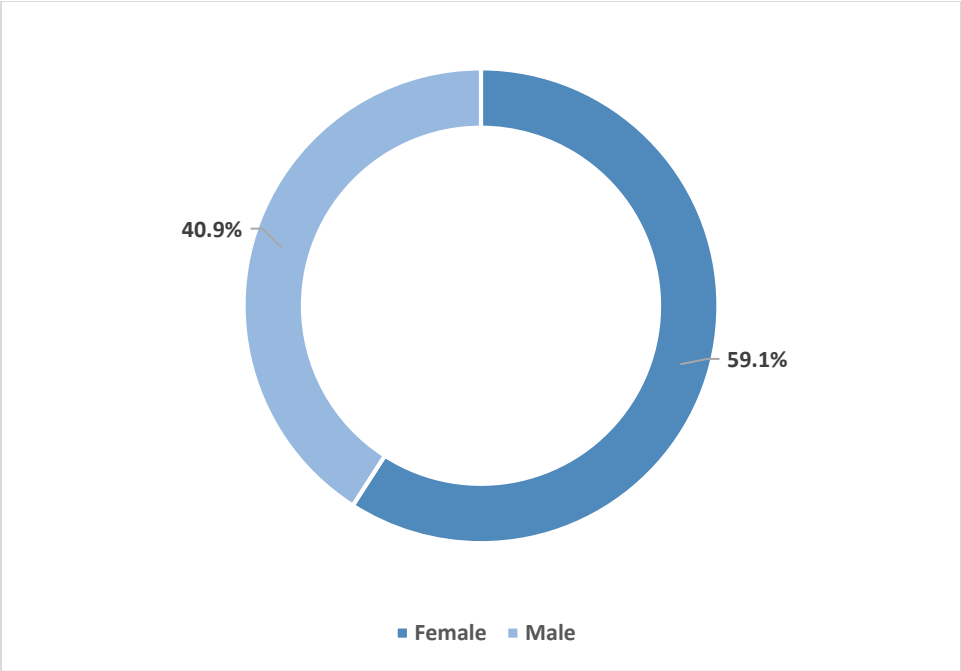
<sup>17</sup> Attended greater than 75 percent of the program.

**Figure 6: Race/Ethnicity Representation in PREP**



PREP tends to have a slightly higher rate of female participants than male, as shown in Figure 7. The average student age is around 14 years old, which lies within the targeted age range for the program.

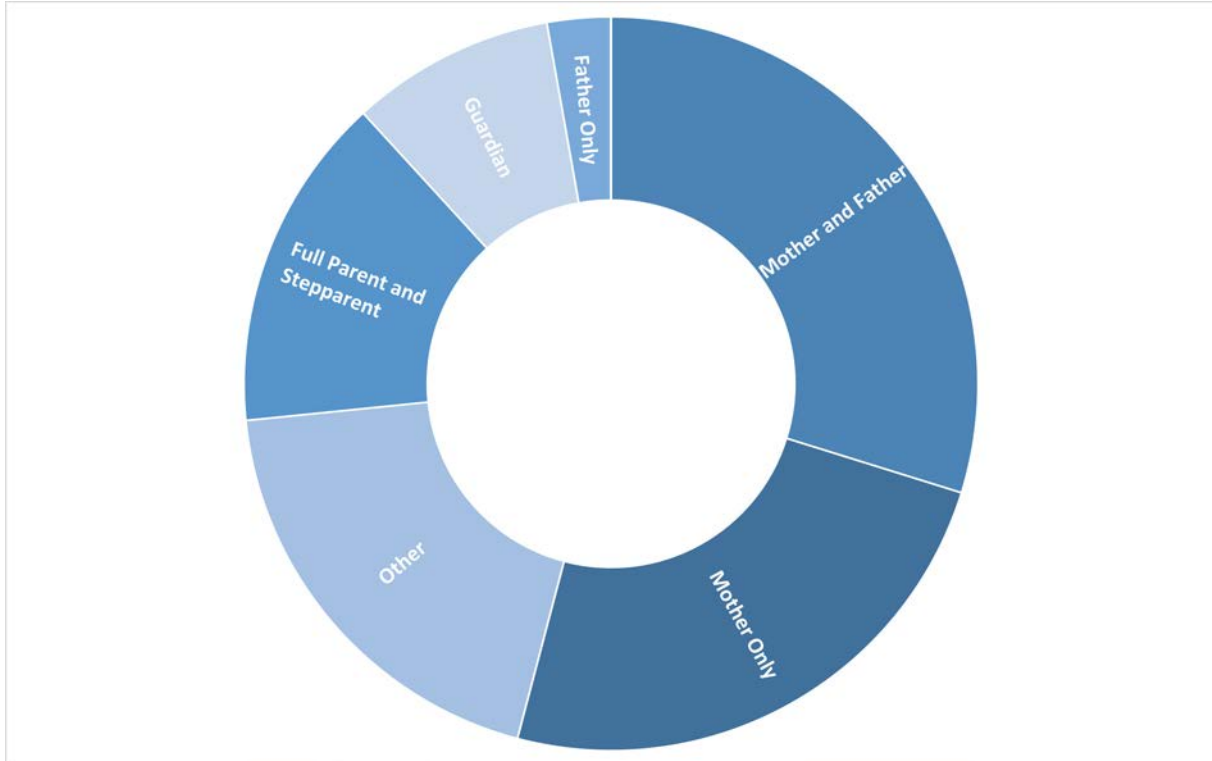
**Figure 7: PREP Gender Representation**





Living conditions among PREP youth vary and programming can be tailored to target certain populations at high risk. For example, Missouri PREP specifically targets youth in foster care. Figure 8 visualizes living conditions among students. PREP social determinants from living conditions such as low social support for teens from families, schools, or community groups, general neighborhood disadvantage, and low social capital may influence youth's sexual decision making and behavior.<sup>18</sup>

**Figure 8: PREP Youth Living Conditions**



Student attitudes toward school and information on grades and behavior are collected at the beginning of the program to obtain an overall assessment of student characteristics and attitudes. The Evaluation Team found the following student characteristics and attitudes from the combined assessment of students at the start of the program:

- 85 percent of students report caring about doing well in school.
- 68 percent state they can resist peer pressure. 58 percent state they are able to manage conflict.
- 55 percent of students report being able to share ideas with a parent or guardian.<sup>19</sup>

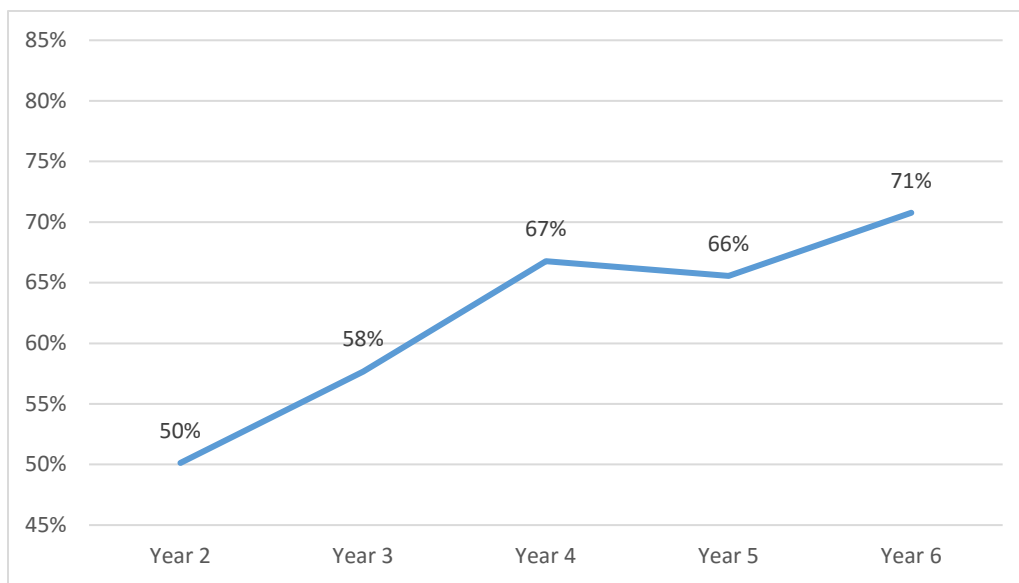
<sup>18</sup> JSI Research & Training Institute, Inc. (May 2015). Integrating a Social Determinants of Health Approach in Teen Pregnancy Prevention. Retrieved from: [http://3cjh0c31k9e12hu8v920fcv0.wpengine.netdna-cdn.com/wp-content/uploads/2016/04/SDH-Case-Study.Final .pdf](http://3cjh0c31k9e12hu8v920fcv0.wpengine.netdna-cdn.com/wp-content/uploads/2016/04/SDH-Case-Study.Final.pdf)

<sup>19</sup> Information exists in years 3-6 only.

- For grades and behavior, 37.2 percent report receiving a failing grade on a report card, 27.5 percent reported a school suspension, 18.1 percent of students report failing a class, and 17.6 percent report cutting class without permission.
- Student response to sexual activity shows that 35 percent of students report that they have had sex before participating in PREP.

Since year two, program completion rates have increased, shown in Figure 9. These rates are the number of students that completed at least 75% of the program. Year one information was not included because it was assessed as a pilot year. PREP has a completion rate of 71 percent for year six and an overall average of 62 percent completion.

**Figure 9: PREP Completion Rates**



## CURRICULA AND OUTCOMES

### ***Curricular Choices***

Contractors implementing a PREP program choose a curricula that is a best fit for their targeted group. The curricula choices available are BART, MPC, or TOP. BART has been the least popular choice of curricula representing only 15 percent of PREP, primarily located in the southern part of Missouri. Half of the counties that began with BART switched to either MPC or TOP curriculum.<sup>20,21</sup> The majority of new clubs are implementing MPC. TOP and MPC curriculums are relatively equal in club implementation with TOP representing 41 percent of clubs and MPC representing 44 percent as shown in Figure 10.

<sup>20</sup> 75% of switches from BART were to MPC curriculum.

<sup>21</sup> 25% of switches from BART were to TOP curriculum.

**Figure 10: PREP Curricula Choices**

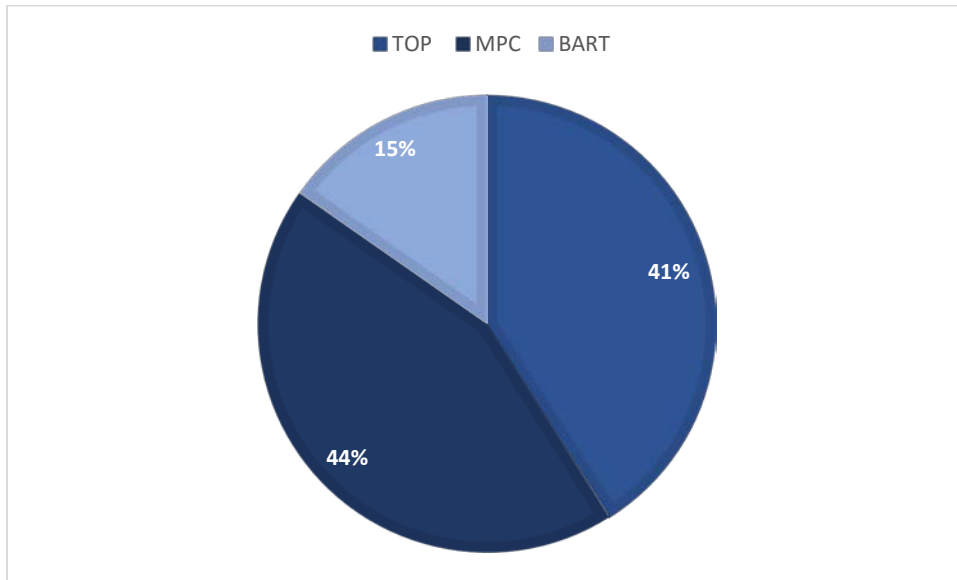
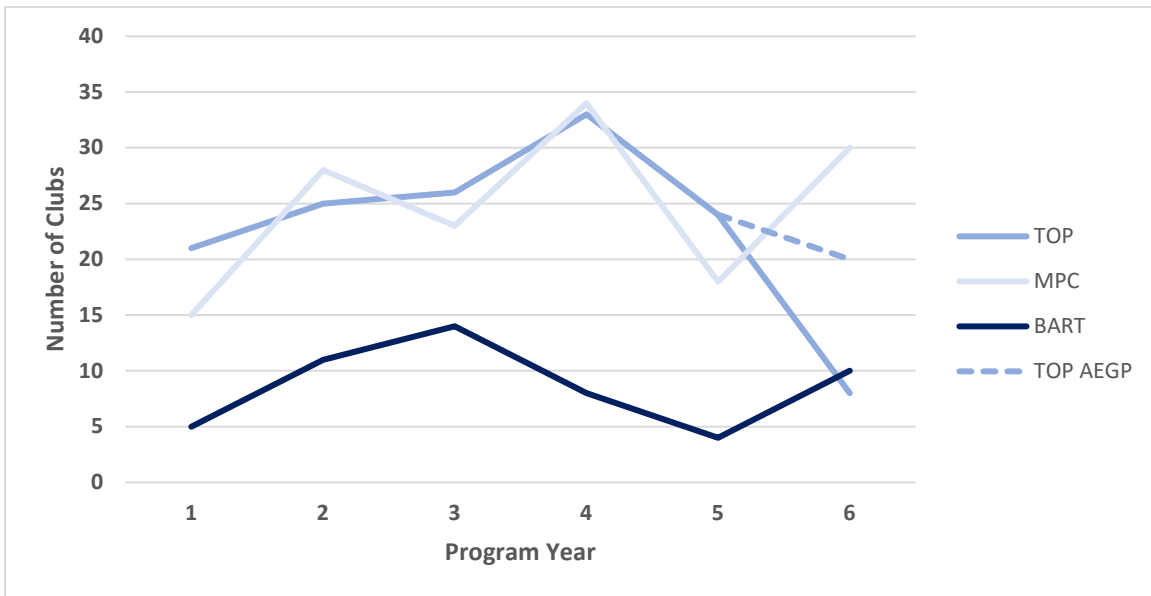


Figure 11 further illustrates the number of clubs in each curricula while also displaying the additional TOP clubs implementing AEGP, resulting in a sudden drop in year six PREP TOP programs.

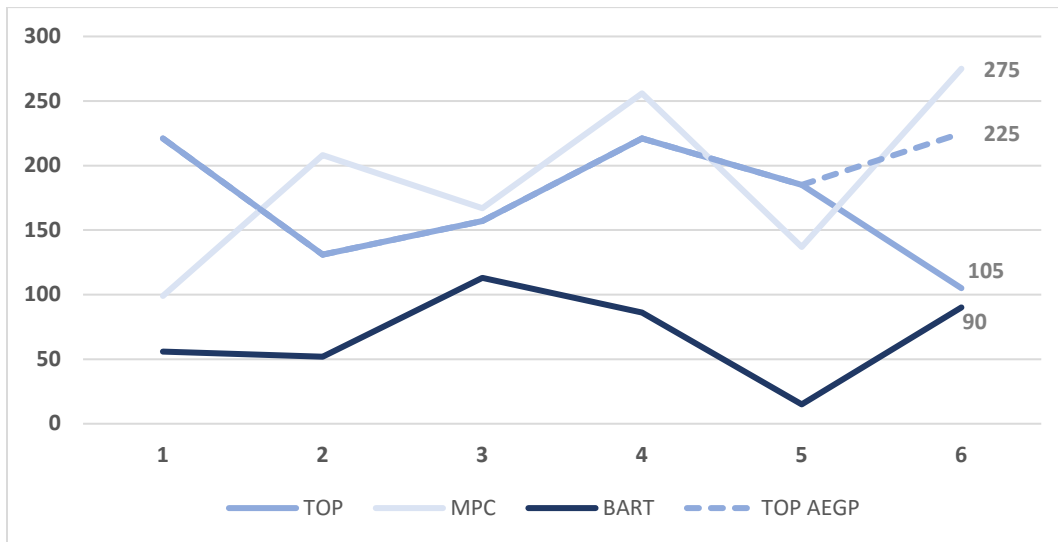
**Figure 11: Number of Clubs per PREP Curricula**



MPC serves the most students over time and represents the highest percentage of students per year. Collectively, club size and the number of classes has grown steadily until year five. With the addition of AEGP, the number of students in Teen Pregnancy Prevention (TPP) classes are the

largest to date.<sup>22</sup> Figure 12 displays the number of students in each PREP curricula along with the number of students in the TOP AEGP curriculum.

**Figure 12: Number of Students per PREP Curricula**



Pre and post-program survey outcomes provide evidence that students are learning. TOP and BART show the best results in student learning. The Evaluation Team attributes these results to the longer duration of the TOP and BART curricula and the age of their program participants.

### *Attendance Rates*

In the fidelity evaluation, attendance is measured by average student attendance. Student attendance is taken by the facilitator at the beginning of each class. Students who attended two or fewer classes are dropped from the calculation. Overall attendance rates have decreased throughout the six program years. Attendance rates are scored for program fidelity from 1 to 25, with 25 being the highest score. Year one has an average attendance score of 21.5 and year five has a score of 15.5.<sup>23</sup>

The average BART fidelity attendance score fluctuates over time. The BART score decreases in the first three years, increases for year four, and decreases in year five.<sup>24</sup> For MPC, attendance scores are best overall with an average of 22.86. TOP attendance scores are lowest with an average of 15.84 as shown in Figure 13. Even with the variation, average attendance scores for all curricula have dropped over time, especially when compared to the beginning of the program.

Program length plays a factor in the attendance rate decrease. For example, TOP has the longest program length (9 months) and the lowest attendance rates. While MPC which has the option of being implemented in as little as one day, has the best attendance rates. By assessing facilitator

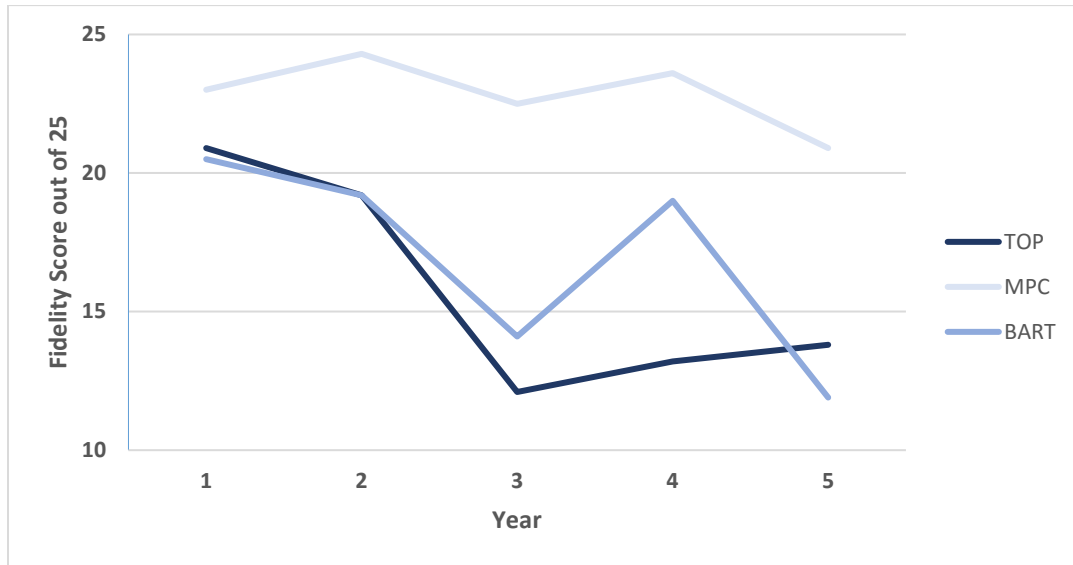
<sup>22</sup> It is estimated that AEGP will add an additional 400 students per program year.

<sup>23</sup> Year six attendance fidelity scores unavailable at time of analysis.

<sup>24</sup> Attendance score (out of 25) for BART in years 1-5 respectively were: 20.5, 19.2, 14.1, 19, and 11.9.

post-surveys, it is also notable that the lack of attendance can be attributed to issues such as time constraints and scheduling issues.

**Figure 13: Fidelity Attendance Score per PREP Curricula**



*Club Size*

Club size and the number of classes taught are increasing every year with the exception of year five. Year six increased from year five but the addition of AEGP is a contributing factor to the change in the number of classes. After combining PREP and AEGP programs in year six, more students are participating than in any other year. As a result, it is important to note that the decline in PREP classes for the current program year is observed as a direct correlation with the addition of AEGP. MPC curriculum has the largest number of students completing the program overall. TOP student numbers are a close second with only 122 less students completing PREP than MPC clubs (Table 2).

**Table 2: Combined Number of Students Completing PREP per Curricula Years 1-6**

Curricula	Number of Students Served
MPC	1,142
TOP	1,020
BART	412
<b>Total Students Served by PREP</b>	<b>2,574</b>

*Outcomes*

A pre-survey and a post-survey are given to students as a part of the facilitation of PREP. These surveys assess evidence of learning between the two time periods. The pre-survey is given at the beginning of the class before lessons begin. The post-survey is completed on the last day of classes.

Responses are assessed on true/false knowledge retention questions pertaining to pregnancy and HIV covered in the curriculum. Responses are scored based on the number of correct answers. The number of correct answers are compiled into a final score for both pre- and post-survey responses. Appendix B (Pre-Survey) and Appendix C (Post-Survey) include an example of the TOP pre- and post-surveys from the sixth program year.

The number of correct responses on knowledge questions are out of 10. For all curricula combined, the average pre-survey scores for years one through five are 5.9 of 10 correct responses. On the post-survey, this score increases to 7.5 out of 10. The increase in correct responses indicates evidence of learning. For the individual curricula, MPC and BART scores are higher percentages and TOP curriculum has the lowest average scores yet has the largest gap in knowledge gained, suggesting the greatest amount of learning.

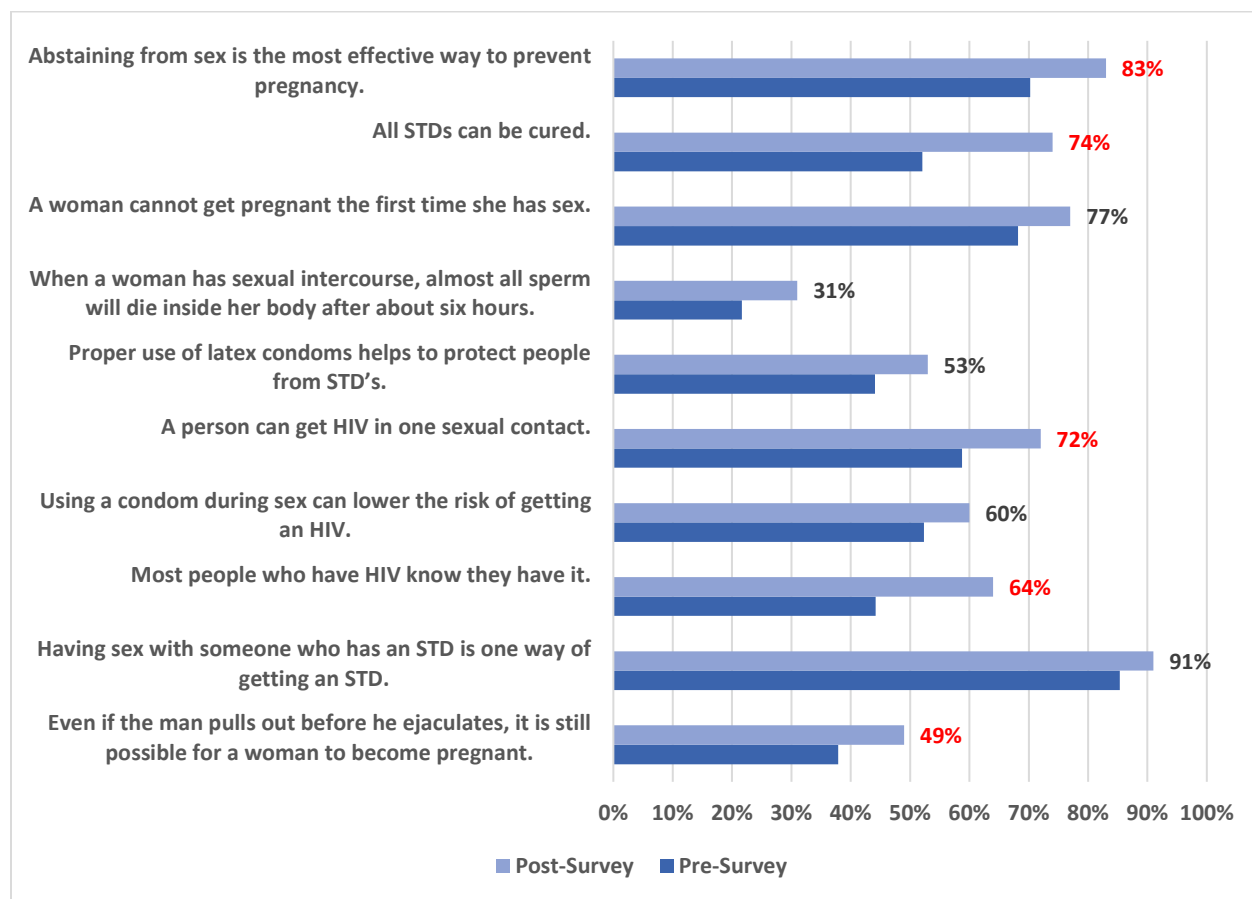
#### *Longitudinal Analysis of Students*

The longitudinal analysis is derived by comparing students from each year's outcomes to identify students who participated in PREP for more than one consecutive year. Although some students are in the program longer, most students in the program for more than a year participate for 2 to 3 years. All students included in the longitudinal data participated in the TOP curriculum.

The purpose of the longitudinal analysis is to assess whether students participating in PREP for more than one year have a change in survey responses dependent on personal characteristics and length of time in the program. The analysis reviews survey questions and responses regarding pregnancy and HIV in addition to ideas and intentions. For this analysis, if a student participated in the program for more than one year, their survey responses were recorded and analyzed separately from any previous year's responses. Overall, 398 student responses are included as multi-year participants from program years 2011-2016. There were a total of 170 students that contributed to the 398 survey responses. The majority of multi-year students participated for two years and 22.4 percent of students participated more than two years. Descriptive statistics for all variables are located in Appendix D.

Assessing the pre- and post-survey questions indicates there is an increase in learning for all ten pregnancy and HIV knowledge questions. Figure 14 displays the difference in percentage of responses for each survey question (Table AA in Appendix E). These true or false questions are graded based on the number of correct responses. Examples of these questions are also listed in the pre- and post-surveys in Appendix B and Appendix C. Percentages highlighted in red show the largest increase in learning. Full results as well as statistical significance are displayed in Appendix J.

**Figure 14: Percent of Correct Answers for Pre- and Post-Surveys**



Overall, 59 percent of students answered 7 or more of the 10 questions correctly on the post-survey. On the pre-survey, the average percentage of correct results was 53 percent. On the post-survey, the average percentage of correct results was 65 percent. These results show that students participating in PREP for multiple years are learning about pregnancy and HIV.

The vast majority of students reported on the pre- and post-surveys that they did not have sex or experience pregnancy during the time that they were in the program.<sup>25</sup> As a result of these findings, there were not enough observations to report whether a change in pre-and post-responses regarding pregnancies or the number of people a person has had sex with was significant. There were also not enough observations to report a statistically significant change in student condom use.

Additionally, these aspects were assessed while controlling for the number of years in PREP, sex, age, and ethnicity. When all of the variables in this section were compounded into one variable, it was found that age was a significant predictor of knowledge pertaining to pregnancy and HIV.<sup>26</sup>

<sup>25</sup> Pre-survey responses indicate that about 86.8% of students had not had sex.

<sup>26</sup> This was also true when variables were tested individually.

The older a student, the more likely he or she is to answer a question correctly. Results from this analysis are located in Table BB in Appendix F.

Along with correct responses, other components are assessed in the longitudinal analysis to determine whether age, sex, race, and number of years in the program have an impact on a particular response in the post-survey (Appendix K and L). Holding all other variables constant, older students are more likely to have ever had sex at the beginning of the program but were also more likely to abstain from sex at the end of the program.<sup>27,28</sup> Additionally, female students as well as black students are more likely to have ever had sex. Black/African American students and Hispanic students are less likely to abstain from sex (Appendix K). Younger students and females students are more likely to feel that they could say no if they did not want to have sex. Older students and female students are more likely to feel that they could convince their girlfriend or boyfriend to use a condom even if they didn't want to. Male students are more likely than females to say that they could refuse sex if the other person wouldn't use a condom. Older students and black/African American students are more likely to say that they could get condoms while Hispanic students are less likely. All students are equally likely to use condoms (Appendix L). Overall for students participating in the program multiple years, 18.1 percent of students reported ever having sex.

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*Age is a significant factor in knowledge gained during PREP.*

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When analyzing survey components asking how the program affected youth, the Evaluation Team observed characteristics that determined whether a student would be more likely to answer a certain way. The survey components include: number of years in PREP, sex, age, and ethnicity. The results of this analysis show:

- Black/African American students are more likely to feel that they care about doing well in school and that they can resist or say no to peer pressure.
- Female students are more likely to state that they could share ideas that matter with a parent or guardian and male students are more likely to say that they know how to manage stress.
- Younger students state they can manage money carefully.
- Black/African American students and younger students are more likely to state that they are respectful towards others, and that they will get more education after high school.

Appendix M shows regression results pertaining to youth and program effects on their feelings about certain characteristics.

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<sup>27</sup> The results from the pre-survey were taken to assess whether a student had ever had sex.

<sup>28</sup> The results from the post-survey were taken to assess whether a student would abstain from sex.



The longitudinal analysis provides insight into whether any characteristics contributed to whom was more or less likely to report a certain answer among those who are in the program for more than one consecutive year. These findings provide valuable information to facilitators and coordinators who implement PREP.

## COMMUNITIES AND LOCATION

### ***Communities Served***

The PREP needs assessment conducted by DHSS identifies counties in which the program is most needed. Nine indicators are chosen on which to base these county rankings and identify the teen pregnancy “high-risk” areas. The needs assessment indicators include:<sup>29</sup>

- Pregnancy Rate (15-17 year old females)
- Birth Rate (15-17 year old females)
- Pregnancy Rate (15-19 year old females)
- Birth Rate (15-19 year old females)
- Sexually Transmitted Infections Rate
- Poverty
- Percent of mothers of newborns with no High School Diploma (20+ years)
- School Dropout Rate
- Percent of repeat live births in women under 18

These indicators are based on state and national performance measurement goals. Pregnancy and birth rates are evaluated separately for those ages 15-17 and for those 15-19. The 15-17 age group is considered to be the primary target for assessing program impact and teen pregnancy and prevention strategies. As a result, the 15-17 year olds are identified as the primary target over those 18-19. Analyzing each group separately helps provide a prioritization toward counties with high pregnancy and birth rates for the 15-17 age group.

For the compilation of the overall state ranking, rankings by county for each indicator are calculated. The average of the counties is then used as the overall state ranking. The counties with rates above the state average are identified as high-risk counties. Appendix G provides an outline of the county ranking.

A vital component of PREP is location of program implementation in relation to the identified high-risk counties. Figure 15 outlines Missouri’s 50 high-risk counties that implement PREP. Figure 15 also outlines additional counties not identified as high-risk that are implementing PREP. As a part of the analysis, a comprehensive review of all program locations is provided.

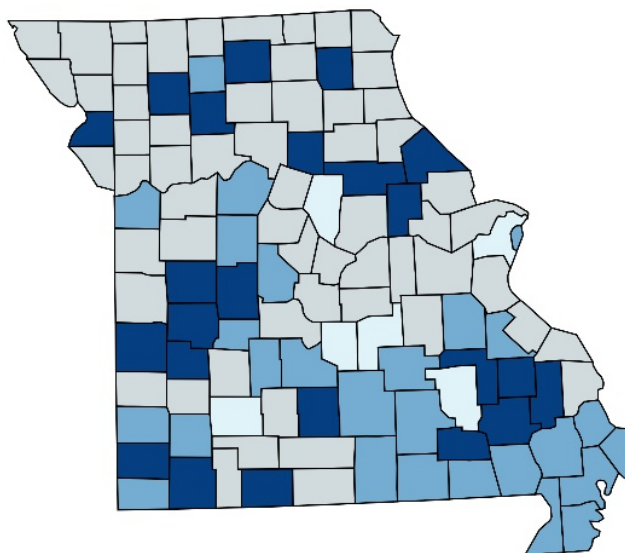
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<sup>29</sup> Information drawn from: Ranking of Missouri Counties and Cities Based on Teen Pregnancy and Birth Rates, STIs, and Other Related Indicators 2008-2012

**Figure 15: PREP Counties Based on Risk**

**PREP High-Risk Counties**

- High-Risk Counties Implementing PREP
- High-Risk Counties Not Implementing PREP
- Other Counties Implementing PREP



Throughout all six program years, eighteen of the original top twenty-five counties have implemented PREP leaving 7 high-risk counties without PREP. In year six, 10 of the top 25 counties are implementing PREP. Observing the updated 50 high-risk counties, 27 have implemented PREP throughout the program’s entirety and 17 of those counties have current programming.

*Foster Youth*

Another key focus of PREP is to reach the foster youth community. Each program year, two contractors have been awarded in conjunction with the Missouri Department of Social Services to serve youth in foster care. To assess whether these youth have been adequately reached in the state of Missouri, Out-of-Home placement in foster home rates are compared to the number of foster children in the communities being served by PREP.<sup>30</sup> Also analyzed are the number of foster children in PREP programs throughout PREP implementation. A finding from this analysis was that from years available to assess, on average, 19 out of every 100 students reached in PREP programs were from foster care.<sup>31</sup>

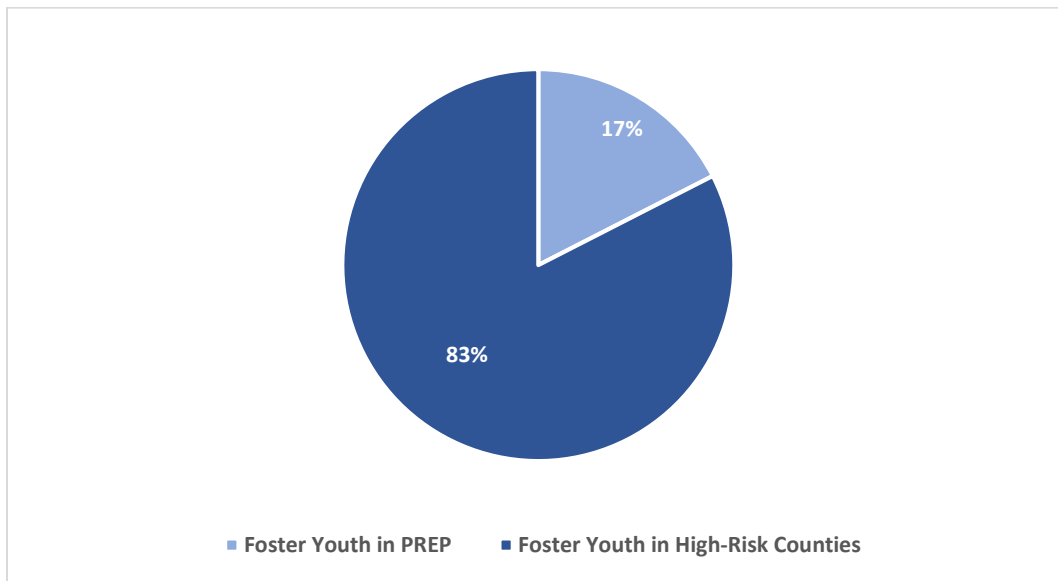
When reviewing statewide foster care information, the number of foster students that were involved in PREP during the years data were available represent about 17 percent of all Missouri foster care youth within the top 50 high-risk counties (Figure 16). There is the potential for PREP to reach additional foster youth.

<sup>30</sup> Missouri Department of Social Services. (2016). Children’s Division Annual Report. <http://dss.mo.gov/re/pdf/cs/2016-missouri-childrens-division-annual-report.pdf>

<sup>31</sup> Years 3, 4, & 5 have available foster youth data.

When reviewing counties that have ever had PREP, there are 3,638 foster youth living in those areas. As a result, PREP is present in communities where 54.5 percent of Missouri’s foster children lived. When reviewing the top 50 high-risk counties only, there are 2,477 foster youth living in those areas.<sup>32</sup> Broken down, 37.1 percent of Missouri’s foster youth would be in the program if all foster youth in the high-risk counties participate in PREP.

**Figure 16: Foster Youth Representation in PREP High-Risk Counties**



### *Community Readiness*

The Community Readiness aspect of PREP assesses the ability of the community to address teen pregnancy. Through defining a community and interviewing key players, a ‘readiness’ score is calculated indicating how prepared the community is to take action against teen pregnancy. This score can provide guidance for the community to move forward with prevention efforts. The readiness score ranges from a low of one to a high of nine and corresponds to the following stages in the community’s readiness to take action on an issue.

- Stage 1: No awareness
- Stage 2: Denial/Resistance
- Stage 3: Vague Awareness
- Stage 4: Preplanning
- Stage 5: Preparation
- Stage 6: Initiation
- Stage 7: Stabilization
- Stage 8: Confirmation/Expansion
- Stage 9: High Level of Community Ownership

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<sup>32</sup> Missouri Department of Social Services. (2016). Children’s Division Annual Report. <http://dss.mo.gov/re/pdf/cs/2016-missouri-childrens-division-annual-report.pdf>

A thorough list of readiness stages, goals, and next steps may be found in Appendix H.

In an analysis of all communities throughout PREP implementation, the average readiness stage has remained consistent at Stage 5: Preparation. Collection of community readiness scores for individual contractors began in year three, after piloting the program in years one and two. Since the scores were being piloted in years one and two, overall scores were calculated and are expected to be lower than they would be in later years. The areas assessed have the lowest scores in leadership and community knowledge of the efforts.<sup>33,34</sup> Existing community efforts has the highest score.<sup>35</sup> Overall scores trend upward with some variation as shown below in Figure 17.

**Figure 17: PREP Community Readiness Scores (Scaled 1-9)**

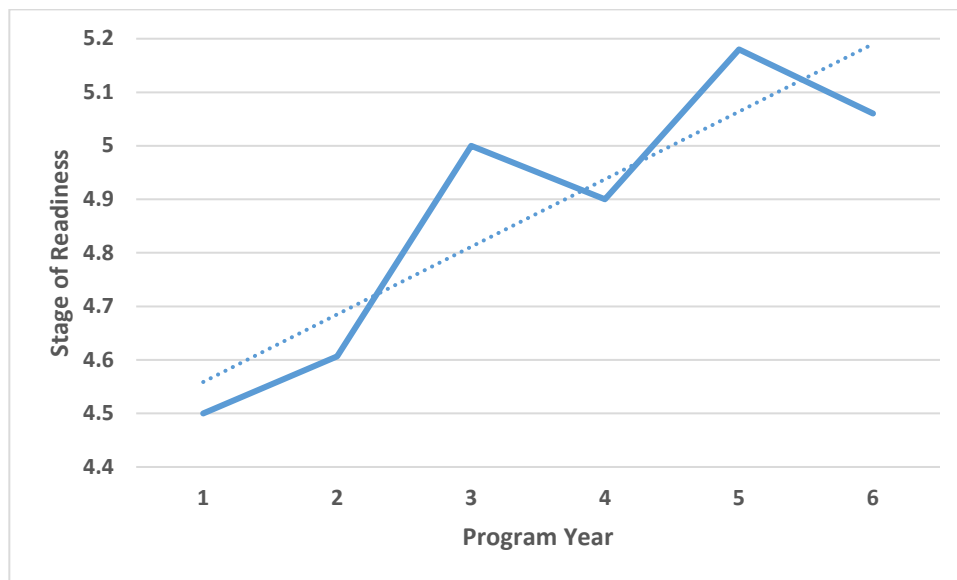


Table 3 shows the individual trends for the scoring components of community readiness. Included are existing community effort, community knowledge, leadership, community climate, community knowledge, and community resources.<sup>36,37,38,39,40,41</sup> Questions are asked pertaining

<sup>33</sup> The survey question asked that pertained to leadership was, “To what degree are community leaders supportive of sex education and strategies to support teen pregnancy prevention initiatives?”

<sup>34</sup> The survey question asked that pertained to community knowledge was, “To what extent do community members know about local efforts and their effectiveness?”

<sup>35</sup> The survey question asked that pertained to existing community efforts was, “To what extent are there efforts, programs and policies that address teen pregnancy?”

<sup>36</sup> “To what extent are there efforts, programs and policies that address teen pregnancy?”

<sup>37</sup> “To what extent do community members know about local efforts and their effectiveness?”

<sup>38</sup> “To what degree are community leaders supportive of sex education and strategies to support teen pregnancy prevention initiatives?”







<sup>39</sup> “What is the prevailing attitude towards teen pregnancy?”

<sup>40</sup> “What is the community’s level of knowledge regarding teen pregnancy?”

<sup>41</sup> “To what degree does the community have resources to address teen pregnancy?”

to each topic so that a score can be derived from the results. The average score for all components results in the overall readiness score represented in the figure above.

**Table 3: Community Readiness Scores Years 1-6 (Scaled 1-9)**

	Years 1-6 Trend	2011 (Pilot)	2012 (Pilot)	2013	2014	2015	2016	Average
<b>Existing Community Effort</b>		4	5.46	5.6	5.9	6.21	5	5.36
<b>Community Knowledge of the Effort</b>		4	4.11	4.5	4.2	4.76	4.89	4.41
<b>Leadership</b>		4	3.88	4	4.4	4.64	5.02	4.32
<b>Community Climate</b>		5	4.75	5.3	5.1	5.26	5.11	5.09
<b>Community Knowledge About the Issue</b>		5	4.59	5	4.6	4.95	5.84	5.00
<b>Community Resources</b>		5	4.85	5	5.1	5.29	4.42	4.94

*Community Attitudes*

The Evaluation Team conducts interviews to identify themes that site-coordinators mentioned regarding community attitudes. The data for these survey questions are collected qualitatively and interpreted to fit the given categories. Collectively, in the years that the surveys have been conducted, the most popular answers are outlined in Figure 18.

**Figure 18: Popular Responses Regarding Community Attitude Questions and Answers**

Best part about working to reduce teen pregnancy?

- Teens get knowledge beyond school education
- Making a positive impact in delaying pregnancy

Who in the community is instrumental to success?

- Local schools

What types of obstacles have you encountered?

- Time constraints

What is the general community climate regarding teen pregnancy?

- It is seen as normalized
- It is seen as a problem
- The community is open and supportive of PREP

How have efforts been made publicly known within the community?

- Newspapers
- Face-to-face networking
- Community service work (most recently)

How is the leadership in your community?

- Mostly, leadership is supportive
- Leadership understands the importance of prevention

Even when local organizations are contracted to implement PREP, the school system has a large impact on the programs. Time is the main obstacle identified by these surveys regardless of when the classes are held. When the classes are held in a school setting, including after school, or at a different location altogether, time conflicts are still present. The general community climate seems to differ dependent upon location and circumstance.

During years one through six, attitudes have shifted from teen pregnancy being poverty driven and normalized to teen pregnancy being viewed as a community problem. Contractors use multiple outlets to distribute information about PREP for program publicity. Barriers to program publicity include resource availability. Lastly, the most common response for community leadership are consistent with the Community Readiness Assessment scoring in that leadership is supportive and understands the importance of prevention.

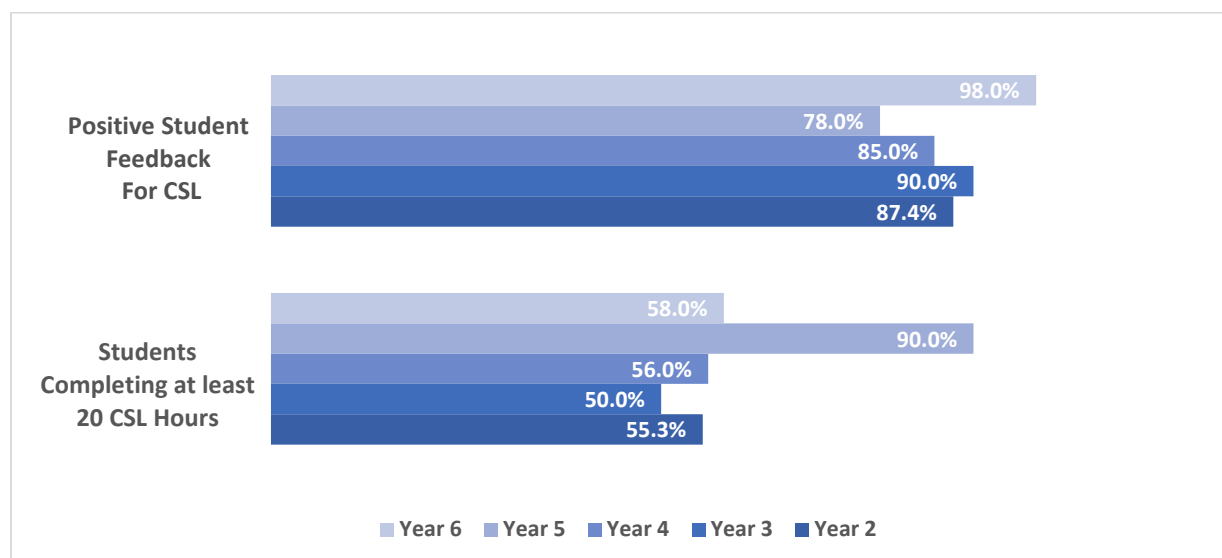
## PROGRAM DELIVERY AND SUSTAINABILITY

### *Program Delivery*

Programs are assessed on fidelity components to determine whether the curricula is implemented as intended. The data are collected through fidelity logs and attendance logs that are submitted by the facilitators. For the evaluation, each of these components are weighted to create a final numeric score from 0 to 100. For the first section of scoring in BART and MPC classes, 50 percent of the score is composed of fidelity log information. For TOP classes, the 50 percent is based on curricula delivery and facilitator credibility. The overall idea is to assess how closely the classes, lessons, and program are delivered as intended. For all clubs, 25 percent of the fidelity score is based on attendance and derived from average student attendance. For MPC and BART, the remaining 25 percent of the score is based on components such as the sequence of and who facilitated a class, as well as the correct size of the class and age of participants. For TOP, the 25 percent of the remaining scoring components include the assessment of community service learning (CSL) requirements. Full fidelity criteria are outlined in Appendix I.

CSL is a requirement offered by TOP programs. In years two through four, the average percentage of students that were completing their CSL hours is 55 percent. In year five, however, this percentage rose to 90 percent and then decreases in year six. The trend suggests that students have a less positive view of CSL hours when more CSL hours are completed. When asked how students feel about their CSL experience, an average of 88 percent of students state their experience is positive. Figure 19 shows the trends from years two through six of the percentage of students who completed at least 20 CSL hours as well as the percentage of those who felt their experience was positive.

**Figure 19: TOP Community Service Learning Completion and Feedback<sup>42</sup>**

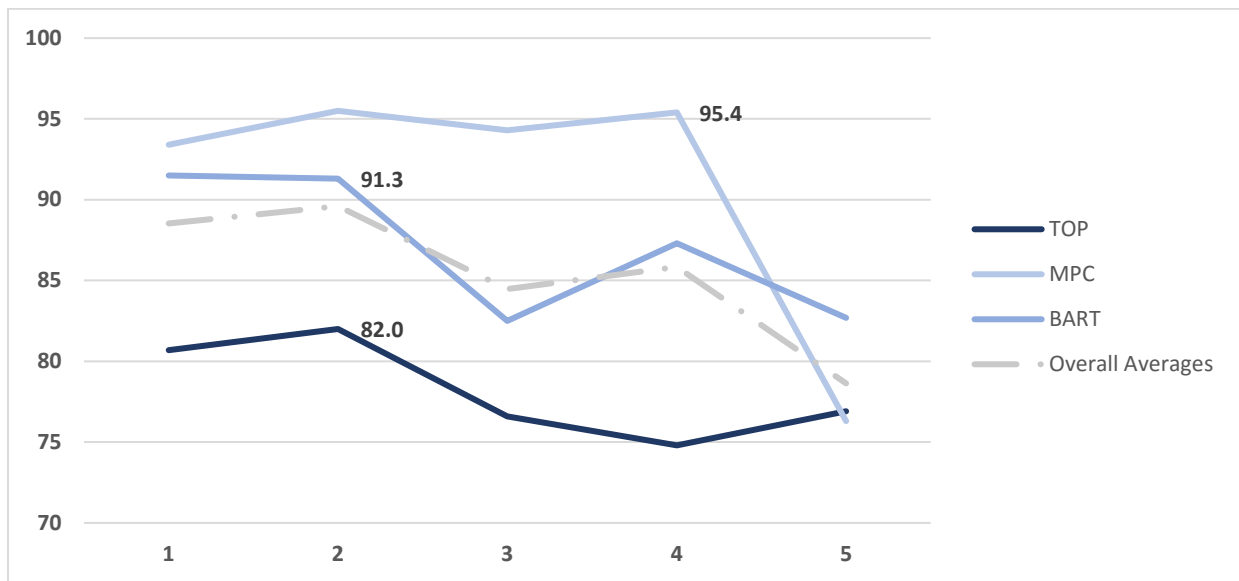


<sup>42</sup> Year one Community Service Learning results are excluded as a pilot year.

Overall, the club with the highest fidelity score is MPC. The club with the lowest fidelity score is TOP. One possible reason for this difference is the differing program lengths of the two programs.<sup>43</sup> With longer program length, attendance may be harder to obtain than in a program with a shorter duration. TOP also offers the most amount of flexibility on programs so criteria such as curriculum taught and CSL hours offered will be different than what the other two programs would offer. When looking at year five information, there was a decrease in fidelity scores for all programs.<sup>44</sup> The overall high was in year two with a score of 89.6 and the lowest score was in year five with 78.6.

With all components combined in each individual year, fidelity scores decrease with the progression of program years. When reviewing each of the three fidelity components separately, a decrease is especially true of attendance scores. Class facilitation and class size and age components for MPC and BART along with TOP CSL scores maintain similar averages over time. The average fidelity log score and curricula scores decrease over time. These observations are based on average fidelity scores both individually and combined for each program year and then compared across the curricula to note differences. Figure 20 shows the progression of fidelity scores for all components combined for each curricula. Additionally, overall averages of the three curricula are displayed along with a dotted trend line.

**Figure 20: Average Fidelity Scores per PREP Curricula**



Looking back at the map in Figure 15, program delivery can be observed through the location of PREP participation. As discussed previously, several high-risk counties are not currently reached by the program. Year six saw the transition from 25 to 50 identified high-risk counties. Program

<sup>43</sup> TOP has the longest program length whereas MPC has the shortest.

<sup>44</sup> Year six fidelity information was unavailable at the time of the analysis.



delivery can be targeted to those locations without current programming. These areas are clustered in the northern and southern regions of the state.

It has been observed that the year CSL feedback reviews were the lowest, the percentage of students completing at least 20 CSL hours was highest.<sup>45</sup> The Evaluation Team identifies this trend as an area that could benefit from additional research.

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<sup>45</sup> In year five, 90% of students completed at least 20 CSL hours and 78% of students stated their experience was positive (lower than previous years).

## DISCUSSION: IMPROVING MISSOURI'S PREP PROGRAM

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The Evaluation Team reviewed each piece of the six year analysis and identified possible solutions to be considered for the sustainability of the PREP program. Through this, recommendations are identified and discussed in the following sections.

### ***Contractors***

The total number of contractors that implement PREP fluctuates from year to year. Further analysis could identify reasons for contractors dropping and allow DHSS to determine strategies for contractor retention. An end of program year contractor survey could be implemented to assess whether or not the contractor is likely to repeat the program. For example, possible reasons for lack of retention could include: lack of funding, lack of participants, contractors time and resources, etc. This information could provide specific contractor areas to target in an effort to maintain or further develop the program.

### ***Technical Assistance***

The analysis reviews the evaluation of technical assistance from the facilitator post-survey. From this survey, several concerns remain consistent. These recurrent issues include: retaining students, student attendance, training facilitators, and keeping the youth engaged. Years two, five, and six also identified youth behavioral problems as a recurring issue. Improvements to facilitator training including dealing with behavioral issues, incentivizing youth attendance and youth engagement could reduce the occurrence of these issues for facilitators. It would be helpful to ask students what would make them want to return to the program. Some facilitators identified that they allow youth to help determine the lessons in order to incentivize student attendance and engagement. It would be useful to assess if these interventions have an impact on youth interest in the program.

### ***Youth Self-Efficacy***

Half of students report that they are able to share ideas with a parent or guardian and that they are able to manage conflict. One of the goals of PREP is to increase student self-efficacy through evidence-based teen pregnancy prevention programs. There is the opportunity to continue to highlight self-efficacy in PREP programming to see an improvement in these important skills.

### ***Longitudinal Results***

Even with 170 students included in the longitudinal analysis, this represents a small sample size. A larger sample size would be ideal for future analysis. Additionally, the knowledge response questions have a low percentage of correct answer responses. Although evidence of knowledge gained is present, several questions have a correct knowledge response rate of less than 50 percent following the program.<sup>46</sup> This could be solved by encouraging facilitators to ensure that these topics are addressed as outlined in their respective curriculums. Another potential solution

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<sup>46</sup> Refer to Figure 14, page 24 and Appendix J.

could be altering the knowledge questions in the surveys to more closely align with the curricula being addressed in the program.

### ***Curricula***

When looking at curricula choices, it is evident that there is a discrepancy among the three programs. The number of students in BART are consistently declining and further investigation should be conducted regarding the future of BART. As mentioned, MPC has better attendance rates than BART and TOP. Both MPC and TOP programs have more flexibility in the curriculum.

Fidelity scores, more specifically fidelity attendance scores, have significantly decreased throughout PREP implementation. An area of future focus could be to identify the direct cause of the scores to decrease and implement strategies to improve fidelity. Attendance rates are a key component in the facilitation of PREP and should be recognized as a key factor to the success of the program.

It is important that contractors feel confident that their curricula choice is best for their population. As shown throughout the analysis, the addition of AEGP has increased the number of student participants and has the potential to aid in the outreach to communities who currently are not implementing Teen Pregnancy Prevention programming. A separate analysis of AEGP could be conducted to evaluate longitudinal Teen Pregnancy Prevention programming in its entirety.

### ***Attendance***

Attendance rates across all programs have lowered throughout PREP implementation. By analyzing attendance fidelity and facilitator surveys it can be concluded that this decrease is due to other commitments and scheduling issues for students. Although lower overall, the curricula with the shortest program length has the greatest attendance rates and the curricula with the longest length has the lowest attendance rates.<sup>47,48</sup> This suggests that attendance discrepancies could be due to program length. To improve overall attendance, facilitators and coordinators should aim to address these concerns. Suggested solutions could include an increase in incentive offerings for student attendance or a review of open-ended student attendance opinions.

### ***PREP Locations***

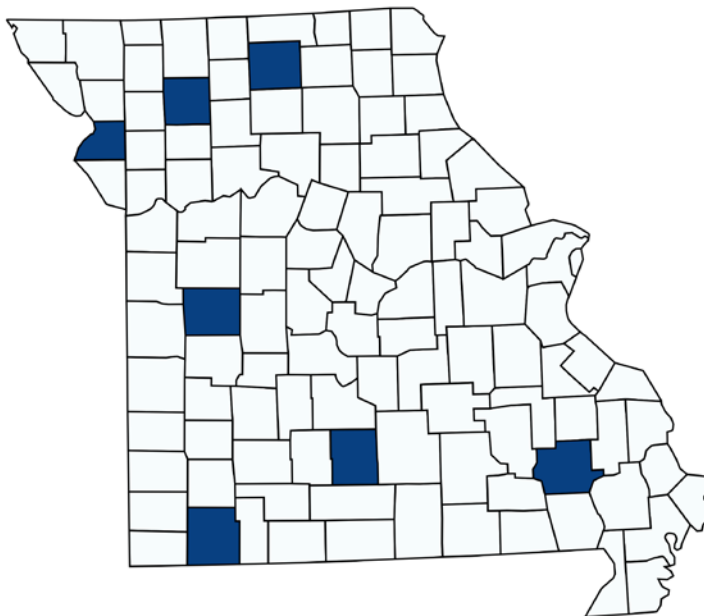
In Missouri, several communities have been identified as high-risk but are not implementing PREP. The addition of the 25 additional high-risk counties has created a larger gap in the ratio of counties that have the program and those that do not, as was expected when it was implemented in year six. A potential solution could be targeted PREP outreach to these identified communities without the program. The northern and southern regions of Missouri are identified as primary target areas. It is suggested from the analysis to locate potential contractors/communities in Sullivan, Buchanan, Wright, Henry, Wayne, Barry, and Daviess Counties (identified in Figure 21).

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<sup>47</sup> MPC

<sup>48</sup> TOP

**Figure 21: Recommended Counties for Future PREP Implementation from 25 High Risk Counties**



Additionally, the analysis suggests targeting PREP implementation in counties with higher rates of foster youth to increase the number of foster youth served by the program. Only a small portion of Missouri’s foster youth are being reached by the program while statistics show that these youth have a significantly higher risk for teen pregnancy.<sup>49</sup> With the additional 25 high-risk counties, the scope of implementation has widened with an emphasis on marginalized and risk-identified youth, such as foster youth. PREP is currently located in areas where a large number of foster youth live. The analysis suggests identifying potential contractors/facilitators who would be willing to implement more programs dedicated to these youth.

### ***Community Readiness***

PREP’s Community Readiness Assessment ratings aim to continuously move to the next stage of readiness so that communities can improve overall PREP implementation. The average stage of readiness thus far has been at the Preparation level. At this stage there is modest support of efforts and active planning around teen pregnancy prevention. While the analysis shows slight progression and support for the project, it suggests a review of communities that have transitioned into the next stage is necessary to improve the overall state rate. The analysis suggests the need for DHSS to create a statewide strategic plan to improve overall state readiness. The Evaluation Team recommends increasing stakeholder involvement around the promotion of teen pregnancy prevention. This could include community focus groups and training around creating community-specific action plans.

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<sup>49</sup> <https://www.cdc.gov/teenpregnancy/about/social-determinants-disparities-teen-pregnancy.htm>

***PREP Delivery***

Over all curricula, fidelity scores are decreasing in PREP. It is recommended that fidelity importance is covered thoroughly in future contractor and facilitator trainings. It is also recommended that contractors and facilitators who have continuously implemented the program receive a fidelity training refresher.

Although completion percentages for TOP programming are increasing, one issue in the delivery of PREP has been that CSL hours are not always offered in a way that the youth can fulfill the 20 required hours. A potential solution to this problem could include continuously offering over 20 CSL hours to give students an opportunity to complete the CSL hours in addition to outside obligations or makeup missed hours. An additional recommendation is to offer open-ended qualitative surveys to the youth to provide CSL feedback. The goal of these qualitative surveys would be to determine potential program advances for future youth and their CSL experiences.

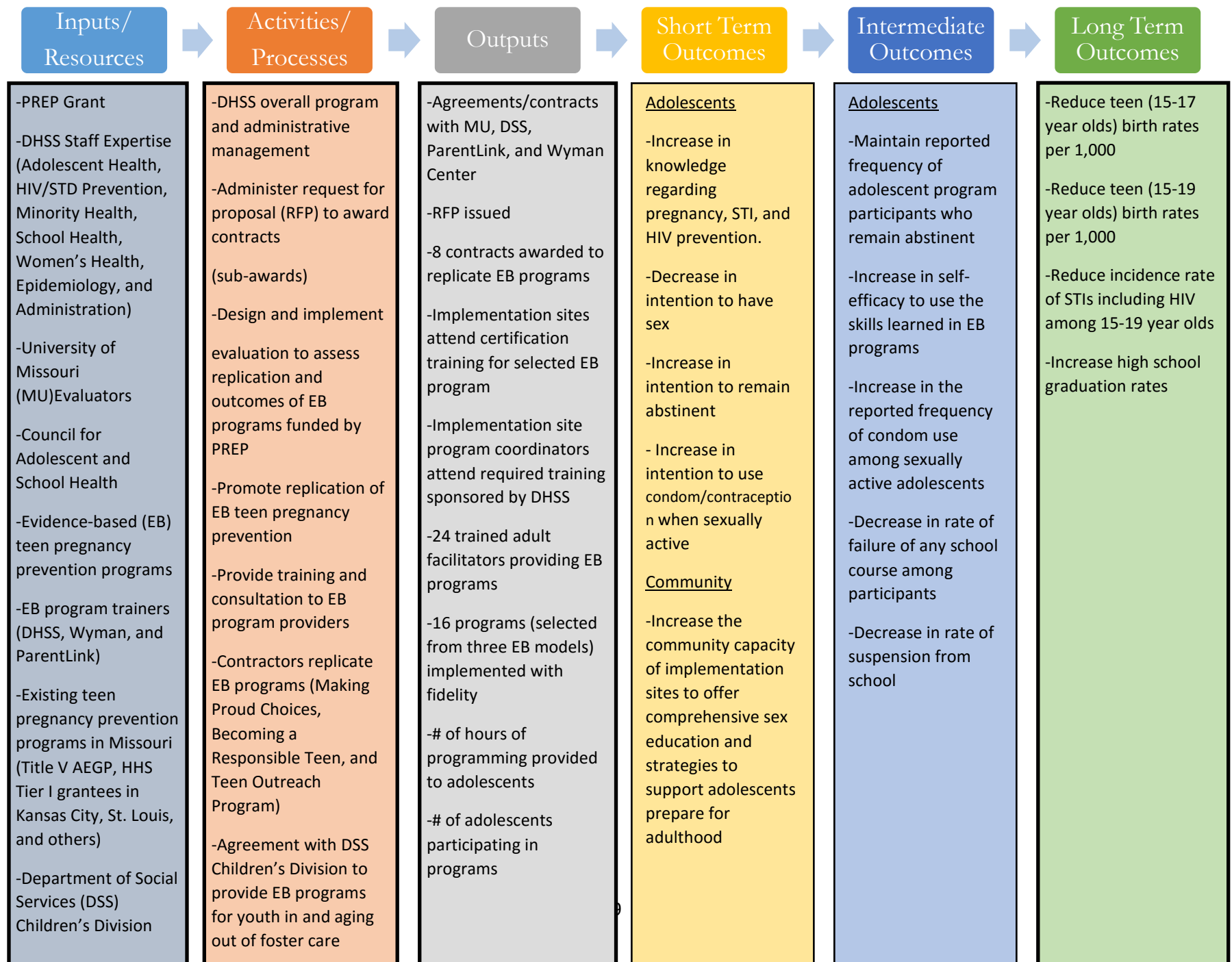
## CONCLUSION

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This analysis provides a comprehensive review of the six years of the Personal Responsibility Education Programming. PREP has shown continuous quality improvement in an attempt to improve outcomes for teen pregnancy prevention in Missouri. These include improvement in program participants, the materials and curricula used in program facilitation, analysis of program outcomes, program location and availability, program fidelity, and the overall sustainability of the program. These components are assessed to provide an overview of the program and provide considerations for future program implementation.

Teen Pregnancy Prevention is a complex topic with the capacity to provide crucial education to Missouri youth who are at a higher risk of becoming pregnant than their peers. The analysis identifies the need to increase community involvement and improve participant feedback to ensure quality pregnancy prevention education for the target population. The findings of this analysis suggest that PREP has a critical impact on the youth participating in the program and a potential for a sustainable impact in Missouri.

## Appendix A: MISSOURI'S PREP GRANT LOGIC MODEL



## **Appendix B: Pre-Program Survey Outcomes<sup>50</sup>**

### **This PRE-Program Survey is for youth age 14 and older in TOP Clubs**

*The program you are participating in is being reviewed by researchers at the University of Missouri and they would like to ask you some questions that will help decide how well the program is working. This survey will ask you questions about:*

- *Your ethnicity, gender, who you live with, and your parents' education levels.*
- *Whether or not you plan to continue schooling, to engage in sexual activity, and to use protection.*
- *Your school attendance, grade level, suspension, and course failure.*
- *Your health information about pregnancy, parenting, and sexual activity.*
- *Your experience in the program and your abilities to use the skills developed during the program.*

*Your individual responses to the questions in the survey will be kept private. We understand that these questions are personal and if you do not want to take this survey you do not have to. You may also skip questions you do not want to answer and move on to the next question. If you choose to complete this survey, your answers will help the University decide if these programs are working in the state of Missouri.*

***Please check this box*** if you have returned a signed parental consent form to your facilitator. If your parent or legal guardian has not turned in a consent form for you to take this survey, or if you are not sure, please speak with your facilitator. ***You cannot take this survey if you have not turned in a consent form.***

*If you have questions or concerns about the survey, please call Jake Cronin at the University. His phone number is 573-884-5023*

*If you have any questions about your rights as a participant in this study, or if you have concerns about the study, or if you feel any pressure to be in the study you may contact the University of Missouri Campus Institutional Review Board (the group of people who work with researchers to make sure your rights are protected). That phone number is 573-882-9585.*

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<sup>50</sup> TOP surveys are used as examples in this report. All questions contained in the BART and MPC surveys are included in the TOP surveys.



*By taking this survey, you are telling the University that you agree to take the survey, answer questions that you feel comfortable answering, and that the University can use your responses to help decide how well the program is working.*

## *Missouri PREP Pre-Program Evaluation Tool*

*10 digit student ID number:* \_\_\_\_\_

*My facilitator's name is:* \_\_\_\_\_

*I am in a \_\_\_\_\_ **TOP** \_\_\_\_\_ club named \_\_\_\_\_*  
*(Club Name)*

*Today's date is:* \_\_\_\_\_

*Your Birthdate (Month, Day):* \_\_\_\_\_

*Questions 1-16 were approved by the Office of Management & Budget  
OMB Control No.: 0970-0398, Expiration Date: 03/31/2016*

***Please answer the following questions to the best of your ability. This first set of questions has to do with you.***

***1. How old are you?***

***MARK ONLY ONE ANSWER***

*10*

*11*

*12*

*13*

*14*

*15*

*16*

*17*

*18*

*19*

*20*

*21 or older*

***2. Are you Hispanic or Latino?***

***MARK YES OR NO***

*Yes*

No



→ SKIP TO QUESTION 4

**3. Are you...?**

**MARK ONLY ONE ANSWER**

*Mexican, Mexican American, Chicano/a*

*Puerto Rican*

*Cuban*

*Another Hispanic, Latino/a or Spanish origin*

**4. What is your race?**

**MARK ALL THAT APPLY**

*American Indian or Alaska Native*

*Asian*

*Black or African American*

*Native Hawaiian or Other Pacific Islander*

*White or Caucasian*

**5. Are you male or female?**

**MARK ONLY ONE ANSWER**

*Male*

*Female*

**6. Do you consider yourself to be one or more of the following?**

**MARK ALL THAT APPLY**

- Straight*
- Gay or Lesbian*
- Transgender*
- Bisexual*
- Something else/I have not decided*

**7. What grade are you in? (If you are currently on vacation or in summer school, indicate the grade you will be in when you go back to school.)**  
**MARK ONLY ONE ANSWER**

- 4th*
- 5th*
- 6th*
- 7th*
- 8th*
- 9th*
- 10th*
- 11th*
- 12th*
- My school does not assign grade levels*
- I dropped out of school, and I am not working on getting a high school diploma or GED*
- I am working towards a GED*

- I have a high school diploma/GED but I not currently enrolled in college/technical school
- I have a high school diploma/GED and I am currently enrolled in college/technical school

**8. In the past three months, how often would you say you...**

**MARK ONLY ONE ANSWER PER ROW**

	<i>All of the Time</i>	<i>Most of the Time</i>	<i>Some of the Time</i>	<i>None of the Time</i>
a. cared about doing well in school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. shared ideas or talked about things that really matter with a parent/guardian?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. resisted or said no to peer pressure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. managed conflict without causing more conflict?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The next questions ask about sexual intercourse and your risk of pregnancy and sexually transmitted diseases. Remember, all of your responses will be kept private.

**9. If you have the chance, do you intend to have sexual intercourse in the next 6 months?**

By sexual intercourse, we mean the act that makes babies.

**MARK ONLY ONE ANSWER**

- Yes, definitely
- No, probably not
- Yes, probably
- No, definitely not

**10. Have you ever had sexual intercourse? By sexual intercourse, we mean the act that makes babies.**

**MARK YES OR NO**

- Yes
- No  →SKIP TO QUESTION 16

**11. To the best of your knowledge, have you ever been pregnant or gotten someone else pregnant, even if no child was born?**

**MARK YES OR NO**

Yes

No

**12. To the best of your knowledge, how many times have you been pregnant or gotten someone pregnant?  
MARK ONLY ONE ANSWER**

0, I have never been pregnant or gotten someone pregnant

1 pregnancy

2 pregnancies

3 or more pregnancies

**13. In the past 3 months, with how many people did you have sexual intercourse, even if only one time?  
MARK ONLY ONE ANSWER**

0, I did not have sexual intercourse in the past 3 months



→SKIP TO QUESTION 16

1 person

2-3 people

4 or more people

**14. When you had sexual intercourse in the past 3 months, how often did you or a partner use birth control? By birth control, we mean using birth control pills, condoms, the shot (Depo Provera), the patch, the ring (NuvaRing), IUD (Mirena or Paragard), or implant (Implanon).  
MARK ONLY ONE ANSWER**

All of the time

Most of the time

Some of the time

None of the time

**15. When you had sexual intercourse in the past 3 months, how often did you or a partner use a condom?  
MARK ONLY ONE ANSWER**

All of the time

Most of the time

Some of the time

None of the time

**16. In the past 3 months, how often would you say you...**

**MARK ONLY ONE ANSWER PER ROW**

	<i>All of the Time</i>	<i>Most of the Time</i>	<i>Some of the Time</i>	<i>None of the Time</i>
a. <i>knew how to manage stress?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. <i>managed money carefully?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. <i>had friendships that kept you out of trouble?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. <i>were respectful towards others?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**17. The next questions ask about sexual intercourse and your risk of pregnancy and sexually transmitted diseases. Remember, all of your responses will be kept private.**

**MARK ONLY ONE ANSWER PER ROW**

	<i>Yes, Definitely</i>	<i>Yes, Probably</i>	<i>No, Probably Not</i>	<i>No, Definitely Not</i>
a. <i>If you have the chance, do you intend to have sexual intercourse in the next 6 months? (By sexual intercourse, we mean the act that makes babies).</i>				
b. <i>In the next 6 months, do you intend to avoid [abstain from having] sexual intercourse?</i>				
c. <i>In the next 6 months, do you intend to use condoms if you have sexual intercourse?</i>				

**18. The last time you had sexual intercourse, which birth control method(s) did you or your partner use?**

**MARK ALL ANSWERS THAT APPLY**

- |  |  |
|--|--|
| <input type="checkbox"/> Condom (“rubber”)         | <input type="checkbox"/> Withdrawal (“pull out”) |
| <input type="checkbox"/> Birth Control pills       | <input type="checkbox"/> None                    |
| <input type="checkbox"/> Depo-Provera (“the shot”) | <input type="checkbox"/> Other (SPECIFY): _____  |

**19. Here are some ideas that young people sometimes have. Do you agree or disagree?**

**MARK ON ANSWER FOR EACH ROW**

	Strongly agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Strongly disagree
a. I can say no to the person going out with me if I don't want to have sex.					
b. Sometimes sex just happens, and you really can't control it.					
c. I could convince my girlfriend/boyfriend that we should use a condom even if she/he doesn't want to.					
d. I could refuse to have sex if the other person will not use a condom.					
e. I could get condoms.					
f. If you had sexual intercourse, your friends would respect you more.					
g. If I decided to have sexual intercourse, I could use a condom.					



**20. These are some statements about pregnancy and HIV. Please tell us if you think that the statements are true, false, or if you don't know.**

**PLEASE MARK ONE RESPONSE FOR EACH ROW**

	<i>True</i>	<i>False</i>	<i>Don't Know</i>
<i>a. Even if the man pulls out before he ejaculates, in other words, even if ejaculation occurs outside of a woman's body, it is still possible for the woman to become pregnant.</i>			
<i>b. Having sex with someone who has an STD (sexually transmitted disease) is one way of getting an STD.</i>			
<i>c. Most people who have HIV know they have it.</i>			
<i>d. Using a condom during sex can lower the risk of getting HIV.</i>			
<i>e. A person can get HIV in one sexual contact.</i>			
<i>f. Proper use of latex condoms helps to protect people from STD's.</i>			
<i>g. When a woman has sexual intercourse, almost all sperm will die inside her body after about six hours.</i>			
<i>h. A woman cannot get pregnant the first time she has sex.</i>			
<i>i. All STD's can be cured.</i>			
<i>j. Abstaining from sex is the most effective way to prevent pregnancy.</i>			

**21. During most of the time you were growing up, with whom did you live?**

**MARK ONLY ONE ANSWER**

- Mother and father*
- Mother and stepfather*
- Father and stepmother*
- Father only*
- Mother only*
- Guardian*
- Other: \_\_\_\_\_*

**22. What is the highest grade that each of your parents completed? (Give your best guess if you are not sure.)**

**MARK ONE ANSWER IN EACH COLUMN**

***Mother:***

- Less than high school*
- High school graduate*
- Some college*
- College graduate or higher*
- I don't know*

***Father:***

- Less than high school*
- High school graduate*
- Some college*
- College graduate or higher*
- I don't know*

**23. Here are some things young people do...**

Please select either **Yes** or **No**. If the answer to a question is yes, please answer how many.

**Example:** if you were suspended from school twice last year, select yes and type **2** for "How many times?"

**During the last school year, did you...**

	Yes	No	If yes, how many times? (Write the Number)
a. Fail any courses for the whole year?	<input type="checkbox"/>	<input type="checkbox"/>	_____
b. Get any failing grades on your report card?	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Get suspended from school?	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. Cut classes without permission?	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Have you ever...**

	Yes	No	If yes, how many times? (Write the Number)
e. Been pregnant or caused a pregnancy?	<input type="checkbox"/>	<input type="checkbox"/>	_____
f. Had a baby or fathered a baby?	<input type="checkbox"/>	<input type="checkbox"/>	_____

**24. Please tell us how you feel about each of the following. How much do you agree with these statements as they apply to you personally?**

**PLEASE MARK ONE RESPONSE FOR EACH ROW**

	No, Not At All	No, Not Too Much	Yes, Somewhat	Yes, Very Much
a. I can work out my problems if I try hard enough.				
b. It's easy for me to stick to my plans and accomplish my goals.				
c. I can usually handle whatever comes my way.				
d. I like to see other people happy.				
e. Most people can be trusted.				
f. There is some good in everybody.				

**25. Overall, how honest would you say you were in answering this survey?**  
**MARK ONLY ONE ANSWER**

- Not honest at all*
- Not very honest*
- Fairly honest*
- Very honest*
- Completely honest*

***Thank you for your participation!***

## **Appendix C: Post-Program Survey Outcomes**

### **This Post-Program Survey is for youth in TOP Clubs**

*The program you are participating in is being reviewed by researchers at the University of Missouri and they would like to ask you some questions that will help decide how well the program is working. This survey will ask you questions about:*

- *Your ethnicity, gender, who you live with, and your parents' education levels.*
- *Whether or not you plan to continue schooling, to engage in sexual activity, and to use protection.*
- *Your school attendance, grade level, suspension, and course failure.*
- *Your health information about pregnancy, parenting, and sexual activity.*
- *Your experience in the program and your abilities to use the skills developed during the program.*

*Your individual responses to the questions in the survey will be kept private. We understand that these questions are personal and if you do not want to take this survey you do not have to. You may also skip questions you do not want to answer and move on to the next question. If you choose to complete this survey, your answers will help the University decide if these programs are working in the state of Missouri.*

***Please check this box*** if you have returned a signed parental consent form to your facilitator. If your parent or legal guardian has not turned in a consent form for you to take this survey, or if you are not sure, please speak with your facilitator. ***You cannot take this survey if you have not turned in a consent form.***

*If you have questions or concerns about the survey, please call Jake Cronin at the University. His phone number is 573-884-5023.*

*If you have any questions about your rights as a participant in this study, or if you have concerns about the study, or if you feel any pressure to be in the study you may contact the University of Missouri Campus Institutional Review Board (the group of people who work with researchers to make sure your rights are protected). That phone number is 573-882-9585.*

***By taking this survey, you are telling the University that you agree to take the survey, answer questions that you feel comfortable answering, and that the University can use your responses to help decide how well the program is working.***

# Missouri PREP Post-Program Evaluation Tool

10 digit student ID number: \_\_\_\_\_

My facilitator's name is: \_\_\_\_\_

I am in a TOP club named \_\_\_\_\_  
(Club Name)

Today's date is: \_\_\_\_\_

Your Birthdate (Month, Day): \_\_\_\_\_

Questions 1-10 were approved by the Office of Management & Budget  
OMB Control No.: 0970-0398, Expiration Date: 03/31/2016

*This page intentionally left blank.*

**Please answer the following questions to the best of your ability. This first set of questions has to do with you.**


**1. How old are you?**

**MARK ONLY ONE ANSWER**

- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21 or older

**2. Are you Hispanic or Latino?**

**MARK YES OR NO**

- Yes
- No  → SKIP TO QUESTION 4

**3. Are you...?**

**MARK ONLY ONE ANSWER**



- Mexican, Mexican American, Chicano/a*
- Puerto Rican*
- Cuban*
- Another Hispanic, Latino/a, or Spanish origin*

**4. What is your race?**

**MARK ALL THAT APPLY**

- American Indian or Alaska Native*
- Asian*
- Black or African American*
- Native Hawaiian or Other Pacific Islander*
- White or Caucasian*

**5. Are you male or female?**

**MARK ONLY ONE ANSWER**

- Male*
- Female*

**6. What grade are you in? (If you are currently on vacation or in summer school, indicate the grade you will be in when you go back to school.)**

**MARK ONLY ONE ANSWER**

- 4th*
- 5th*
- 6th*
- 7th*
- 8th*
- 9th*

- 10th*
- 11th*
- 12th*
- My school does not assign grade levels*
- I dropped out of school, and I am not working on getting a high school diploma or GED*
- I am working towards a GED*
- I have a high school diploma/GED but I am not currently enrolled in college/technical school*
- I have a high school diploma/GED and I am currently enrolled in college/technical school*

***Please think about how the program that you just completed has affected you.***

**7. Even if your program didn't cover a topic, would you say that being in the program has made you more likely, about the same, or less likely to...**

**MARK ONLY ONE ANSWER PER ROW**

	<b>Much More Likely</b>	<b>Somewhat More Likely</b>	<b>About the Same</b>	<b>Somewhat Less Likely</b>	<b>Much Less Likely</b>
a. resist or say no to peer pressure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. know how to manage stress?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. manage conflict without causing more conflict?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. form friendships that keep you out of trouble?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. be respectful toward others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. make plans to reach your goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. care about doing well in school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. get a steady job after you finish school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. share ideas or talk about things that really matter with a parent/guardian?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. make healthy decisions about drugs and alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. get more education after high school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. manage money carefully, such as making a budget, saving, or investing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. be the best that you can be?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The next few questions refer to sexual intercourse and your risk of pregnancy and sexually transmitted diseases.**

**Please respond, even if you are not planning on having sex in the next 6 months.**

**8. Would you say that being in the program has made you more likely, about the same, or less likely to...**

**a. Have sexual intercourse in the next 6 months?**

*By sexual intercourse, we mean the act that makes babies.*

**MARK ONLY ONE ANSWER**

- Much more likely*
- Somewhat more likely*
- About the same*
- Somewhat less likely*
- Much less likely*

**b. Use (or ask your partner to use) any of these methods of birth control, if you were to have sexual intercourse in the next 6 months?**

*By birth control, we mean using birth control pills, condoms, the shot (Depo Provera), the patch, the ring (NuvaRing), IUD (Mirena or Paragard), or implant (Implanon).*

**MARK ONLY ONE ANSWER**

- Much more likely*
- Somewhat more likely*
- About the same*
- Somewhat less likely*
- Much less likely*
- I will abstain from sexual intercourse (choose not to have sex) in the next 6 months*

**c. Use (or ask your partner to use) a condom if you were to have sexual intercourse in the next 6 months?**

**MARK ONLY ONE ANSWER**

- Much more likely*
- Somewhat more likely*
- About the same*
- Somewhat less likely*

- Much less likely*
- I will abstain from sexual intercourse (choose not to have sex) in the next 6 months*

**d. Abstain from sexual intercourse (choose not to have sex) in the next 6 months?  
MARK ONLY ONE ANSWER**

- Much more likely*
- Somewhat more likely*
- About the same*
- Somewhat less likely*
- Much less likely*

**The next questions ask you about your experiences in the program that you just completed. Think about all of the sessions or classes of the program that you attended.**

**9. Even if you didn't attend all of the sessions or classes in this program, how often in this program...**

**MARK ONLY ONE ANSWER PER ROW**

	<i>All of the Time</i>	<i>Most of the Time</i>	<i>Some of the Time</i>	<i>A Little of the Time</i>	<i>None of the Time</i>
<i>a. did you feel interested in program sessions and classes?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>b. did you feel the material presented was clear?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>c. did discussions or activities help you to learn program lessons?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>d. did you feel respected as a person?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>e. were you picked on, teased, or bullied in this program?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>f. did you have a chance to ask questions about topics</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

or issues that came up in the program?

**10. Now thinking about all youth in this program, how often...**

**MARK ONLY ONE ANSWER PER ROW**

	<i>All of the Time</i>	<i>Most of the Time</i>	<i>Some of the Time</i>	<i>A Little of the Time</i>	<i>None of the Time</i>
a. were youth in this program picked on, teased, or bullied because people thought they were lesbian, gay, bisexual, or transgender?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. were youth in this program picked on, teased, or bullied because of their race or ethnic background?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The next questions ask about sexual intercourse and your risk of pregnancy and sexually transmitted diseases. Please respond, even if you are not planning on having sex in the next 6 months. Remember, all of your responses will be kept private.**

**11.**


**MARK ONLY ONE ANSWER PER ROW**

	<i>Yes, Definitely</i>	<i>Yes, Probably</i>	<i>No, Probably Not</i>	<i>No, Definitely Not</i>
d. If you have the chance, do you intend to have sexual intercourse in the next 6 months? (By sexual intercourse, we mean the act that makes babies).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. In the next 6 months, do you intend to avoid [abstain from having] sexual intercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. In the next 6 months, do you intend to use condoms if you have sexual intercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**12. Have you ever had sexual intercourse? By sexual intercourse, we mean the act that makes babies.**

**MARK YES OR NO**

Yes

No  → SKIP TO QUESTION 18

**13. To the best of your knowledge, have you ever been pregnant or gotten someone else pregnant, even if no child was born?**

**MARK YES OR NO**

YES

NO

**14. To the best of knowledge, how many times have you been pregnant or gotten someone pregnant?**

**MARK ONLY ONE ANSWER**

0, I have never been pregnant or gotten someone pregnant

1 pregnancy

2 pregnancies

3 or more pregnancies

**15. How old were you when you first had sexual intercourse?**

**MARK ONLY ONE ANSWER**

11 or younger

15

19

12

16

20

13

17

14

18

**16. The last time you had sexual intercourse, which birth control method(s) did you or your partner use?**

**MARK ALL ANSWERS THAT APPLY**

- |  |  |
|--|--|
| <input type="checkbox"/> Condom ("rubber")         | <input type="checkbox"/> Withdrawal ("pull out") |
| <input type="checkbox"/> Birth Control pills       | <input type="checkbox"/> None                    |
| <input type="checkbox"/> Depo-Provera ("the shot") | <input type="checkbox"/> Other (SPECIFY): _____  |

**17. When you had sexual intercourse in the past 3 months, how often did you or a partner use a condom?**

**MARK ONLY ONE ANSWER**

- |   |   |
|---|---|
| <input type="checkbox"/> All of the time  | <input type="checkbox"/> Some of the time |
| <input type="checkbox"/> Most of the time | <input type="checkbox"/> None of the time |



**18. Here are some ideas that young people sometimes have. Do you agree or disagree ?**

**MARK ONE ANSWER PER ROW**

	<b>Strongly Agree</b>	<b>Somewhat Agree</b>	<b>Neither Agree or Disagree</b>	<b>Somewhat Disagree</b>	<b>Strongly Disagree</b>
<i>h. I can say no to the person going out with me if I don't want to have sex.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>i. Sometimes sex just happens, and you really can't control it.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>j. I could convince my girlfriend/boyfriend that we should use a condom even if he/she doesn't want to.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>k. I could refuse to have sex if the other person will not use a condom.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>l. I could get condoms.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>m. If you had sexual intercourse, your friends would respect you more.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>n. If I decided to have sexual intercourse, I could use a condom.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**19. These are some statements about pregnancy and HIV. Please tell us if you think that the statements are true, false, or if you don't know.**

**MARK ONE ANSWER PER ROW**

	<b>True</b>	<b>False</b>	<b>Don't Know</b>
<i>k. Even if the man pulls out before he ejaculates, in other words, even if ejaculation occurs outside of a woman's body, it is still possible for the woman to become pregnant.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>l. Having sex with someone who has an STD (sexually transmitted disease) is one way of getting an STD.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>m. Most people who have HIV know they have it.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>n. Using a condom during sex can lower the risk of getting HIV.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>o. A person can get HIV in one sexual contact.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>p. Proper use of latex condoms helps to protect people from STD's.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>q. When a woman has sexual intercourse, almost all sperm will die inside her body after about six hours.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>r. A woman cannot get pregnant the first time she has sex.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s. All STD's can be cured.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Abstaining from sex is the most effective way to prevent pregnancy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**20. Will you be in school next year?**

**MARK ONLY ONE ANSWER**

- Yes, I will be in the same grade I was in this year
- Yes, I will be in the next grade compared to the grade I was in this year (ex. moving from 9th to 10th grade)
- Yes, I am graduating high school and going on to college or vocational school
- No, I am graduating high school but not continuing in school
- No, I am not graduating high school and will not be in school at all

**21. Here are some things young people do...**

Please select either **Yes** or **No**. If the answer to a question is yes, please answer how many.

Example: if you were suspended from school twice last year, select **Yes** and type **2** for "How many times?".

**During this school year, did you or will you...**

	<b>Yes</b>	<b>No</b>	<b>If yes, how many times?</b> <b>(Write the number)</b>
g. Fail any courses for the whole year?	<input type="checkbox"/>	<input type="checkbox"/>	_____
h. Get any failing grades on your report card?	<input type="checkbox"/>	<input type="checkbox"/>	_____
i. Get suspended from school?	<input type="checkbox"/>	<input type="checkbox"/>	_____
j. Cut classes without permission?	<input type="checkbox"/>	<input type="checkbox"/>	_____
k. Get pregnant or cause a pregnancy?	<input type="checkbox"/>	<input type="checkbox"/>	_____
l. Have a baby or father a baby?	<input type="checkbox"/>	<input type="checkbox"/>	_____

**22. Please tell us how you feel about each of the following. How much do you agree with these statements as they apply to you personally?**

**MARK ONE ANSWER PER ROW**

	<b>No, Not At All</b>	<b>No, Not Too Much</b>	<b>Yes, Somewhat</b>	<b>Yes, Very Much</b>
<i>g. I can work out my problems if I try hard enough.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>h. It's easy for me to stick to my plans and accomplish my goals.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>i. I can usually handle whatever comes my way.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>j. I like to see other people happy.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>k. Most people can be trusted.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>l. There is some good in everybody.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**23. Please respond to the following questions about how you feel about TOP.**

**MARK ONE ANSWER PER ROW**

	<b>No, not at all</b>	<b>No, not too much</b>	<b>Yes, somewhat</b>	<b>Yes, very much</b>
<i>a. When I am at TOP I can say what I think and talk about my life.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>b. I feel safe (physically) during TOP sessions.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>c. TOP facilitators care about me.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>d. TOP facilitators understand me.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>e. TOP facilitators support and accept me.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>f. I feel like I belong at TOP; it's a positive group of teens for me.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>g. I enjoyed the community service part of TOP.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>h. I learned how to deal with challenges during my Community Service part of TOP.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>i. I helped plan my Community Service projects.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>j. The Community Service projects helped me make a positive difference in the lives of others.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>k. I learned new skills during my Community Service projects.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**24. Overall, how honest would you say you were in answering this survey?**

- Not honest at all*
- Not very honest*
- Fairly honest*
- Very honest*
- Completely honest*

***Thank you for your participation!***

**Appendix D: Descriptive Statistics of Variables in Longitudinal Analysis**

Descriptive Statistics: Longitudinal Analysis Study of Teen Pregnancy

	#obs	mean	sd	min	max
Pre Pregnant Pullout Knowledge Question	338	.39		0	1
Post Pregnant Pullout Knowledge Question	272	.49		0	1
Pre Way to Get STD Knowledge Question	340	.86		0	1
Post Way to Get STD Knowledge Question	274	.90		0	1
Pre Know Have HIV Knowledge Question	339	.48		0	1
Post Know Have HIV Knowledge Question	272	.61		0	1
Pre Lowering HIV Risk Knowledge Question	335	.56		0	1
Post Lowering HIV Risk Knowledge Question	268	.61		0	1
Pre Pregnant in One Knowledge Question	336	.60		0	1
Post Pregnant in One Knowledge Question	271	.71		0	1
Pre Latex Protects STD Knowledge Question	331	.47		0	1
Post Latex Protects STD Knowledge Question	268	.53		0	1
Pre Sperm Lifespan Knowledge Question	334	.23		0	1
Post Sperm Lifespan Knowledge Question	269	.30		0	1
Pre Pregnant First Sex Knowledge Question	335	.70		0	1
Post Pregnant First Sex Knowledge Question	273	.77		0	1
Pre Cure for All STDs Knowledge Question	273	.55		0	1
Post Cure for All STDs Knowledge Question	273	.72		0	1
Pre Abstaining Knowledge Question	335	.73		0	1
Post Abstaining Knowledge Question	273	.82		0	1
Knowledge Combined	259	6.43	2.51	1	10
I Could Say No	266	4.80	.62	1	5
I Could Convince	260	4.50	.97	1	5

Condom Usage					
I Could Refuse Sex	266	4.63	1.02	1	5
Could Get Condoms	261	4.06	1.20	1	5
Would Use a Condom	263	4.67	.80	1	5
Care About School	279	4.55	.84	1	5
Can Share Ideas	279	4.11	.98	1	5
Can Resist	279	4.39	.93	1	5
Peer-Pressure					
Can Manage Stress	277	3.97	.95	1	5
Can Manage Money	278	4.32	.90	1	5
Friends	277	4.26	.91	1	5
Respect Others	276	4.41	.87	1	5
Get More Education	278	4.59	.75	1	5
Best	272	4.64	.74	1	5
Pre Ever Had Sex	333	.13		0	1
Post ever had sex	268	.19		0	1
Would Abstain	253	3.54	1.01	0	4
from Sex					
Pre Intend to Have	343	3.56	.77	1	4
Sex					
Post Intend to Have	282	2.93	1.21	1	4
Sex					
Pre Ever	50	.16		0	1
Been Pregnant					
Post Ever	71	.11		0	1
Been Pregnant					
Pre Number of	51	.24	.51	0	2
Pregnancies					
Post Number of	55	.20	.56	0	3
Pregnancies					
Pre Number of	51	.24	.51	0	2
Pregnancies					
Post Number of	55	.20	.56	0	3
Pregnancies					
Pre Used	37	2.97	1.32	1	4
Contraception					
Post Used	36	.83	.56	0	3
Contraception					
Pre How Often for	36	2.61	1.34	1	4
Condom Usage					
Post How Often for	40	2.23	1.26	1	4
Condom Usage					

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***N=398***

**Appendix E: T-Test Results Regarding Knowledge Comparison**

Table AA: The Effect of Knowledge from Pre- and Post-Survey Responses Regarding Teen Pregnancy Prevention

Outcome	Pre-Survey Results	Post-Survey Results	Difference	Std. Error	t-stat
Pregnant Pullout	.3786	.4856	.1070**	.0390	2.7470
Way to Get STD	.8536	.9065	.0528	.0283	1.8665
Know Have HIV	.4421	.6364	.1942***	.0361	5.3847
Lowering HIV Risk	.5232	.6034	.0802*	.5876	2.1005
Pregnant in One	.5875	.7167	.1292***	.5373	3.7243
Latex Protects STD	.4407	.5254	.0847*	.5772	2.2553
Sperm Lifespan	.2167	.3125	.0958**	.0257	2.6901
Pregnant First Sex	.6818	.7727	.0909**	.0217	2.5874
Cure for All STDs	.5207	.7355	.2149***	.5106	6.5469
Abstaining	.7025	.8347	.1322***	.4810	4.2762

\*indicates <.05 level of significance \*\*indicates <.01 level of significance \*\*\* indicates <.001 level of significance

**Appendix F: Linear Regression Predicting Knowledge**

Table BB: Linear Regression Predicting Knowledge on Pre-survey Questions

---

Variable Knowledge	b (Std. error)
Years in program	.316 (.41)
Female	.796 (.71)
Black	-.616 (.69)
Hispanic	-1.792 (1.25)
Age	.557 (.15)***
Cons	-2.564 (2.32)
N	88
F Statistic	4.08
Prob>F	0.0024
Adjusted R2	0.1502
Root MSE	2.6699

---

\*indicates p<0.1, \*\*indicates p<0.05, \*\*\*indicates p<0.01



## ***Appendix G: Missouri High-Risk Counties and Indicators***

Indicators are described below:

### **Pregnancy and Birth Related Rates**

The data used to calculate birth rates are collected by the Missouri DHSS Bureau of Vital Records, using an electronic registration system that collects data from hospitals and funeral homes on births and deaths in Missouri. The national standard definition for pregnancies includes all births, fetal deaths reported after 20 weeks gestation, and reported abortions.

The indicator 'percent of mothers of newborns with no high school diploma' is calculated with self-reported data from the birth certificate.

### **Sexually Transmitted Infections (STIs)**

STI data for DHSS are collected from lab results and are stored in the evaluation HIV/AIDS Reporting System (eHARS) and the STD Management Information System (STD\*MIS). Reportable STIs in Missouri include Chlamydia, Gonorrhea, Syphilis, and HIV.

### **Poverty**

Poverty data are collected from the U.S. Census Bureau, Small Area Income and Poverty Estimates. Poverty is determined by comparing the family's gross income with the poverty threshold, which adjusts for family size and composition.

### **School Dropouts**

The Missouri Department of Elementary and Secondary Education provides the current school dropout rates. The rates are defined as the number of dropouts divided by (September enrollment plus transfers in minus transfers out minus dropouts added to total September enrollment then divided by two).

**RANKING OF MISSOURI COUNTIES AND CITIES  
BASED ON TEEN PREGNANCY AND BIRTH RATES, STIS, AND OTHER RELATED INDICATORS 2008-2012**

<b>County</b>	<b>Preg Rate 15- 17</b>	<b>Birth Rate 15- 17</b>	<b>Preg Rate 15- 19</b>	<b>Birth Rate 15- 19</b>	<b>% Age 20+ no HS diploma</b>	<b>% Repeat Live Births &lt;18 yrs old</b>	<b>Percent below poverty level Estimate</b>	<b>Average Drop Out Rate</b>	<b>STD Total</b>	<b>Ranking</b>
St. Louis City	46.2	37.0	76.3	59.6	18.3	10.6	27.0	102.34	10424.3	1
Pemiscot County	47.9	43.3	97.1	89.8	24.9	12.2	29.6	24.82	4818.8	2
Mississippi County	48.0	44.1	93.4	90.4	22.2	14.8	22.9	6.48	3580.6	3
Jackson County	31.8	24.3	63.3	49.4	15.8	10.3	17.0	195.80	5552.6	4
Dunklin County	35.5	33.4	79.9	75.4	30.1	10.3	25.5	26.48	2505.3	5
Ripley County	35.4	34.7	76.4	74.8	21.5	11.3	27.2	7.38	815.5	6
Sullivan County	42.0	37.7	84.0	79.1	28.9	3.4	17.6	5.60	1390.8	7
Butler County	34.3	33.0	75.8	73.3	19.2	9.5	20.6	13.58	2794.7	8
New Madrid County	32.4	30.2	64.7	59.7	19.0	13.8	21.9	7.04	2216.4	9
Jasper County	29.2	26.7	63.3	60.1	20.0	8.8	18.9	19.52	2654.7	10
Buchanan County	36.4	32.0	67.4	60.0	14.9	8.8	16.5	5.24	2685.0	11
Howell County	28.4	27.9	67.7	65.8	16.1	8.6	20.6	10.12	1608.2	12
Scott County	29.1	27.4	64.1	62.1	17.6	7.6	18.3	8.46	2839.1	13
Wright County	24.0	23.5	66.9	62.8	19.9	8.0	26.6	3.74	1192.3	14
McDonald County	21.3	21.3	56.7	56.3	33.7	12.3	21.8	2.16	726.3	15
Laclede County	26.9	25.0	66.5	62.8	17.7	7.2	18.5	4.18	1744.2	16
St. Francois County	28.3	26.2	63.5	60.1	15.2	8.9	18.3	11.22	1404.6	17
Henry County	27.7	24.7	65.4	58.6	15.2	10.4	17.1	10.78	1418.3	18
Grundy County	28.9	28.9	59.0	56.2	29.6	3.2	12.6	5.68	1624.9	19
Wayne County	26.1	25.3	65.0	62.8	17.7	6.7	22.7	5.60	0.0	20
Saline County	23.1	20.6	51.4	45.8	18.7	14.0	19.1	11.12	1818.4	21
Barry County	21.8	21.5	53.8	52.5	26.5	9.0	18.0	14.90	1152.6	22

Morgan County	22.0	19.6	53.5	47.7	37.7	4.8	20.6	2.64	928.3	23
Texas County	24.3	23.2	58.6	56.0	17.4	6.8	20.5	7.96	1315.0	24
Daviess County	16.4	14.2	42.4	40.2	33.6	23.1	14.3	8.06	1237.1	25
Washington County	24.6	22.7	57.4	52.8	19.3	4.9	23.7	9.18	775.2	26
Pettis County	24.5	21.3	54.9	49.8	21.5	7.2	17.2	6.84	2258.9	27
Taney County	27.8	25.9	52.6	50.0	17.7	10.3	17.0	3.62	1253.6	28
Audrain County	25.5	23.6	53.9	48.6	25.4	6.1	16.3	8.28	1610.8	29
Cedar County	20.5	18.5	50.4	48.1	19.5	14.8	20.2	5.04	1232.2	30
Hickory County	25.2	23.8	50.1	49.3	19.4	15.8	17.5	4.14	0.0	31
Lawrence County	23.0	21.1	50.5	48.6	25.3	6.6	17.4	17.42	1312.5	32
Shannon County	27.1	23.8	57.8	54.2	21.1	4.3	21.4	0.92	0.0	33
Dent County	24.1	22.8	60.8	58.3	20.1	2.9	19.4	1.68	857.3	34
Knox County	11.7	11.7	34.3	32.7	38.1	20.0	22.8	2.00	0.0	35
Vernon County	24.6	23.3	49.4	44.7	17.6	5.8	21.7	5.56	1043.1	36
Benton County	24.3	19.4	57.2	52.0	16.5	6.3	18.6	7.78	1094.5	37
St. Clair County	22.8	22.8	47.2	46.5	21.2	4.5	20.4	12.58	960.3	38
Dallas County	17.1	17.1	46.2	45.1	28.7	9.1	20.8	3.82	775.2	39
Randolph County	22.3	19.9	52.9	48.6	13.8	3.9	18.2	8.46	2757.6	40
Pike County	20.2	18.6	51.7	47.6	20.6	11.4	14.5	7.60	1346.3	41
Madison County	22.1	20.5	54.3	51.4	17.5	7.4	18.6	8.00	662.3	42
Livingston County	25.3	21.6	59.5	54.8	13.7	0.0	18.1	5.70	2031.7	43
Oregon County	18.3	18.3	54.8	53.2	12.8	4.8	26.1	3.10	887.6	44
Newton County	24.0	23.0	47.9	46.7	18.0	6.8	14.9	9.36	1356.4	45
Bollinger County	18.7	18.7	48.2	46.7	15.0	11.5	19.3	5.00	1041.2	46
Carter County	17.2	15.6	51.2	50.2	20.8	0.0	27.2	5.98	890.5	47
Montgomery County	20.4	18.7	56.0	52.1	13.4	9.1	17.2	4.10	783.7	48
Iron County	16.8	15.8	56.1	53.7	17.1	0.0	25.6	6.32	1009.0	49
Stoddard County	21.2	19.2	50.6	47.4	16.7	3.4	15.6	14.96	1453.7	50

Miller County	20.5	18.5	47.7	42.4	14.2	6.3	19.3	9.14	1009.7	51
Crawford County	14.1	13.3	50.1	47.6	20.5	5.7	19.0	14.58	1045.7	52
Reynolds County	22.8	19.7	52.6	49.5	14.1	0.0	25.0	2.94	0.0	53
Bates County	21.2	18.4	54.7	48.7	14.3	2.9	17.0	14.12	800.4	54
Webster County	17.2	15.2	42.1	39.0	31.5	4.8	16.6	5.38	948.9	55
Douglas County	19.6	16.0	48.1	44.7	13.6	4.5	24.1	0.70	817.9	56
Marion County	19.8	17.6	46.6	43.7	14.9	4.0	15.5	5.32	2475.9	57
St.Louis County	16.7	11.4	35.0	24.6	7.1	9.1	10.5	71.92	3528.8	58
Greene County	21.0	18.5	37.4	32.8	10.8	8.5	17.9	13.78	1893.5	59
Cole County	18.4	15.0	37.9	30.9	9.7	15.2	11.6	9.46	2878.4	60
Stone County	16.4	15.7	49.5	47.0	15.6	4.3	19.0	8.14	739.2	61
Macon County	18.5	16.5	44.2	39.8	17.3	7.7	14.3	5.56	1167.2	62
Barton County	19.7	18.2	42.3	40.3	17.2	4.0	19.4	5.58	459.5	63
Harrison County	16.1	13.6	58.5	55.4	19.5	0.0	14.1	7.58	958.8	64
Schuyler County	15.0	13.2	42.0	40.7	27.0	0.0	25.2	2.24	0.0	65
DeKalb County	17.3	15.3	40.5	34.7	12.4	20.0	8.3	7.28	1048.3	66
Polk County	17.0	16.1	37.3	35.5	14.7	3.8	22.4	10.50	888.9	67
Cape Girardeau County	18.2	16.9	34.4	31.2	10.2	9.0	15.9	10.18	1744.0	68
Camden County	18.4	13.8	43.0	36.2	12.8	9.4	13.9	8.70	1161.0	69
Phelps County	15.8	14.1	40.4	36.0	11.8	6.5	18.8	10.36	1209.9	70
Lafayette County	17.4	14.1	46.8	38.7	12.0	11.5	10.0	9.26	1128.1	71
Warren County	19.5	18.3	44.0	39.7	12.4	4.8	14.4	4.80	1061.5	72
Boone County	18.8	15.0	25.1	18.8	7.4	9.6	19.5	14.54	2675.9	73
Ray County	21.3	16.9	47.8	39.5	11.7	4.4	10.5	10.60	1418.6	74
Moniteau County	15.2	15.2	43.2	41.2	23.6	3.8	11.2	7.96	904.0	75
Franklin County	17.9	15.8	42.7	37.7	13.1	4.4	12.9	16.94	1258.9	76
Cooper County	18.1	11.7	36.0	29.3	18.1	4.5	17.8	8.26	1491.3	77

Holt County	20.1	17.5	59.5	56.2	5.8	0.0	14.7	5.06	0.0	78
Pulaski County	19.1	16.3	36.8	31.9	7.6	7.5	14.0	9.12	1805.4	79
Caldwell County	16.1	16.1	48.1	43.7	11.1	0.0	14.9	6.90	1532.0	80
Putnam County	12.1	12.1	44.0	44.0	20.3	0.0	19.4	1.32	0.0	81
Adair County	14.8	12.8	18.8	16.5	10.5	12.0	24.7	4.82	739.1	82
Chariton County	11.6	10.3	33.7	32.0	11.3	11.1	15.8	5.18	1397.1	83
Perry County	14.5	14.0	37.8	36.2	10.2	10.3	12.5	3.18	779.1	84
Gentry County	10.2	10.2	38.5	36.9	22.0	0.0	17.7	4.26	1230.6	85
Callaway County	13.9	9.7	35.2	29.0	11.6	8.9	11.7	20.22	1584.3	86
Lewis County	18.3	16.3	31.7	29.7	16.2	0.0	15.2	4.36	1385.1	87
Lincoln County	15.6	13.9	41.8	36.8	11.2	1.1	13.7	10.36	1090.6	88
Carroll County	11.6	9.8	35.6	30.8	16.2	8.3	13.1	5.62	1020.1	89
Clay County	17.5	12.2	39.3	29.1	7.7	6.4	8.3	12.12	2171.0	90
Gasconade County	11.8	8.7	40.8	36.3	11.9	7.1	13.6	3.76	1072.4	91
Maries County	11.3	11.3	33.4	32.7	11.9	9.1	14.3	6.06	642.9	92
Ralls County	10.6	9.6	35.3	32.6	13.6	10.0	10.4	2.38	1385.4	93
Linn County	13.2	11.8	44.2	39.5	12.6	0.0	13.4	5.44	1130.5	94
Johnson County	12.8	10.2	29.7	23.6	7.8	6.3	16.6	14.08	1729.0	95
Jefferson County	15.4	12.5	35.6	30.5	9.5	5.2	10.5	23.26	884.0	96
Ozark County	10.8	10.8	43.6	41.3	12.7	0.0	18.4	6.42	0.0	97
Clinton County	16.0	14.2	41.2	35.5	7.9	3.2	9.8	9.28	1108.1	98
Dade County	13.1	11.9	32.3	30.7	15.2	0.0	20.3	9.34	0.0	99
Cass County	16.0	11.5	35.7	28.1	8.4	4.5	8.4	17.16	1637.4	100
Clark County	8.4	8.4	43.8	43.8	13.9	0.0	16.6	2.76	0.0	101
Andrew County	17.1	14.9	39.4	35.8	5.5	3.7	7.5	4.04	1111.5	102
Scotland County	3.6	1.8	16.4	14.1	48.3	0.0	18.9	2.50	0.0	103
Christian County	14.7	11.9	33.1	29.1	6.4	3.8	10.1	12.56	1194.2	104
Monroe County	7.4	7.4	29.5	28.8	15.7	0.0	14.2	7.46	1280.4	105

Howard County	10.6	8.5	29.0	22.7	7.6	0.0	16.1	7.50	1554.7	106
Nodaway County	8.7	7.7	14.3	11.6	5.3	0.0	27.9	9.52	1199.2	107
Ste. Genevieve County	9.9	9.9	33.0	30.7	11.6	0.0	10.7	2.94	503.7	108
Atchison County	13.4	13.4	33.1	30.9	7.2	0.0	10.2	5.58	0.0	109
Mercer County	4.9	4.9	18.5	16.9	27.4	0.0	16.6	1.48	0.0	110
Shelby County	8.0	8.0	18.0	18.0	13.7	0.0	17.5	3.90	0.0	111
Platte County	8.9	7.4	25.6	21.7	5.5	2.9	7.3	8.80	1546.0	112
Worth County	10.5	10.5	21.0	21.0	3.9	0.0	13.3	1.24	0.0	113
St. Charles County	9.6	6.4	23.6	17.2	4.8	4.0	5.4	10.66	1064.5	114
Osage County	4.4	3.7	16.8	15.9	7.3	0.0	9.9	3.10	531.3	115
Missouri	21.5	17.5	45.0	37.6	12.7	8.3	15.0		<b>2792.5</b>	

**Appendix H: Community Readiness**

**STAGES OF COMMUNITY READINESS<sup>51</sup>**

The following tables contain a series of readiness stages (one through nine) and are not designed to be followed concurrently. The “goal” and “next steps” aim to guide a community to the next readiness stage until stage nine is reached.

<b>STAGE 1: NO AWARENESS</b>	
<i>Status</i>	Teen pregnancy and teen pregnancy prevention is not generally recognized by the community or leaders as a problem (or it may truly not be an issue).
<i>Goal</i>	Raise awareness of teen pregnancy and teen pregnancy prevention
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>• Make one-on-one visits with community leaders/members</li> <li>• Visit existing and established small groups to inform them of the issue of teen pregnancy and teen pregnancy prevention</li> <li>• Make one-on-one phone calls to friends and potential supporters</li> </ul>
<b>STAGE 2: DENIAL / RESISTANCE</b>	
<i>Status</i>	At least some community members recognize that it is a teen pregnancy concern, but there is little recognition that it might be occurring locally
<i>Goal</i>	Raise awareness that teen pregnancy exists in this community
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>• Continue one-on-one visits and encourage those you have talked with to assist</li> <li>• Discuss descriptive local incidents related to teen pregnancy</li> <li>• Approach and engage local educational/health outreach programs to assist in the effort with flyers, posters, or brochures</li> <li>• Begin to point out medial articles that describe local critical incidents</li> <li>• Prepare and submit articles for church bulletins, local news letters, club newsletters, etc.</li> <li>• Present information to local related community groups</li> </ul>
<b>STAGE 3: VAGUE AWARENESS</b>	
<i>Status</i>	Most feel that there is a local teen pregnancy concern, but there is no immediate motivation to do anything about it
<i>Goal</i>	Raise awareness of teen pregnancy and teen pregnancy prevention
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>• Get on the agendas and present information at local community events and to unrelated community groups</li> <li>• Post flyers, posters, and billboards</li> <li>• Begin to initiate your own events and use those opportunities to present information on the issue</li> <li>• Conduct informal local surveys and interviews with community people by phone or door-to-door</li> <li>• Publish newspapers editorials and articles with general information and local implications of teen pregnancies</li> </ul>
<b>STAGE 4: PREPLANNING</b>	
<i>Status</i>	There is clear recognition that something must be done about teen pregnancy, and there may even be a group addressing it. However, efforts are not focused or detailed
<i>Goal</i>	Raise awareness with concrete ideas to combat teen pregnancy
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>• Introduce information about teen pregnancy prevention through presentations and media</li> <li>• Visit and invest community leaders in the cause</li> </ul>

<sup>51</sup> Plested, B.A., Edwards, R.W., & Jumper-Thurman, P. (2006, April). *Community Readiness: A handbook for successful change*. Fort Collins, CO: Tri-Ethnic Center for Prevention Research

	<ul style="list-style-type: none"> <li>Review existing efforts in community (curriculum, programs, activities, etc.) to determine who the target populations are and consider the degree of success of the efforts</li> <li>Conduct local focus groups to discuss teen pregnancy and teen pregnancy prevention strategies</li> <li>Increase media exposure through radio and television public service announcements</li> </ul>
<b>STAGE 5: PREPARATION</b>	
<i>Status</i>	Active leaders begin planning in earnest. Community offers modest support of efforts
<i>Goal</i>	Gather existing information with which to plan teen pregnancy prevention strategies
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>Conduct school surveys</li> <li>Conduct community surveys</li> <li>Sponsor a community picnic to kick off the effort</li> <li>Conduct public forums to develop strategies from the grassroots level</li> <li>Utilize key leaders and influential people to speak to groups and participate in local radio and television shows</li> <li>Plan how to evaluate the success of your efforts</li> </ul>
<b>STAGE 6: INITIATION</b>	
<i>Status</i>	Enough information is available to justify teen pregnancy prevention efforts. Activities are underway
<i>Goal</i>	Provide community-specific information
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>Conduct in-service training on Community Readiness for professionals and paraprofessionals</li> <li>Plan publicity efforts associated with start-up of activity or efforts</li> <li>Attend meetings to provide updates on progress of the efforts</li> <li>Conduct consumer interviews to identify service gaps, improve existing services and identify key places to post information</li> <li>Begin library or Internet search for additional resources and potential funding</li> <li>Begin some basic evaluation efforts</li> </ul>
<b>STAGE 7: STABILIZATION</b>	
<i>Status</i>	Teen pregnancy prevention activities are supported by administrators or community decision makers. Staff are trained and experienced
<i>Goal</i>	Stabilize efforts and programs
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>Plan community events to maintain support for teen pregnancy prevention</li> <li>Conduct training for community professionals</li> <li>Conduct training for community members</li> <li>Introduce your program evaluation through training and newspaper articles</li> <li>Conduct quarterly meetings to review progress, modify strategies</li> <li>Hold recognition events for local supports or volunteers</li> <li>Prepare and submit newspaper articles detailing progress and future plans</li> <li>Begin networking among service providers and community systems</li> </ul>
<b>STAGE 8: CONFIRMATION / EXPANSION</b>	
<i>Status</i>	Teen pregnancy prevention efforts are in place. Community members feel comfortable using services, and they support expansions. Local data are regularly obtained
<i>Goal</i>	Expand and enhance services
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>Formalize the networking with qualified service agreements</li> <li>Prepare a community risk assessment profile</li> <li>Publish a localized program service directory</li> <li>Maintain a comprehensive database available to the public</li> <li>Develop a local speaker's bureau</li> <li>Initiate policy change through support of local city officials</li> <li>Conduct media outreach on specific data trends related to the teen pregnancy</li> <li>Utilize evaluation data to modify errors</li> </ul>
<b>STAGE 9: HIGH LEVEL OF COMMUNITY AWARENESS</b>	



<i>Status</i>	Detailed and sophisticated knowledge exists about prevalence, causes, and consequences of teen pregnancy. Effective evaluation guides new directions. Model is applied to other issues
<i>Goal</i>	Maintain momentum and continue growth
<i>Next Steps</i>	<ul style="list-style-type: none"> <li>• Maintain local business community support and solicit financial support from them</li> <li>• Diversify funding sources</li> <li>• Continue more advanced training of professionals and paraprofessionals</li> <li>• Continue re-assessment of teen pregnancy prevention and progress made</li> <li>• Utilize external evaluation and use feedback for program modification</li> <li>• Track outcome data for use with future grant requests</li> <li>• Continue progress reports for the benefit of community leaders and local sponsorship</li> <li>• At this level, the community has ownership of the efforts and will invest themselves in maintaining the efforts</li> </ul>

**Appendix I: Fidelity Evaluation Criteria**

TABLE 4: CRITERIA DEVELOPED BY THE EVALUATION TEAM FOLLOWED BY AN ANALYSIS OF EACH PROGRAM		
BART	MPC	TOP
<ul style="list-style-type: none"> <li>• <b>Fidelity Logs - 50%</b> of the total fidelity score was assigned based on the delivery of the lessons as described in the facilitator’s curriculum.</li> <li>• Within each module there are a series of activities. Each activity was scored based on how closely they implemented the activity according to the directions in the curriculum guide.</li> <li>• This section also included the core content and core pedagogical components. These are a series of yes/no questions taken from the BART adaptation kit.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Fidelity Logs - 50%</b> of the total fidelity score was assigned based on the delivery of the lessons as described in the facilitator’s curriculum.</li> <li>• Within each module there are a series of activities. Each activity was scored based on how closely they implemented the activity according to the directions in the curriculum guide.</li> <li>• This section also included the core content and core pedagogical components. These are a series of yes/no questions taken from the MPC adaptation kit.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Curriculum Delivery and Facilitator Credibility – 50%</b></li> <li>• Program must have lasted 9 months</li> <li>• Must average one meeting per week for the duration of the program.</li> <li>• Must implement adult preparation topics per the protocol of DHSS.</li> <li>• Facilitators must have credibility with youth.</li> <li>• Must have two facilitators. <ul style="list-style-type: none"> <li>○ Must be same facilitators for duration of program.</li> </ul> </li> </ul>
<p><b>Attendance – 25%</b> of the fidelity score was based on student attendance. The score was derived from the average attendance.</p>	<p><b>Attendance – 25%</b> of the fidelity score was based on student attendance. The score was derived from the average attendance.</p>	<p><b>Attendance – 25%</b> of the fidelity score was based on student attendance. This score was calculated as the percentage of students that completed at least 75% of the program divided by the total number of students.</p>
<ul style="list-style-type: none"> <li>• <b>Remainder of Core Components-25%</b></li> <li>• Classes taught in sequence</li> <li>• Class is between 5-15 youth</li> <li>• Implementing to age appropriate participants (14-18 years old)</li> <li>• Two co-leaders, one male and one female (unless class consists of only one gender)</li> <li>• Implementing in a private meeting space</li> <li>• Implementing in a non-school setting</li> <li>• Youth get a BART t-shirt</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Remainder of Core Components-25%</b></li> <li>• Classes taught in sequence</li> <li>• Two facilitators</li> <li>• Secure a private meeting space</li> <li>• Group size is between 6-12 teens (if larger, more facilitators needed)</li> <li>• Student feedback about class and facilitator (taken from outcome survey, below)</li> <li>• facilitator has credibility with youth</li> <li>• Students feel safe and secure</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Community Service Learning-25%</b></li> <li>• Each student must have completed 20 hours during duration of the program.</li> <li>• Average score of student feedback regarding CSL (taken from TOP post-program survey): <ul style="list-style-type: none"> <li>○ I enjoyed CSL.</li> <li>○ I learned how to deal with challenges during CSL.</li> <li>○ I helped plan my CSL project.</li> <li>○ The CSL project made a positive</li> </ul> </li> </ul>

<ul style="list-style-type: none"><li>• Student feedback about class and facilitator (taken from outcome survey)<ul style="list-style-type: none"><li>○ facilitator has credibility with youth</li><li>○ Students feel safe and secure</li></ul></li></ul>		<p>difference in the lives of others.</p> <ul style="list-style-type: none"><li>○ I learned new skills from CSL.</li></ul>
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**Appendix J: Percent of Correct Answers for Pre and Post Surveys**

Question	Pre-Survey	Post-Survey	Difference
Even if the man pulls out before he ejaculates, it is still possible for a woman to become pregnant.	37.86%	48.56%	10.70%**
Having sex with someone who has an STD is one way of getting an STD.	85.36%	90.65%	5.28%
Most people who have HIV know they have it.	44.21%	63.64%	19.42%***
Using a condom during sex can lower the risk of getting an HIV.	52.32%	60.34%	8.02%*
A person can get HIV in one sexual contact.	58.75%	71.67%	12.92%***
Proper use of latex condoms helps to protect people from STD's.	44.07%	52.54%	8.47%*
When a woman has sexual intercourse, almost all sperm will die inside her body after about six hours.	21.67%	31.25%	9.58%**
A woman cannot get pregnant the first time she has sex.	68.18%	77.27%	9.09%**
All STDs can be cured.	52.07%	73.55%	21.49%***
Abstaining from sex is the most effective way to prevent pregnancy.	70.25%	83.47%	13.22%***

\*indicates <.05 level of significance \*\*indicates <.01 level of significance \*\*\* indicates <.001 level of significance

**Appendix K: Logistic Regression Predicting Survey Questions**

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Variable	Ever Had Sex b (Std. error)	Would Abstain From Sex b (Std. error)
Years in program	.111 (.41)	-.143 (.43)
Female	1.806 (1.00)*	.213 (.75)
Black	2.106 (.81)***	-1.142 (.66)*
Hispanic	.159 (1.37)	-2.539 (1.09)**
Age	1.066 (.23)***	.570 (.24)**
Cons	-19.264 (4.10)***	-5.241 (2.99)*
N	127	91
Chi-squared	47.78	16.35
Prob> chi2	0.0000	0.0059
Pseudo R2	0.3793	0.1865

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\*indicates p<0.1, \*\*indicates p<0.05, \*\*\*indicates p<0.01

**Appendix L: Linear Regression Predicting Survey Questions**

Variable	I Could Say No b (Std. error)	Could Convince Condom Usage b (Std. error)	Could Refuse Sex b (Std. error)	Could Get Condoms b (Std. error)	Would Use a Condom b (Std. error)
Years in program	.077 (.11)	-.020 (.13)	.130 (.13)	.048 (.19)	.092 (.11)
Female	.440 (.04)**	.365 (.22)*	-.483 (.19)**	.099 (.33)	.278 (.18)
Black	.010 (.19)	.195 (.21)	.072 (.22)	.605 (.33)*	.300 (.18)
Hispanic	-.495 (.33)	.411 (.36)	-.404 (.37)	-1.021 (.55)*	-.125 (.31)
Age	-.067 (.04)*	.133 (.04)***	.003 (.04)	.239 (.07)***	.043 (.04)
Cons	5.191 (.61)***	2.528 (.71)***	1.325 (.66)**	.388 (1.08)	3.635 (.60)***
N	88	92	119	90	93
F Statistic	4.08	2.66	1.62	3.74	1.82
Prob>F	0.0024	0.0279	0.1608	0.0042	0.1182
Adjusted R2	0.1502	0.0834	0.0255	0.1333	0.0424
Root MSE	2.6699	.82675	.8787	1.2636	.70888

\*indicates p<0.1, \*\*indicates p<0.05, \*\*\*indicates p<0.01

**Appendix M: Linear Regression Predicting Survey Questions on Student Attitudes**

Variable	Care About School b (Std. error)	Can Share Ideas b (Std. error)	Resist Peer Pressure b (Std. error)	Can Manage Stress b (Std. error)	Can Manage Money b (Std. error)	Respects Others b (Std. error)	Get More Education b (Std. error)
Years in program	-.157 (.11)	-.164 (.14)	.179 (.16)	.020 (.15)	.054 (.12)	.138 (.11)	-.059 (.09)
Female	.048 (.18)	.732 (.24)***	-.308 (.22)	-.469 (.24)*	.081 (.20)	-.209 (.19)	-.169 (.15)
Black	.498 (.18)***	.036 (.24)	.519 (.23)**	.331 (.24)	.057 (.20)	.347 (.19)*	.282 (.16)*
Hispanic	.163 (.33)	.221 (.41)	.222 (.39)	.169 (.15)	.207 (.35)	.608 (.35)*	.116 (.29)
Age	-.021 (.04)	-.031 (.05)	.010 (.05)	-.061 (.05)	-.143 (.04)***	-.073 (.04)*	-.061 (.03)*
Cons	5.117 (.57)***	4.336 (.77)***	4.013 (.72)***	5.043 (.79)***	6.158 (.66)***	5.183 (.62)***	5.693 (.50)***
N	97	97	98	96	98	95	97
F Statistic	2.37	2.38	1.65	1.34	2.66	2.50	1.86
Prob>F	0.0453	0.0449	0.1556	0.2549	0.0271	0.0360	0.1096
Adjusted R2	0.0667	0.0669	0.0323	0.0176	0.0790	0.0741	0.0427
Root MSE	.70494	.9506	.89566	.96452	.81337	.75281	.616

\*indicates p<0.1, \*\*indicates p<0.05, \*\*\*indicates p<0.01