

2009 Prevention Outcomes Annual Report

South Carolina
DAODAS
Department of Alcohol and Other Drug Abuse Services



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EXECUTIVE SUMMARY

This report summarizes prevention outcomes generated by the South Carolina county authority substance abuse prevention system in Fiscal Year 2008-2009. A large portion of the content of this report focuses on the outcomes generated through pre- and post-testing of multi-session youth prevention curricula because those evaluation methods were the most standardized across sites.

The key outcome findings from these **youth prevention curricula** are:

- There were 7,526 participants with matched pre- and post-tests. Most (89%) participants were between the ages of 10 and 14. The race demographics were roughly 44% Black or African American, 44% White, and 5% “Other” race.
- The results showed statistically significant positive changes on all five risk factor measures: perceived risk, favorable attitudes, decision-making, perceived peer norms, and perceived parental attitudes ($p < .05$).
- For substance use, there were statistically significant reductions in the number of users of all eight substances measured, ranging from a high of 42% (inhalants) to a low of 14% (other tobacco products). These include reductions in the number of alcohol (27.2%), cigarette (22.7%), and marijuana (30.6%) users.
- Between 95% and 99% of participants that were non-users at pre-test remained non-users at post-test for each substance. Around 70-90% of substance users at pre-test were using less or not at all by post-test.
- Of the programs with multiple implementations, All Stars, Keepin’ It Real, Life Skills, Project Northland, Project TNT, and Too Good for Drugs had some of the most consistently positive results.
- 95% of the matched program participants were served in an evidence-based program, the highest percentage ever. In almost every way, evidence-based programs had greater positive change results for participants than programs that were not evidence-based.
- Average ages of 1st use for cigarettes, other tobacco products, and alcohol were between 10.9 and 11.3. First use of marijuana averaged 12.1.

Key findings for prevention efforts other than youth prevention curricula are:

- County authority prevention staff returned forms on 7,121 alcohol compliance checks and 1,182 tobacco compliance checks, a considerable increase in alcohol checks from FY ’08 but a drop in tobacco checks. For alcohol, 18.2% of attempts generated sales compared to 16.5% for tobacco. The sale rate for tobacco

products other than cigarettes was higher than cigarettes. Having posted signage about checking IDs or having age verification equipment were both statistically significantly associated with being less likely to sell.

- 1,899 merchants were served in the Palmetto Retailer Education Program in FY '09, down from 2,097.
- Primarily through Alcohol Enforcement Teams, counties reported 529 public safety checkpoints, resulting in more than 8,600 tickets, and 144 dispersed parties during which 791 underage drinking violations were written. Another 231 parties were prevented from AETs working off of advance information. About 10% of the 365 adults approached by a cooperating youth asking for alcohol from a store purchased alcohol and were ticketed by an AET (“shoulder tap” operations).
- The FFY 2009 Youth Access to Tobacco Study (Synar) showed a retailer violation rate of 10.8%, which is the lowest ever rate for selling tobacco products to youth in the study. The rate remains far lower than the 63.2% in 1994.
- Many **other prevention activities** are not well suited to generating valid outcomes, and some interventions were implemented too infrequently to generate conclusions. A lack of outcomes is not necessarily an indication that an approach is unimportant or ineffective.

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SECTION I: EVALUATION REPORT OVERVIEW

State Prevention Evaluation Efforts

The South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS) is one of the primary funders for substance abuse prevention services in the state. A majority of their funds are distributed to the county alcohol and drug authority system, 33 agencies serving the state's 46 counties. Every county authority offers prevention services, primarily using funds that pass through DAODAS and originate from the U.S. Substance Abuse and Mental Health Services Administration's (SAMHSA) Substance Abuse Prevention and Treatment Block Grant (SAPTBG). In addition, DAODAS also receives Safe and Drug-Free Schools and Communities (SDFS) funds through the U.S. Department of Education that are distributed to community providers in a competitive process. A handful of these SDFS grant recipients are not part of the county authority system, but their outcomes are included in this report where appropriate.

Beginning in FY '05, county alcohol and drug abuse authorities were required to use the DAODAS Standard Survey for recurring programs delivered to youth between the ages of 10 and 20 years old. PIRE developed the original DAODAS Standard Survey after DAODAS prevention staff selected the SAMHSA core measures they wanted included. In response to the federally issued National Outcome Measures (NOMs) in 2006, DAODAS and PIRE, with significant input from local prevention staff, adapted the DAODAS Standard Survey for FY '08. The survey remained unchanged in FY '09.

Local prevention staff administer the surveys and enter student responses into the KIT Prevention online reporting system. PIRE staff are sent a cumulative outcome database quarterly. The deadline for pre- or post-tests to be included in the final database for FY '09 was June 15. This report, written by the Columbia, SC office of the Pacific Institute for Research and Evaluation, focuses on the findings based on the year-end cumulative database for FY '09, though we also present results where appropriate from past years for comparison purposes.

Contents of This Report

This report will not focus exclusively on outcomes generated through pre- and post-testing of middle and high school youth, but those results will receive the most analysis and discussion because it is the most standardized, valid method implemented across county authority sites. Other sections of the report will deal with those outcomes that can be assessed across sites for environmental strategies, the Youth Access to Tobacco Study (Synar), and other interventions.

Section II will focus on the overall results generated by the DAODAS Standard Survey. Section II will also present and discuss the pre- and post-test findings by demographic groups: age, gender, race, and ethnicity.

Section III will present and discuss analyses for the pre- and post-test results by program. In addition, we will present a comparison of the results for evidence-based programs versus non-evidence-based programs and Block Grant funded programs versus SDFS funded programs.

Section IV will be a discussion of some of the methods and issues key to analyzing and interpreting the pre- and post-test results in Section II and Section III.

Section V will discuss findings from county alcohol and tobacco environmental strategies with a focus on compliance checks and Alcohol Enforcement Team efforts.

Section VI will cover results from the FFY '10 Youth Access To Tobacco Study (Synar).

Section VII will address the findings for other prevention interventions not included in the previous sections.

Many of the most detailed data tables are included in Appendix A of this report to make the report more readable, while more succinct tables or summaries are presented in the narrative sections. Appendix B includes a copy of the DAODAS Standard Survey in effect for FY '09.

SECTION II: OVERALL PRE- AND POST-TEST FINDINGS

This section will present findings for the general state prevention system generated through youth participant pre- and post-testing (the DAODAS Standard Survey) when a valid pre- and post-test could be matched to the same participant. We present data on demographic characteristics of the participants, results for the risk-factor measures, and results for substance use measures.

The Pre-Post Test Outcome Evaluation Instrument

The revised DAODAS Standard Survey is comprised of SAMHSA National Outcome Measures (NOMs) and other measures from the Core Measure Initiative. The measures used were **perceived risk/harm of ATOD use, favorable attitudes toward ATOD use, decision-making, perceived peer norms regarding ATOD use, perceived parental attitudes regarding ATOD use, and 30-day use of cigarettes, other tobacco products, alcohol, marijuana, other illegal drugs, inhalant drugs, non-medical use of prescription drugs, and non-medical use of over-the-counter drugs.** The DAODAS Standard Survey is included in Appendix B. The survey stayed unchanged for the first three years, but adaptations were made in FY '08 to ensure compatibility with the National Outcome Measures (NOMs). Some measures stayed consistent across the two versions, but most required changes. The survey was unchanged in FY '09.

Providers were instructed to administer the pre-test within two weeks prior to the start of the program content and administer the post-test within two weeks following the end of the content. Local staff were expected to enter the student responses into the KIT Prevention online reporting system. Providers were instructed on participant protection procedures that would ensure likely confidentiality.

It is important to note that the evaluation design is non-experimental. That is, pre- and post-surveys are required to be administered only to program participants and not to control groups, so we cannot tell what would have happened in the absence of the program. Despite this limitation, positive results are expected to provide some level of comfort that the program seems to be leading to the outcomes anticipated for a program.¹ Negative results are expected to raise questions about the fidelity of program implementation and/or the fit of the program to the community but should never be taken as a conclusive indication of program ineffectiveness. Through this monitoring process,

¹ Because adolescents in today's society generally become more tolerant of substance use and more likely to engage in some substance use behaviors as they grow older, it may be difficult to achieve positive changes among program participants over the time span between the pre- and post-surveys, even for a period as short as a few months. Therefore, even seeing no change on some risk factors and/or substance use behaviors may be viewed as a positive impact of program participation. This is particularly true for these data, where most respondents reported very low levels of risk and very low levels of substance use at the beginning of the programs.

the hope is that program implementation receives the attention that is necessary to be of greatest benefit to the community. In addition, the analysis of pre-post data across multiple programs and sites will assist the state in further understanding which programs, implemented under which conditions, appear to be most and least effective.

Matched Participants

For multiple reasons, not every pre-test completed by a participant could be matched to a valid post-test for that participant and vice-versa. This could happen because:

- The participant was absent at the time the pre-test or post-test was administered,
- Something in the test-coding process went wrong (participants were not to put their name on their surveys; a coding system was used to match the pre- and post-test at a later time),
- The participant left so much of the survey blank that it was removed from the analyses,
- The participant refused to take the pre- or the post-test, or
- Surveys were misplaced or not entered by local prevention staff.

If a participant did not have matched, valid pre- and post-tests, then neither test was included in the database that we analyzed.

The final database had 7,526 matched participants, which is a substantial increase from 5,631 in FY '08 and the largest total since DAODAS implemented the Standard Survey in FY '05. An unmatched database provided by KIT Prevention staff showed a total of 8,812 pre-tests entered, meaning a match rate of 85.4%. This is far less than the 98.5% match rate for FY '07 but better than the FY '08 match rate of 79.7%. The 8,812 total that received a pre-test do not necessarily reflect all school age youth to receive curriculum program services. DAODAS' prevention reporting system had 11,765 total registered recurring participants for FY '09, and 93% (10,980) of these individuals were school-aged youth. However, because elementary school programs and some other types of programs are allowed exceptions to not use the DAODAS Standard Survey, it is reasonable that a smaller total would have been given a pre-test. Year-end reports showed that there were only a few programs in the state with any substantial numbers of elementary school students.

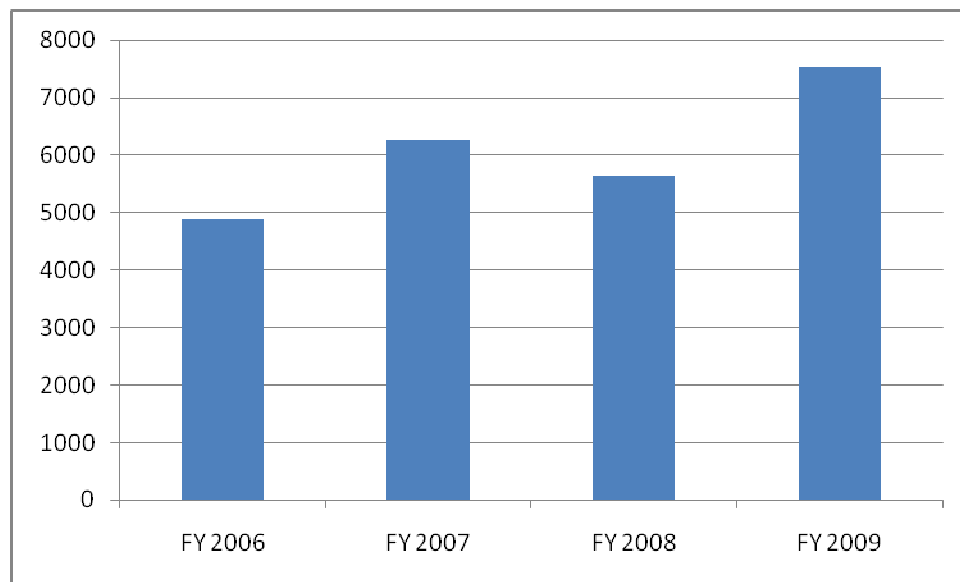
In a review of year-end reports, a majority of programs reached the targeted number of youth. In a few instances, these outcomes were far exceeded. About one-third of program implementations fell short of their target numbers. In many instances, this was attributed to scheduling difficulties presented by the schools or low attendance in less structured settings like after-school programs. There were a few instances where a program never happened due to staff turnover or a commitment falling through from a school or other youth facility. It appears that the traditional middle and high school

curriculum programs had slightly better success in reaching targeted numbers than programs for different ages or those implemented in settings other than schools.

Demographic Breakdown

The demographic figures presented in this section are based on the participants' responses to the demographic items on their pre-test. The same items appeared on their post-tests but were not used.

Chart 1. Matched Participants in Pre-Post Database, FY '06-'09



Age. A majority (89%) of participants were between the ages of 10 and 14, with an average age of 12.4 (same as FY '08). This means that middle school students make up a sizable portion of the total population. Table 1 shows the complete breakdown. Compared to FY '08, there were more 13 and 14 year olds and fewer 11 and 12 year olds. This continues a trend seen in the FY '07 and FY '08 data. The programs delivered to a majority older audience were Class Action, Palmetto Youth Leadership, Teen Institute, and Youth Board.

Gender. Females made up a slim majority of the matched participant population (51% with 0.9% of the participants unidentified for gender). The only programs with an atypical gender breakdown were Second Step (85% male), along with Wise Guys, Strong Sons, and G.I.R.L. Power, for obvious reasons.

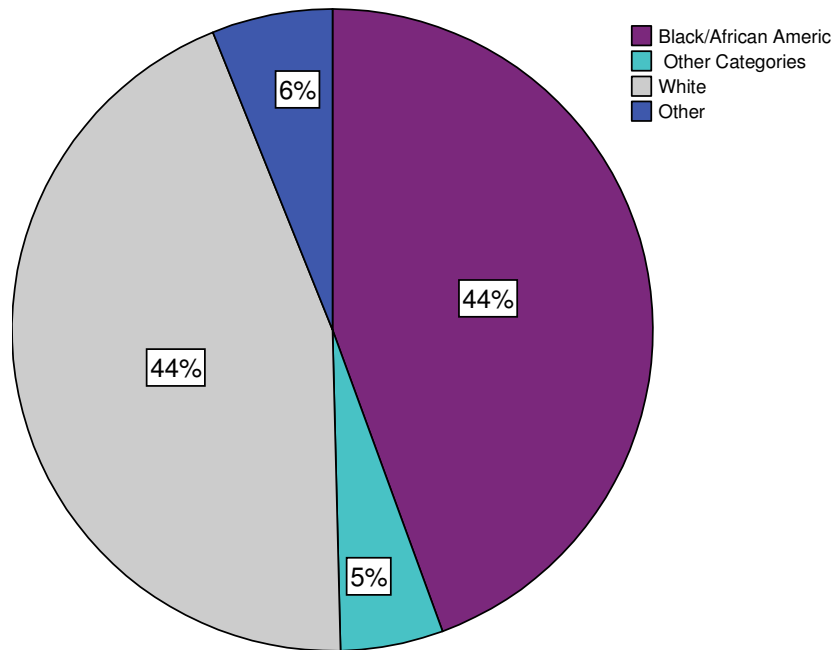
Race/Ethnicity. 44% of the matched participants were Black or African American, 44% were White, 5% were of "Other" race, 1% were American Indian or Alaskan Native, and 3% were in the Multiethnic race category. There were small numbers of participants (0.6% or below) that were Asian, Native Hawaiian, or Other Pacific Islander. Only 6% of matched participants were of Hispanic, Latino, or Spanish origin or descent. These percentages are very similar to FY '08 and '07. Some programs had atypical

demographic breakdowns, such as After School Recreation (82% White), G.I.R.L. Power (31% Hispanic/Latino), Keep a Clear Mind (93% Black or African American), Lions-Quest Skills For Adolescence (84% Black or African American), Palmetto Youth Leadership (73% White), Responding in Peaceful and Positive Ways (74% Black or African American), Second Step (70% White), Street Smart (87% Black or African American), Teen Institute (100% Black or African American), and Too Good For Drugs (70% White).

Table 1. Age Distribution of County Authority Program Participants

Age	% of Participants	
	FY'09	FY'08
10	17.5	17.3
11	17.9	21.4
12	15.1	17.9
13	21.3	16.3
14	17.2	13.0
15	6.1	8.2
16	2.7	4.2
17	0.8	1.2
18	0.3	0.2
19	0.1	0.0

Chart 2. Matched Participants by Race



Risk-Factor Measures

Table 2 shows the results for the five risk factors included on the DAODAS Standard Survey. As shown in the table, there was statistically significant ($p < .05$) positive change from pre- to post-test for all five measures. It should be noted that perceived parental attitudes had the highest relative pre-test score and may have been limited by a “ceiling effect” because the high pre-test score left little room for improvement. FY '08 data showed a better improvement for perceived risk and decision-making, but FY '09 had greater improvements on favorable attitudes, perceived peer norms, and perceived parental attitudes.

**Table 2. Overall Results, Risk-Factor Measures:
County Authorities, FY '09 and '08**

Risk-Factor Measure	Possible Range of Scores	Pre-Test Average	Post-Test Average	FY '09 % Change	FY '08 % Change
Perceived Risk	0-3	2.0	2.2	12.2**	13.7**
Decision-Making	0-3	1.8	1.9	5.2**	6.3**
Favorable Attitudes	0-2	1.5	1.6	6.1**	4.4**
Perceived Peer Norms	0-10	8.2	8.4	2.8**	1.9**
Perceived Parental Attitudes	0-3	2.8	2.8	0.6**	0.4*

* Pre- and post-test averages are approaching a statistically significant difference (at the $p < .10$ level but not at the $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Demographic Differences in Risk-Factor Measures. Tables A1 through A4 in Appendix A display risk-factor measure and substance use rates results separated by age group (middle school ages and high school ages), gender, race, and ethnicity.

Age. Table A1 shows county authorities' data results separated by age range: middle school age (ages 10 to 13) and high school age (ages 14 to 19). As expected, younger participants had higher pre-test risk-factor scores. Both groups had statistically significant changes on all risk-factor measures, except for perceived parental attitudes which was approaching significance for middle school students.

Gender. Table A2 shows data results separated by gender. Results for all five risk-factor measures show statistically significant positive change for males and females, except that perceived parental attitudes was not significant for females. It is worth noting that females had better pre-test risk-factor scores than males on all measures, which may be a primary reason that males had more desirable change scores on all five measures—females had less room for improvement.

Race/Ethnicity. Table A3 shows data results separated by race (for those race groups with 40 or more participants), and Table A4 shows the results by ethnicity. Both the White participant group and the Black or African American participant group had

significant positive change on all measures except perceived parental attitudes, and the Black or African American participant group had near significant change on that measure. All race groups had significant positive change for perceived risk.

Participants of Hispanic, Latino, or Spanish descent or origin had statistically significant positive change for perceived risk, favorable attitudes, decision-making, and perceived peer norms and near significant change on perceived parental attitudes. They had lower pre-test risk factor scores than participants not of that ethnicity but greater improvements from pre- to post-test. This is likely related to the fact that they had more room for improvement rather than an actual difference in effectiveness based on ethnicity.

Participant Substance Use

The DAODAS Standard Survey asked participants to indicate the extent of their cigarette, other tobacco, alcohol, marijuana, other illegal drug, inhalant, non-medical prescription drug, and non-medical over-the-counter drug use in the past 30 days. Using these responses, the percentage of participants that used each substance at any amount was calculated at pre- and post-test. FY '09 results, along with the corresponding changes in use from FY '08, are shown in Table 3.

Table 3. Overall Results, Substance Use Rates, FY '08-'09

Risk-Factor Measure	% Using at Pre-Test	% Using at Post-Test	FY '09 % Change	FY '08 % Change
30-Day Cigarette Use	7.8	6.0	-22.7**	-16.5**
30-Day Other Tobacco Use	5.1	4.4	-13.8**	-18.2**
30-Day Alcohol Use	11.9	8.7	-27.2**	-23.7**
30-Day Marijuana Use	4.8	3.3	-30.6**	-19.3**
30-Day Other Illegal Drug Use	2.1	1.5	-28.2**	-23.1**
30-Day Inhalants Use	4.3	2.5	-42.3**	-41.1**
30-Day Non-Medical Prescription Drug Use	2.6	2.1	-21.2**	-29.0**
30-Day Non-Medical OTC Drug Use	2.3	1.4	-39.6**	-34.4**

Negative changes are desired for these items

** Pre- and post-test averages are statistically significantly different (significant at p<.05 level)

There were desired statistically significant declines in the number of users for all substances from pre- to post-test. For cigarettes, alcohol, marijuana, other illegal drug use, inhalants, and non-medical over-the-counter drug use, the reductions in the number of users was greater in FY '09 and FY '08.

Maintenance/Reductions. Responses regarding past-30-day use were analyzed to determine (1) the percentage of participants who were not using a substance at pre-test that were still not using at post-test and (2) the percentage of participants who were using a substance at pre-test that were using less (or not at all) by post-test. The former, in

particular, may be the most accurate assessment of the “preventive” effect of the programs.

Chart 3. Percent of Pre-Test Non-Users Who Remained Non-Users, FY '09 and '08

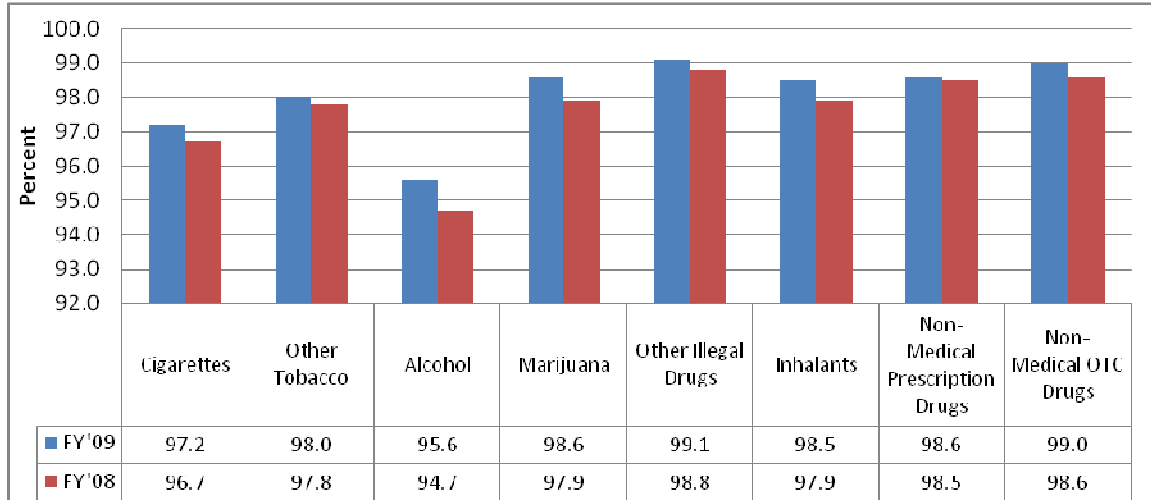
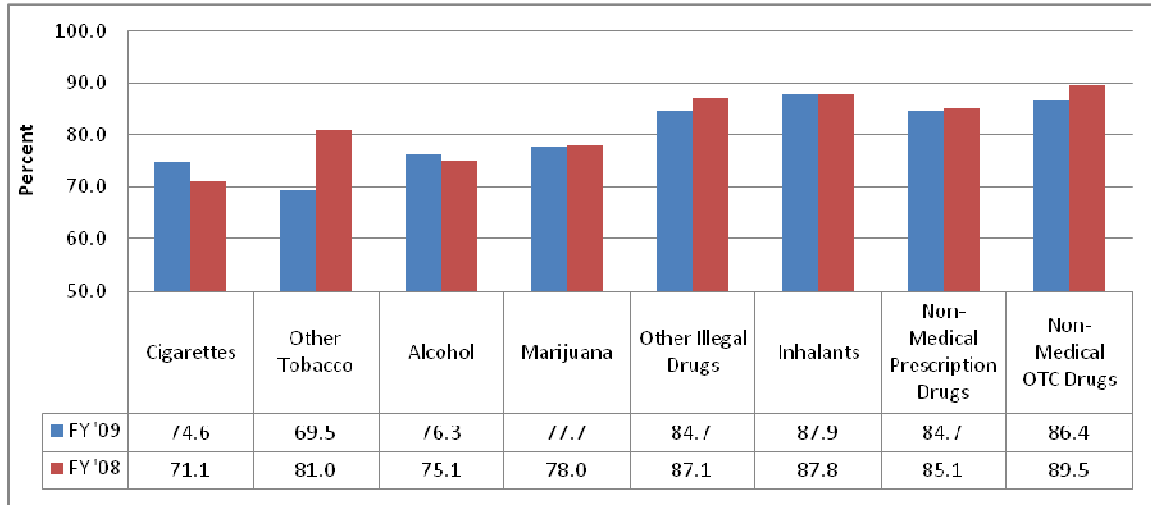


Chart 4. Percent of Pre-Test Users Who Reduced Their Level of Use, FY '09 and '08



Charts 3 and 4 show that the vast majority of participants who begin programs as non-users remain non-users. More than 98% of other marijuana, illegal drug, non-medical prescription drug, and over-the-counter drug non-users maintained non-use. Alcohol had the most undesirable results, with more than 4% of participants initiating alcohol use during the course of programs. The percentages of students maintaining non use was consistently better in FY '09 and than in FY '08.

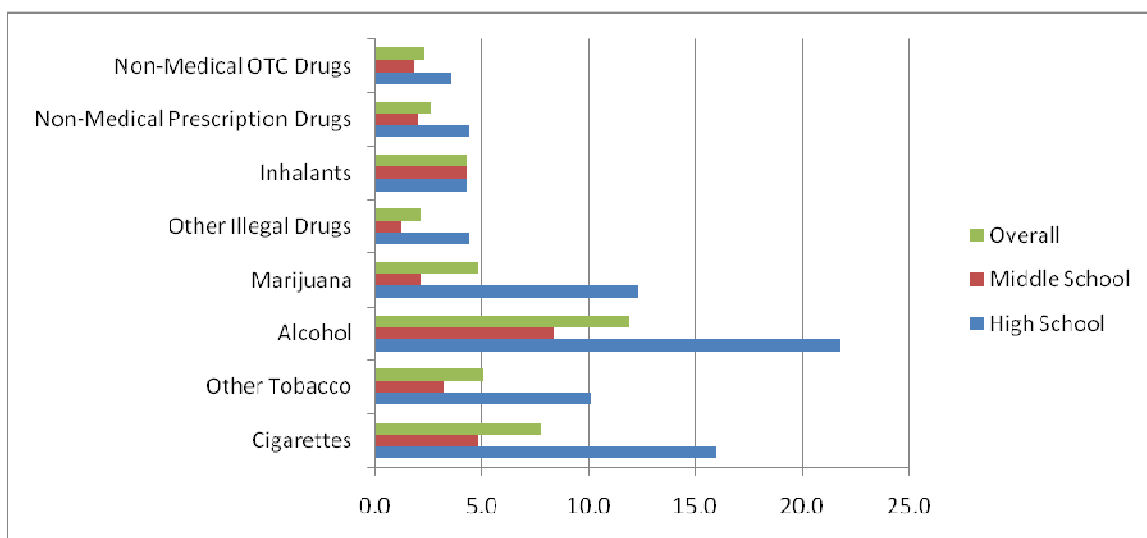
Users of tobacco products other than cigarettes at pre-test were least likely among users of any of the substances to reduce their level of use over the course of a program, though the 70% that did still represents a strong majority. Several substances saw more than 80% of users reducing their use.

Demographic Differences in Substance Use. Tables A1 through A4 in Appendix A also display substance use rates results separated by age groups, (middle school ages and high school ages), gender, race, and ethnicity.

Age. Table A1 shows data results separated by middle school (ages 10 to 13) and high school (ages 14 to 19) age ranges. For both age groups, there were decreases in the use of every substance. The middle school participant group had significant decreases in the number of users for seven of the eight substances a near significant decline for the eighth, other tobacco products. The high school participant group had significant reductions in the number of users for cigarettes, alcohol, marijuana, other illegal drugs, and inhalants. The percentage change in the number of users was greater for the middle school group for six of eight substances.

These numbers stand in contrast to the FY '08 data in several ways. For middle school students, there were only significant ($p < .05$) decreases in the number of users for two substances, compared to the seven in FY '09. However, the FY '08 high school group had significant decreases for all substances. The high school group had larger percentage reductions for all substances in FY '08, but only two substances in FY '09. There is no clear reason why state programming was more effective for middle schools students in reducing the number of substance users in FY '09 than for high school students when the opposite was the case in FY '08.

Chart 5. Overall Results, Rates of Substance Use at Pre-Test: Overall, Middle School, and High School, FY '09



It should be noted in Chart 5 that the high school group had higher percentages of every substance except inhalants, which was equal. It was the third most used substance among middle school students, but seventh among high school students. This is a typical pattern based on national data as inhalants are one of the few substances that has decreased use as age increases. Alcohol was the most commonly used drug for both groups, followed by cigarettes.

Gender. Table A2 shows data results separated by gender. Males had statistically significant declines in users for all substances except non-medical use of prescription drugs. Females had significant declines in users for all substances except other tobacco products, and only 2% of females were using those at pre-test. Males were more likely to be users at pre-test for all substances except non-medical use of prescription drugs yet still had smaller reductions in number of users for all substances except alcohol. The most notable contrast in use rates across gender is other tobacco products, which only 1.9% of females used at pre-test but 8.1% of males.

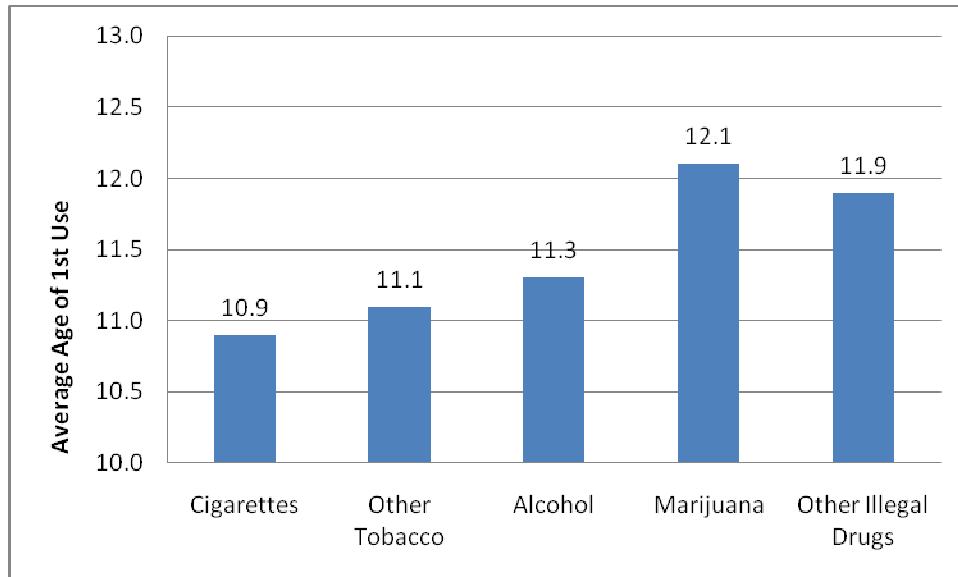
Race/Ethnicity. Table A3 shows data results separated by race (for those race groups with 40 or more participants), and Table A4 shows the results by ethnicity. The Asian participant group, the smallest group included, had the highest percentage of alcohol users at pre-test but among the lowest percentages for every other substance. The American Indian participant group, another small group, had the highest percentage of pre-test cigarette users. The Black or African American participant group had a very low percentage of pre-test other tobacco product users (2.6%). The White participant group had equal or higher rates of pre-test use for all substances except marijuana and other illegal drugs compared to the Black or African American participant group. Both White and Black or African American participant groups had declines in the number of users from pre- to post-test for all substances with the reductions being statistically significant in almost all instances.

Participants of Hispanic, Latino, or Spanish ethnicity had significant reductions in the number of alcohol and inhalant users. Participants of Hispanic, Latino, or Spanish descent or origin had higher pre-test use rates in FY '08 for all substances as compared to those not of that ethnicity, but that was not the case in FY '09 for cigarettes, other tobacco products, and marijuana, though the differences were often very slight.

Age of First Use

Starting in FY '08, the DAODAS Standard Survey asked participants at what age they first began using certain substances. As shown in Chart 6, ages of first use for cigarettes, other tobacco products, and alcohol were between 10.9 and 11.3 with tobacco being the most used drug at early ages; participants averaged first use of marijuana and other illegal drugs at 12.1 and 11.9, respectively.

Chart 6. Overall Results, Average Age of First Use, FY '09



Parent-Child Communication and Youth Exposure to Prevention Messages

Two additional items were first added to the survey in FY '08, but only on the pre-test. First, just under two out of three students (65%) report they had talked to their parents about the dangers of drugs in the past year—a minor decrease from FY '08 (67%). Additionally, 79%, the same as FY '08, reported having watched, read, or heard a prevention advertisement in the past year.

Summary of Section II

For the county authorities' multi-session prevention programs for youth 10 to 20 years old, a pre-post design was used with a survey containing five risk factor items and eight past-30-day-use questions for cigarettes, other tobacco products, alcohol, marijuana, other illegal drugs, inhalant drugs, non-medical use of prescription drugs, and non-medical use of over-the-counter drugs. There were 7,526 matched participants, meaning there was a valid pre- and post-test. This number is an increase from 5,631 from the year before. A majority (89%) of participants were between the ages of 10 and 14. Gender percentages were essentially equal, and the race breakdowns was roughly 44% Black or African American, 44% White, and 5% "Other" race. Only 6% of participants were of Hispanic, Latino, or Spanish descent or origin.

The results showed statistically significant positive changes ($p < .05$) on all five risk factor measures: perceived risk (12.2%), decision-making (5.2%), favorable attitudes (6.1%),

perceived peer norms (2.8%), and perceived parental attitudes (0.6%). For substance use, there were statistically significant reductions in the number of users of every substance, ranging from a high reduction of 42% (inhalants) to a low of 14% (other tobacco product use).

Between 95% and 99% of participants that were non-users at pre-test remained non-users at post-test for each substance. Around 70-90% of substance users at pre-test were using less or not all for that substance by post-test.

Demographic analyses reveal that programs were effective for both middle school and high school age youth. Unlike most years, the middle school group had generally larger declines in substance use percentages compared to the high school group.

Females had higher pre-test risk factor scores and smaller percentages of pre-test substance users. Males generally had greater positive change on risk factor measures, which may be related to their lower pre-test scores (more room for improvement than females had). However, females still generally had larger reductions in the number of users, even with lower rates of pre-test use.

Results were generally positive across all race groups. The White participant group had higher pre-test risk factor scores but also generally higher rates of pre-test substance use compared to the Black or African American participant group. The Asian participant group was especially high on alcohol use, and the American Indian group was particularly high on other tobacco product use. Participants of Hispanic, Latino, or Spanish origin or descent had significant positive change on four risk factor measures as well as significant reductions in the number of alcohol and inhalant users. They also began the programs with generally higher pre-test percentages of users as compared to those not of that ethnicity.

Ages of first use for cigarettes, other tobacco products, and alcohol were between 10.9 and 11.3; participants averaged first use of marijuana and other illegal drugs at 12.1 and 11.9, respectively.

About two-thirds of students reported talking to their parents about the dangers of drugs in the past year, and 79% reported having watched, read, or heard a prevention advertisement in the past year.

SECTION III: PROGRAM OUTCOMES

Across the provider network, 27 different programs were implemented. In this section, we compare the outcomes for the programs with 40 or more matched participants. The full tables with results by program are found in Appendix A in Table A5. A summary of the statistically significant effects by program are found in Table 4 and described below.

Table 4. Summary of Statistically Significant Program Effects

Program	# of Sites	Measures with Significant Change
All Interventions	67	Perceived Risk Favorable Attitudes Decision-Making Perceived Peer Norms Perceived Parental Attitudes 30-Day Cigarette Use 30-Day Other Tobacco Use 30-Day Alcohol Use 30-Day Marijuana Use 30-Day Other Illegal Drugs Use 30-Day Inhalants Use 30-Day Non-Medical Presc. Drug Use 30-Day Non-Medical OTC Drug Use
All Stars	11	Perceived Risk Favorable Attitudes Perceived Peer Norms Perceived Parental Attitudes 30-Day Alcohol Use 30-Day Marijuana Use 30-Day Other Illegal Drugs Use 30-Day Inhalants Use
Class Action	2	none
ICRC After-School Recreation	1	Perceived Risk Decision-Making Skills <i>Favorable Attitudes</i> <i>Perceived Peer Norms</i>
Keep A Clear Mind	1	Perceived Risk Favorable Attitudes
Keepin' It Real	3	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms 30-Day Alcohol Use 30-Day Non-Medical OTC Use

Life Skills Training	7	Perceived Risk Favorable Attitudes Decision-Making Perceived Peer Norms 30-Day Cigarettes Use 30-Day Other Tobacco Use 30-Day Marijuana Use 30-Day Inhalants Use
Lions-Quest Skills for Adolescence	1	<i>Decision-Making Skills</i> <i>Perceived Peer Norms</i>
Project Alert	9	Perceived Risk Favorable Attitudes Decision-Making
Project Northland	6	Perceived Risk Favorable Attitudes Decision-Making Perceived Peer Norms 30-Day Cigarette Use 30-Day Alcohol Use 30-Day Marijuana Use
Project Toward No Drug Abuse (TND)	4	none
Project Toward No Tobacco Use (TNT)	4	Perceived Risk Favorable Attitudes Decision-Making Perceived Peer Norms Perceived Parental Attitudes 30-Day Cigarette Use 30-Day Other Tobacco Use 30-Day Alcohol Use 30-Day Marijuana Use 30-Day Inhalants Use 30-Day Non-Medical OTC Drug Use
Responding in Peaceful and Positive Ways (RIPP)	1	Perceived Risk Favorable Attitudes Perceived Peer Norms
Second Step	1	<i>Perceived Peer Norms</i>
Street Smart	1	none
Teen Insitute	1	Favorable Attitudes
Too Good For Drugs	2	Perceived Risk Favorable Attitudes Decision-Making Perceived Peer Norms Perceived Parental Attitudes 30-Day Cigarette Use 30-Day Other Tobacco Use 30-Day Alcohol Use 30-Day Marijuana Use 30-Day Other Illegal Drugs Use 30-Day Inhalants Use 30-Day Non-Medical Presc. Drug Use 30-Day Non-Medical OTC Drug Use

Italics indicate undesired change.

Bold items indicate statistically significant change (p<.05); Non-bold items indicate near significance (p<.10).

All Stars, a comprehensive evidence-based ATOD prevention curriculum, had four positive risk-factor changes (perceived risk, favorable attitudes, perceived peer norms, and perceived parental attitudes) and a significant reduction in the number of alcohol, marijuana, other illegal drugs, and inhalants users. It was the most commonly implemented program with 11 sites and 1,064 matched participants.

Class Action, an evidence-based program that is a high school extension of Project Northland uses interactive, peer-led sessions to discuss and debate the consequences of substance abuse. Two sites implemented this program with no significant changes found.

ICRC After-School Recreation, which provides at-risk youth ages 11-14 with evidence-based prevention programs in an after-school setting with instructional, recreational, cultural and athletic programs that encourage drug- and violence- free lifestyles, was implemented by one site. Results were mixed as there was a statistically significant improvement on perceived risk and a near significant improvement for decision-making. However, there were negative significant changes for favorable attitudes and perceived peer norms.

Keep a Clear Mind is an evidence-based program for late elementary school students that primarily involves a series of homework booklets. Only one site implemented the program with the Standard Survey in FY '09 and saw significant positive changes on perceived risk and favorable attitudes.

Keepin' It Real, an evidence-based, video-enhanced intervention for youth 10 to 17 that uses a culturally-grounded resiliency model that incorporates traditional ethnic values and practices that protect against drug use, was used by three sites. The results show a statistically significant improvement in perceived risk, decision-making, favorable attitudes, and perceived peer norms. There was also a significant reduction in the number of users for alcohol, and there was a near-significant reduction in the number of users for non-medical over-the-counter drugs.

Life Skills Training, a skill-based, evidence-based ATOD prevention curriculum, was used by seven sites for a total of 715 matched students. It demonstrated significant positive change for perceived risk, favorable attitudes, decision-making skills, and perceived peer norms. There was also a significant reduction in the number of users for marijuana and inhalants, as well as a near-significant reduction in the number of users for cigarettes and other tobacco products.

Lions-Quest Skills for Adolescence is an evidence-based program for middle school students that employs inquiry, presentation, discussion, group work, guided practice, and reflection to build positive social behaviors of self-discipline, responsibility, good judgment, and respect for self and others. One site used this program and had undesired near-significant change on decision-making and perceived peer norms.

Project Alert, a comprehensive evidence-based ATOD prevention curriculum for middle school students, was delivered in nine counties for 578 students. Overall, the results showed positive significant effects for perceived risk, favorable attitudes, and decision-making.

Project Northland, an evidence-based ATOD prevention curriculum with a strong focus on alcohol and influencing the environment, was used by six sites with a large total of 1,802 matched participants, making it the most represented program in our database. The overall results show significant effects for perceived risk, favorable attitudes, decision-making, and perceived peer norms. The number of users of cigarettes, alcohol, and marijuana decreased significantly.

Project Towards No Drug Abuse (TND), an evidence-based general ATOD prevention curriculum for high school youth, was used by four county authority sites and showed no significant changes across the implementation sites.

Project Towards No Tobacco Use (TNT), a comprehensive, evidence-based tobacco prevention program for middle school youth, had significant positive change for all risk factor measures. There were significant decreases in the number of users for all substances but non-medical prescription drugs and other (than marijuana) illegal drugs.

Responding in Peaceful and Positive Ways, a school-based violence prevention program designed to provide students in middle and junior high schools with conflict resolution strategies and skills, was used by one site and had significant improvements in perceived risk, favorable attitudes, and perceived peer norms. There were no significant changes on substance users measures, but pre-test use was very rare.

Second Step is an evidence-based classroom-based social skills program for preschool through junior high students (4 to 14 years old). It is designed to reduce impulsive, high-risk and aggressive behaviors; and to increase children's social-emotional competence and other protective factors. One site implemented Second Step and had undesired statistically significant change on perceived peer norms.

Street Smart was created by The Boys & Girls Clubs of America and consists of four modules that address youth risk factors for gang involvement, help develop effective conflict resolution and leadership skills, create positive peer helpers, and recognize and address the virtues of diversity. Each module consists of 8 – 10 interactive sessions. It was implemented by one site and showed no significant changes.

Teen Institute is the name often given to year-long work with a youth leadership group, typically including their attendance at the South Carolina Teen Institute leadership camp. One site pre- and post-tested their Teen Institute youth group in FY '09 and showed significant positive change in favorable attitudes.

Too Good for Drugs is an evidence-based program with specific lessons for each middle and high school grade. Two sites used Too Good for Drugs, and the combined results

showed statistically significant improvement on all five risk factor measures and significant reductions in the number of users of all eight substances.

Evidence-Based vs. Non-Evidence-Based Programs

County authorities are not required to use evidence-based interventions exclusively, though most do. In FY '09, 95% of participants were served in evidence-based programs, the highest percentage since this has been tracked. Despite the large difference in size between the group served by evidence-based programs versus non-evidence-based programs, we can compare their outcomes. These results are displayed in Table A6 in Appendix A.

Every measure had statistically significant change for evidence-based programs, while non-evidence-based programs had significant positive change for one risk factor, decision-making skills, and actually had negative change approaching significance for perceived peer norms and perceived parental attitudes. There were no significant changes on the 30-day use measures for non-evidence-based programs, and the number of users only decreased for three of the eight substances. Evidence-based programs had a higher percentage of positive change for all five risk factors and all substance use measures. These contrasts are the most divergent since we have been conducting this analysis, though evidence-based programs have generally had superior results in recent years, just not to this extent. It should be noted that non-evidence-based interventions had consistently lower pre-test substance use rates.

Safe and Drug-Free Schools

Almost exactly 50% of the matched participants in the state database were served by a program funded by Safe and Drug-Free Schools dollars in FY '09, compared to 64% in FY '08. Table A7 in Appendix A shows results for these participants compared to the rest of the participants (considered to be Block Grant funded as that is the other primary prevention funding source). Safe and Drug-Free Schools programs had overall greater increases in risk factor measures except for decision-making skills. Safe and Drug-Free Schools programs also had greater percentage declines in the number of substance users for six of the eight substances. This is in stark contrast to FY '08 analyses where Block Grant program had more desirable improvements on almost every measure. In FY '09, Safe and Drug-Free Schools participants had lower percentages of users at pre-test for every substance except inhalants, yet still had the greater declines.

Summary of Section III

There were 67 county authority program implementations of 27 different programs in FY '09. Of the programs with multiple implementations, All Stars, Keepin' It Real, Life

Skills, Project Northland, Project TNT, and Too Good For Drugs had some of the most consistently positive results.

The large majority (95%) of participants with matched pre- and post-tests were served in evidence-based programs, the state's highest percentage yet. Evidence-based programs had dramatically more positive results for risk factors and reducing the number of substance users. Evidence-based programs showed significant declines in users for each of the eight substances, while non-evidence-based programs had none and only had decreases for three substances.

Half of the matched participants in the state database were served by a program funded by Safe and Drug-Free Schools dollars. In contrast to FY '08, SDFS participants had generally greater improvements on risk factor measures and typically greater declines in the number of substance users.

SECTION IV: METHODOLOGY AND ANALYSIS ISSUES

In this section, we describe the evaluation design that generated the outcomes from pre- and post-testing of youth curricula participants described in sections II and III. In addition, we discuss the analyses used and cautions in interpreting the results.

Evaluation Design Issues

Evaluation design issues acknowledge possible limitations in the ability to detect positive findings due to the particular evaluation methodology. Several evaluation design issues are relevant for both projects, including floor and ceiling effects, lack of comparison groups, and the short duration between pre- and post-surveys. Unpublished data collected by the developers of Life Skills show that when measured simply with a pre-post survey, there were no apparent effects of the Life Skills intervention. But when measured after booster sessions and at later points in time and with a comparison group, effects of the intervention emerged. Thus, it is possible that seeds of some of these interventions have been planted, but that we are not yet able to measure the intended long-term benefit.

Floor and Ceiling Effects. Floor and ceiling effects refer to circumstances that make it difficult to measure change over time because participants' scores are already as low (or high) as they can be prior to the intervention. Participants generally reported low risk and low rates of substance use. Thus, the potential to show improvement at post-survey was limited. Despite these ceiling and floor effects, positive changes were reported for many of the interventions.

Lack of Comparisons. DAODAS staff and PIRE decided that it would not be appropriate to require collection of data from comparison sites. There were two primary reasons for this. First, the purpose was not to prove that interventions are effective, but to enhance communities' capacity to implement and monitor effective interventions. The PIRE evaluation team views evaluation data as an essential tool to improve future performance more so than a judgment of past efforts. Second, requiring subrecipients to collect comparison data would have been a large administrative burden. Clearly, however, the lack of comparison groups limits our ability to interpret these findings. Given that there is a consistent trend across the country for teens to develop less favorable attitudes and behaviors regarding illegal substance use over time, it is likely that the absence of pre/post changes for participants is indication of favorable effects relative to youth who did not participate in similar prevention interventions.

Attendance Bias. It should be noted that our matched participant databases consist of participants who attended the pre- and post-test sessions for the program. Thus, these groups may not include some higher-risk youth because they may have been more likely to be absent from the program during the pre- or post-test session due to truancy, suspension, or change of schools. The implication of the differences between the

participants in our databases and the full set of participants is that our findings should not be generalized to the whole sets of participants. However, because the bias in our results is largely due to absenteeism, our findings are relevant for those youth who were present for a larger portion of the interventions. Thus, our results should provide a relatively accurate picture of changes experienced by program participants who had a significant opportunity to benefit from the intervention.

Short Duration Between Pre- and Post-Surveys. It is possible that the effects of the prevention interventions will not be realized until a later point in time. The large majority of participants in these databases are in their early teens or younger. The interventions are aimed at preventing or delaying the onset of substance use as the youth get older. Thus, by the time youth reach late high school age, these participants may report lower risk and lower rates of substance use, relative to non-participants. We do not have the data to determine whether there will be long-term positive results for these program participants, but it is the case that each evidence-based program tends to have a base of research support for the long-term impact of the program.

Maturation Effects. Because adolescents in today's society generally become more tolerant of substance use and more likely to engage in some substance use behaviors as they grow older, it may be difficult to achieve positive changes among program participants over the time span between the pre- and post-surveys, especially if the time gap between pre- and post-tests is long. Therefore, even seeing no change on some risk factors and/or substance use behaviors may be viewed as a positive impact of program participation. This is particularly true for these data, where most respondents reported very low levels of risk and very low levels of substance use at the beginning of the programs. Outcomes for programs with longer time gaps between pre- and post-test are difficult to compare to those with shorter time gaps because the maturation effect is more pronounced for the former and may appear to have less positive outcomes.

Program Implementation Issues

Program implementation issues acknowledge possible limitations in program effectiveness due to particular aspects of the way an intervention is implemented. At least three program implementation issues are relevant for these projects: ineffective interventions, inadequate match between interventions and communities, and fidelity.

Ineffective Interventions. The first reaction one might have upon reviewing some of these programs' data is that some interventions are not effective in preventing or reducing substance use or affecting risk factors. This is less likely to actually be the case when evidence-based interventions were used because they have been shown through research to be effective. Thus, we should not conclude that these interventions are, in general, ineffective. Nevertheless, there may be aspects of the way they are implemented that render them less effective. There is a possibility that unfavorable results for a non-evidence-based intervention indicate a lack of program effectiveness, but there are other potential explanations, as well.

Inadequate Match Between Interventions and Communities. It is possible that some interventions do not match the needs of, and/or are not appropriate for, some local target populations. In other words, the research-based interventions may be very effective with the populations in the settings where they were designed and tested, but may not be as appropriate to serve the needs of some of the target populations in South Carolina. There continue to be factors involved in program selection other than proven effectiveness with a particular type of target population, such as implementation time allowed, cost, and convenience (using whatever program that staff currently have training in or can be trained in quickly or inexpensively). In addition, sites are not always aware of the exact needs of their communities, community characteristics can change across time, and intervention developers are not always aware of limitations to the generalizability of the effectiveness of their interventions. It would be wise for all programs to continuously ask themselves whether their interventions are a “good fit” for their target population and setting, and this may have been an important factor in the different levels of success across locations.

Fidelity. Fidelity is the extent to which interventions are delivered as they are intended. Even with well-controlled research studies, the degree of fidelity can vary widely. Life Skills researchers have found limited effects of the program when analyzing data from the full sample of students, but more widespread effects when analyzing data from a high-fidelity sample. Clearly, fidelity is an important factor in determining the effectiveness of interventions, and low fidelity can lead an otherwise effective intervention to appear ineffective. Thus, it is possible that for some implementations where we did not see more positive outcomes it may be because the interventions were not delivered with a high degree of fidelity.

The only fidelity measure used for the county authorities was the recording of participant attendance. However, a large number of sites had attendance results that indicate considerable amounts of missing data, as many participants were listed with zero sessions attended, which would not be possible if they had a matched pre- and post-test. Until the attendance data is better entered, there cannot be analyses of attendance’s impact on outcomes. However it may be safe to assume that a lack of fidelity probably had an adverse impact on the findings for at least some of the interventions at some of the sites, and, in many cases, this may be avoided in the future through close monitoring of these issues.

Data Analysis Methods

Testing Pre- and Post-Survey Differences in Risk-Factor Scores: We used SPSS statistical software for all analyses. We conducted paired-samples t-tests to compare the means of the pre-survey and post-survey scores for each risk-factor measure assessed on the surveys. This test computed the difference (change) between the pre- and post-survey means for each factor and then tested whether the mean difference was “significantly different” from zero. A statistically significant difference means that the observed

difference was too large to occur as a result of chance alone. The treatment (intervention) and/or other factors played a role in helping changes take place in the behaviors and attitudes of the participants. T-tests (as well as all tests of significance) were performed at a significance level of $p < .05$ (two-tailed), though differences of between .05 and .10 were noted for participants and labeled as “approaching” or “near” significant. Appropriate nonparametric tests were used with small group sizes.

Testing Pre- and Post-Survey Differences in Substance Use: Based on students’ responses to the substance-specific “Past 30-Day Use” items on the pre- and post-tests, students were coded as being users (if they used a substance on at least one day of the past 30 days) or non-users. We used the nonparametric McNemar test to detect if the changes in percentages of substance users were statistically significant. Similar to other nonparametric tests, the McNemar uses the chi-square distribution and is used mainly to detect changes in response to a treatment (e.g. a program intervention) in *before and after* designs.

Summary of Section IV

The methods used to generate outcomes for the youth curricula are common and generally accepted. There are aspects of the design, however, that should be taken into account when considering the results. There were numerous instances of ceiling effects where pre-test responses were so close to the ideal that it was difficult to improve on the post-test and limited potential positive changes. Also, there were no comparison groups, so we cannot say with confidence whether the outcomes would have been more or less favorable as compared to a group having no intervention. Negative results for any site or program may not necessarily indicate an ineffective program. Poor fidelity or poor matching of a program with the target population may be more likely to lead to poor outcomes.

SECTION V: ALCOHOL AND TOBACCO ENVIRONMENTAL PREVENTION STRATEGIES

County authorities have been implementing or assisting with the implementation of environmental strategies for many years. These efforts were boosted in FY '07 with the creation of the Synar Tobacco Enforcement Partnerships (STEP) and Alcohol Strategy Incentive Program (ASIP). For FY'08, the ASIP program was ended due to the creation of the state Alcohol Enforcement Teams (AET) program, which now reports on most of the same strategies that had been tracked through ASIP. STEP continued into FY'09 and is most identified with its year-end monetary incentives to local providers based on the amount of tobacco-related environmental strategies implemented. Under STEP, counties could receive points for educating merchants through PREP (Palmetto Retailer Education Program), implementing, tobacco compliance checks, serving youth who had been charged with tobacco possession with an approved program (up until March 1, 2009), getting a multi-jurisdictional law enforcement agreement around tobacco enforcement signed, and sending in new tobacco outlets. In this section, we document the amount of overall environmental strategy activity generated with a primary emphasis on the outcomes generated from the most common strategy, compliance checks.

The South Carolina Alcohol Enforcement Team (AET) model has grown from just three sites in the early 2000s to our current situation of having an active AET covering every judicial circuit in the state. The AET model, which includes community coalition maintenance and development, merchant education, and law enforcement partnership, specifies a multi- or single jurisdictional alcohol law enforcement approach (depending on the needs and participation of law enforcement within the target area) in a community to:

- reduce youth access to alcohol utilizing various strategies (social and retail access);
- measure, track and improve merchant compliance with alcohol laws;
- provide research-based merchant education;
- build community support for enforcement of underage drinking laws through media advocacy and community coalition maintenance and development; and
- develop local law enforcement support for underage drinking prevention and enforcement efforts.

Alcohol and Tobacco Compliance Checks

Compliance checks are an environmental strategy to reduce youth access to alcohol or tobacco. Ideally, compliance checks include the following actions:

- Publicity to alcohol and tobacco sales staff that enforcement operations will be increasing,
- Awareness-raising with the community to increase its acceptance of increased compliance operations,

- Law enforcement operations involving the use of underage buyers attempting to purchase alcohol or tobacco with charges being brought against the clerk and establishment license holder if a sale is made, and
- Regularly offered merchant education to help merchants improve their underage sales policies and practices.

Across the county authority system, prevention staff were required to use the DAODAS Compliance Check Form when cooperating with local law enforcement to implement compliance checks. This form was to be used for both alcohol and tobacco compliance checks. The form records details of the compliance checks such as time of check, type of store, information on purchaser and clerk, and whether the clerk asked for ID or age.

In FY '09, there were 7,121 alcohol and 1,182 tobacco compliance check forms returned. Compared to FY '08, this is an increase for alcohol (5,261) but a decrease for tobacco (1,599). The FY '07 totals were 1,349 and 585, respectively. In FY '09, all but two counties (44) returned alcohol compliance check forms, while 33 counties returned tobacco forms. This is an increase by four counties for alcohol compared to FY '08 and one for tobacco.

The tobacco merchants sold cigarettes 195 times or 16.5%. Alcohol was sold 1,299 times or 18.2%. Tables 5 and 6 show the buy rate by county. The FY '08 tobacco and alcohol rates were 15.9% and 19.4%, respectively, and the FY '07 rates were 17.9% and 20.3%, respectively. Thus, the alcohol compliance rate has dropped annually, but the tobacco compliance rate increased in FY '09 after dropping in FY '08. The alcohol purchase rate decrease from FY '07 to FY '09 approaches statistical significance ($p=.073$).

In the analysis of FY '08 alcohol compliance data, we were able to demonstrate a statistically significant difference in the compliance rates between counties that had traditional local enforcement (18.7% sales) and those that had local enforcement for the first time in FY '08 (22.3%). This supported the idea that consistent enforcement decreases compliance rates over time, which would be consistent with the continued decline in the state rate. However, we were not able to repeat this exact analysis in FY '09 as there were very few "new" enforcement counties in FY '09.

Most FY '09 alcohol compliance checks were done at convenience stores (71%). The next most common type of location was large grocery stores (10%), then liquor stores (8%), restaurants (4%), and bars (4%). In most cases, the youth attempted to buy beer (68%), although a substantial 22% attempted to buy alcopops or alcohol energy drinks and 7% attempted to buy liquor. The most common age for the youth volunteers was 18 or 19 (31% each). Almost 19% of buyers were 17, and 10% were 20. Most buyers were male (65%) and White (86%). Only 3% of attempts were in the a.m. hours.

Table 5. FY '09 Alcohol Compliance Check Buy Rates by County

CountyName	Total Eligible Purchase Attempts	Buy	Buy Rate
ABBEVILLE	40	5	12.5%
AIKEN	20	0	0.0%
ALLENDALE	43	15	34.9%
ANDERSON	408	55	13.5%
BAMBERG	35	6	17.1%
BARNWELL	52	2	3.8%
BEAUFORT	42	17	40.5%
BERKELEY	574	99	17.2%
CALHOUN	5	0	0.0%
CHARLESTON	603	170	28.2%
CHEROKEE	60	18	30.0%
CHESTER	64	21	32.8%
CHESTERFIELD	48	11	22.9%
CLARENDON	142	15	10.6%
COLLETON	10	5	50.0%
DARLINGTON	170	44	25.9%
DILLON	61	7	11.5%
DORCHESTER	201	27	13.4%
FAIRFIELD	76	6	7.9%
FLORENCE	362	89	24.6%
GEORGETOWN	95	19	20.0%
GREENVILLE	602	93	15.4%
GREENWOOD	80	9	11.3%
HAMPTON	39	14	35.9%
HORRY	281	38	13.5%
JASPER	43	9	20.9%
KERSHAW	162	22	13.6%
LANCASTER	126	29	23.0%
LAURENS	89	19	21.3%
LEE	37	1	2.7%
LEXINGTON	318	67	21.1%
MARION	19	4	21.1%
MARLBORO	92	22	23.9%
NEWBERRY	49	10	20.4%
OCONEE	217	42	19.4%
ORANGEBURG	32	5	15.6%
PICKENS	317	39	12.3%
RICHLAND	202	39	19.3%
SALUDA	18	2	11.1%
SPARTANBURG	414	74	17.9%
SUMTER	79	11	13.9%
UNION	20	0	0.0%
WILLIAMSBURG	35	9	25.7%
YORK	739	110	14.9%

Table 6. FY '09 Tobacco Compliance Check Buy Rates by County

CountyName	Total Eligible Purchase Attempts	Buy	Buy Rate
ABBEVILLE	5	0	0.0%
AIKEN	9	0	0.0%
BAMBERG	9	1	11.1%
BARNWELL	45	2	4.4%
BERKELEY	59	14	23.7%
CALHOUN	5	1	20.0%
CHARLESTON	20	3	15.0%
CHEROKEE	22	1	4.5%
CHESTER	8	1	12.5%
CHESTERFIELD	4	1	25.0%
CLARENDON	40	5	12.5%
DARLINGTON	58	12	20.7%
DILLON	17	2	11.8%
DORCHESTER	50	8	16.0%
FAIRFIELD	11	0	0.0%
FLORENCE	214	17	7.9%
GEORGETOWN	15	2	13.3%
GREENVILLE	134	40	29.9%
GREENWOOD	3	0	0.0%
HORRY	34	7	20.6%
JASPER	10	0	0.0%
LAURENS	16	4	25.0%
LEXINGTON	47	13	27.7%
MARLBORO	5	2	40.0%
NEWBERRY	16	7	43.8%
OCONEE	41	5	12.2%
ORANGEBURG	10	0	0.0%
PICKENS	23	3	13.0%
RICHLAND	65	8	12.3%
SALUDA	11	2	18.2%
SPARTANBURG	91	18	19.8%
WILLIAMSBURG	4	0	0.0%
YORK	81	16	19.8%

For tobacco compliance checks, 73% were done at convenience stores, followed by large grocery stores (10%), restaurants (4%), and bars (4%). Whereas 6% of FY '08 checks were done at drug stores, only 1% of FY '09 checks were. Buyers typically attempt to buy cigarettes (85%) with smokeless tobacco, cigars, or blunts being the other products targeted. In FY '08, only 5% of attempts were for other tobacco products. Most buyers were 17 (38%), followed by 15 years old (38%), and 16 year olds (22%). Only 14% of buyers were 15 in FY '08. Buyers were male 71% of the time, while the percentage was closer to 50% in FY '08. Most buyers were White (79%). Another 15% of buyers were Black or African American. Only 3% of attempts were in the a.m. hours.

The FY '09 sale rate for other tobacco products was 22%, statistically significantly higher than the cigarette sale rate of 15% (p=.041). Specifically, the sale rate when blunts were purchased was 31.4%, almost twice the state tobacco rate of 16.5%, and cigars had an even higher sale rate of 46%, though there were only 13 attempts statewide.

For alcohol, the sale rate for alcopops/alcohol energy drinks was essentially the same as beer (18.6% vs. 18.4%). The sale rate for liquor was 19.6%. Overall, the type of product purchased was not a statistically significant factor on the alcohol sale rate. In Table 7 below, some of the higher and lower sale rates are shown for some types of alcohol products. In some instances, those completing alcohol compliance check forms included in the product description what quantity was attempted to be purchased. It is interesting to note that when only one can or bottle was purchased, the sale rate was 33%, much higher than other quantity sale rates such as 18% for 12 packs or 15% for 6 packs.

Table 7. Notable High and Low Percentages of Completed Sales by Alcohol Product (minimum 20 attempts)

Low Sale Rates		High Sale Rates	
Product	Sale Rate	Product	Sale Rate
Bacardi	12%	Busch	26%
Crown Royal	5%	Corona	31%
		Icehouse	41%
		Malibu	35%
		Steel Reserve	43%
		Yuengling	30%

Table 8 details the frequency of certain merchant conditions and practices at the time of the compliance check. Merchants were much more likely to ask to see an ID than merely ask the buyers' age. However, they only studied the ID 66% to 76% of the time. Even when the ID was studied, the sale was completed about 9% to 11% of the time. These percentages were similar to FY '07 but, unfortunately, did not stay in the 5% to 7% range seen in FY '08. More than 75% of stores had posted signage stating that they check IDs, but only around 35% to 40% had age-verification equipment.

Table 8. Compliance Check Merchant Practices

Compliance Check Feature	Alcohol (%)	Tobacco (%)
Sales Completed	18.2	16.5
Merchant Asked Buyers Age	24.0	21.8
Merchant Asked to See ID	85.4	81.1
Merchant Studied ID	76.2	66.5
Completed Sale When Merchant Studied ID	9.1	10.7
Visible ID-Checking Signage in Store	76.2	80.5
Age-Verification Equipment Used	37.4	40.3

The presence of signage promoting ID-checking had a statistically significant impact for completed sales for both alcohol and tobacco ($p < .001$). Only 15% of stores with signage sold alcohol compared to 27% of stores without signage (15% vs. 25% for tobacco). The use of age verification equipment was also statistically significant for alcohol and tobacco ($p < .001$) as only 7% of stores with equipment sold alcohol compared to 25% of stores without equipment (11% vs. 20% for tobacco).

Table 9. Percentage of Completed Sales by Type of Business

Type of Business	N (Alcohol Purchase Attempts)	% Sales Completed— Alcohol	N (Tobacco Purchase Attempts)	% Sales Completed— Tobacco
Convenience Store/Gas Station	4,994	17.3	855	15.9
Bar	270	20.0	0	--
Restaurant	294	32.3	2	0
Liquor Store	540	19.3	1	0
Small Grocery	84	23.8	19	15.8
Large Grocery	722	18.1	138	20.3
Drug Store	81	7.4	31	19.4

Table 9 shows that drug stores had lower sales rates than other types of businesses for alcohol, while restaurants had by far the highest. Drug stores and large grocery stores had the highest tobacco sales rates. The type of business was a statistically significant factor on the alcohol sale rate ($p < .001$), primarily due to the high restaurant sale rate. Type of business was not significant for tobacco sales.

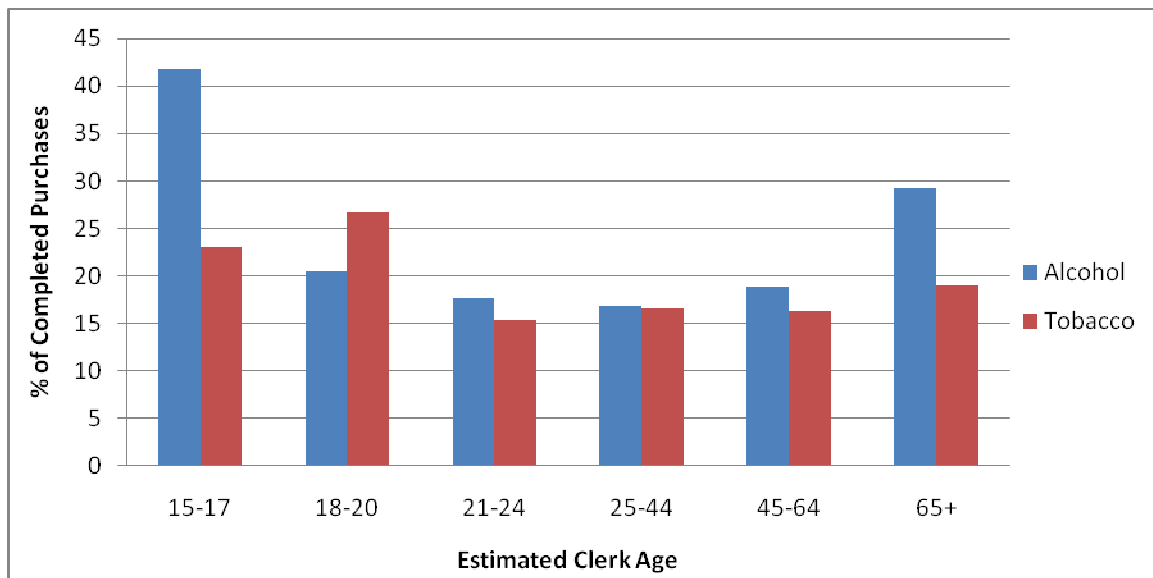
Table 10 displays the percentages of sales completed based on multiple demographic characteristics of the clerks and buyers. There were no significant differences in sale rates by clerk gender. White and “other” race clerks had the lowest sales rate for alcohol and tobacco. Hispanic clerks had the highest sales rates for both. The impact of clerk race on sales was statistically significant for alcohol ($p = .002$), largely due to the high sales rates for Hispanic clerks, but not for tobacco.

Youth buyers were asked to estimate the age of the clerk who handled their attempted purchase. For alcohol, clerk age had a statistically significant effect on the sales rate ($p < .001$). As seen in Chart 7, clerks estimated to be 15-17 had the highest sale rates, which were significantly higher than any other age bracket other than those 65 or older. This inverted bell curve for estimated clerk age where the youngest and older clerks sell most often has been seen in past year’s compliance data, but not in every instance. Estimated clerk age was not significant for tobacco sales, though the two age brackets selling most often were 15-17 and 18-20.

Table 10. Percentage of Retailer Sales by Demographic Characteristics

Compliance Check Characteristic	% Sales Completed— Alcohol	% Sales Completed— Tobacco
Clerk: Male	18.7	19.0
Clerk: Female	18.4	15.2
Clerk: Black or African American	19.4	17.2
Clerk: White	18.2	15.9
Clerk: Hispanic	26.8	25.0
Clerk: Other	16.2	15.6
Buyer: Male	19.5	16.1
Buyer: Female	16.1	18.1
Buyer: Black or African American	21.1	21.3
Buyer: White	17.8	14.8
Clerk and Buyer: Same Gender	18.3	18.8
Clerk and Buyer: Different Gender	18.7	14.8
Clerk and Buyer: Same Race	17.8	15.9
Clerk and Buyer: Different Race	19.3	17.0

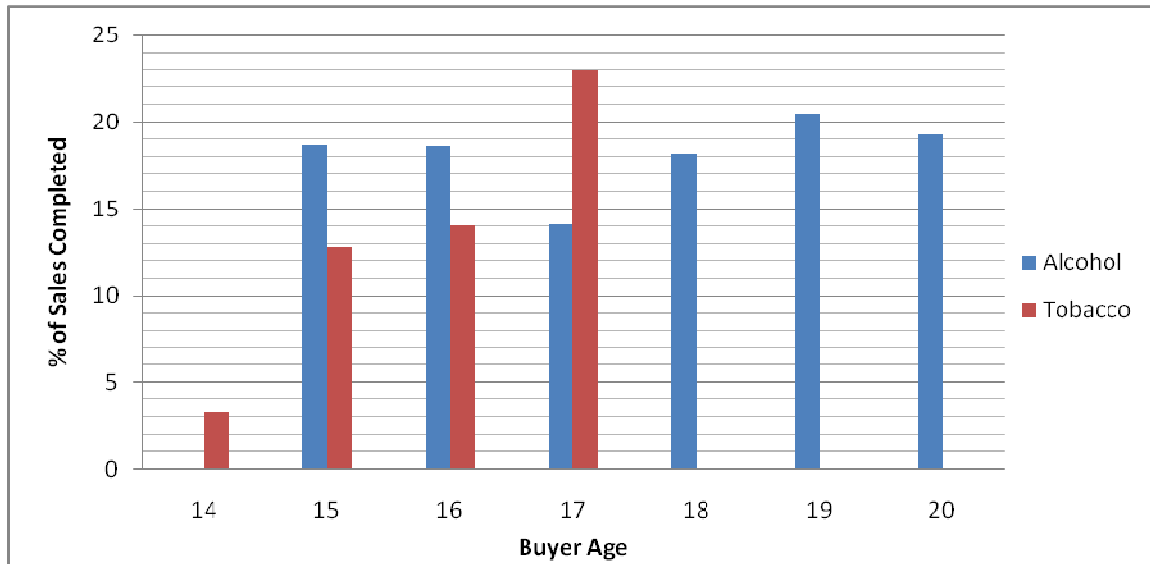
Chart 7. Percentage of Stores Selling by Estimated Clerk Age, FY '09



Buyer race was statistically significant for tobacco ($p=.017$) as Black or African American youth buyers bought tobacco about 50% more often than White youth buyers. Black or African youth buyers also bought alcohol more often than other buyers, though the difference was not statistically significant. Males were significantly more likely to be able to purchase alcohol (19.5% vs. 16.1% for females, $p<.001$). Females had a higher purchase rate for tobacco, but the difference was not significant.

The age of the purchaser had a statistically significant effect on sale rates for both substances ($p < .001$). Chart 8 shows that there is an increasing likelihood that a youth can purchase tobacco as age increases from 14 to 17. While a similar pattern of increased buy rates by age was seen for alcohol in FY '08, the FY '09 compliance data does not show that pattern. Instead sales rates seem generally consistent from ages 15 to 20, except for a substantially lower rate at age 17.

Chart 8. Percentage of Stores Selling by Buyer Age, FY '09



For alcohol compliance checks, 18% of the 2,515 checks recorded as taking place before 6 p.m. had a sale; almost the same rate as those after 6 p.m. For tobacco, however, 14% of attempts had sales before 6 p.m. compared to 18% of those after 6 p.m., which was approaching statistical significance ($p = .066$).

The average clerk fine for an alcohol sale, at the time of ticketing, was \$633.21, and the median amount was \$672.50. The average fine for a tobacco sale ticket was \$431.20 with \$465.00 or \$470.00 being the most common amounts.

The compliance check form includes a section where officers should ask offenders if they have ever taken a merchant education class. Only 32 of 604 (5%) indicated they had. Of the 19 instances where a class was named by the clerk, 11 times the program noted was PREP.

In a review of year-end objective reports, a strong majority of counties reported exceeding their expected number of alcohol compliance checks—some by a few and some by more than 100. Slightly more than two-thirds of counties had retailer violation rates that met or were lower than their outcome objectives, which is an improvement over last year when only about half met their outcomes.

For tobacco compliance checks, only about half of counties met or exceeded their anticipated number of checks. Similarly, about half of counties met or stayed below their target buy rates, with the rest having higher sale rates than desired. Several of those with successful compliance rates had zero buys for the year.

Multi-Jurisdictional Law Enforcement Agreements

Counties were able to earn STEP points for providing a copy of a multi-jurisdictional tobacco law enforcement agreement, a document signed by multiple law enforcement agencies that promised a cooperative effort to address underage alcohol and/or tobacco enforcement. These agreements are believed to be important to sustaining consistent enforcement. In FY '09, 19 counties turned in tobacco agreements compared to 16 the prior year. There are many multi-jurisdictional alcohol enforcement agreements in place (often as part of the same document that serves as the tobacco agreement), but DAODAS does not formally collect or count them.

Public Safety Checkpoints

A total of 529 public safety checkpoints, often called sobriety checkpoints, were implemented in FY '08, up from 452 in FY '08 and 153 in FY '07. AET reports show that these checkpoints resulted in 8,610 tickets, including 193 underage drinking violations. There were also 244 DUIs, 94 felony arrests, 106 fugitives apprehended, 16 stolen vehicles recovered, 737 drug possession charges, 77 underage tobacco possession charges, and 624 open container violations. There were 33 different counties with checkpoints in FY '09, compared to 32 in FY '08 and eight in '07, though 61% of the checkpoints were done by the 3rd judicial circuit. The most common alcoholic beverage confiscated was beer, by far.

Slightly more than two-thirds of counties met or exceeded their anticipated number of checkpoints for the year.

Controlled Party Dispersals/Party Patrols

Controlled party dispersals are a way of addressing underage drinking parties that involve better containment, adequate manpower, more faithful enforcement of underage drinking laws, and safe returns home for underage drinkers. This is in contrast to a manner of breaking up a party that may involve youth scattering and getting into cars intoxicated. Some law enforcement agencies or AETs devote manpower to locating parties through patrols or acting on previously gathered information. This enforcement best practice is being utilized much more often due to the presence of AETs. Twenty-one counties turned in AET party dispersal reporting forms in FY '09, up from 18 in FY '08, though three counties (Greenville, Pickens, and York) accounted for 60% of the 144 parties dispersed. Those 144 parties had an estimated total of 2,773 attendees and took 1,004

total officer hours. A total of 972 tickets were written during these operations, including 791 for underage drinking violations (91 of those for age 16 or younger), 33 for transfer of alcohol to an underage person, 3 for unlicensed keg possession, 3 for fake IDs, and 26 for drug possession. By far, beer was the most common type of alcohol confiscated, followed by liquor. The most common month for party dispersals was January (23), followed by November (20), and December (16). The fewest dispersals were done in June and July (8 total).

In addition to the safe dispersal of parties, many AETs were involved in preventing parties, often by receiving information and contacting the youth planning to host the party or that young person's parents. AETs reported 231 parties prevented in FY '09.

About half of counties implemented the number of party patrols they planned for, though in many cases that was less than three. There were three counties that planned to do dispersals but did not have any done.

Merchant Education

Efforts to enforce laws regarding underage purchases of alcohol or tobacco are strengthened by efforts to help educate and train those who sell alcohol or tobacco products with appropriate information and proper techniques. There are a number of these merchant education curricula used nationally and in South Carolina, though the county authorities are now exclusively using the PREP curriculum. County authorities were each required to implement merchant education programming in FY '09 and collectively served 1,899 retail staff, slightly less than the 2,067 in FY '08 but about double the 958 total for FY '07.

There is a standardized PREP post-test used across the system that allows standardization of outcomes. Primarily, the test is graded for a pass or fail. The FY '09 pass rate was 98%, higher than 94% in FY '08, with the average score being 94, higher than the 92 in FY '08. Slightly less than half of the counties met or exceeded their expected number of PREP participants. Several of the counties that fell short, however, did so by relatively small margins.

Diversions or Court-mandated Youth Programs

County authorities often play a role in the post-arrest process for youth violators of alcohol or tobacco laws. Related to alcohol, county providers often offer programming as part of their solicitor's Alcohol Education Program (AEP), a program many first-time offenders will be offered in lieu of a conviction. We do not have final numbers for youth served in AEP in FY '09.

For tobacco, there was a mid-year shift in the typical program offered by many county authorities that youth can complete instead of having them pay a fine when they are

guilty. In the early part of the fiscal year, counties were primarily offering the Alternative to Suspension (ATS) program, but the field created a new program in early 2009 called the Tobacco Education Program (TEP). At this point, we have not finalized the numbers served in the two tobacco programs. There were 306 youth served in these tobacco-mandated programs in FY '08.

In year-end reports, despite having little control over referrals because TEP is primarily for youth cited by law enforcement, a majority of counties served the number of youth they anticipated or came very close. Outcome objectives for TEP were met in almost every instance, including a majority of youth stating their intention to quit using in future.

Shoulder Taps

Shoulder tap operations involve an underage volunteer standing outside of an off-premise establishment and asking adults going in to purchase alcohol for them. Those who do are ticketed.

FY '09 was the first year where there were sufficient shoulder tap forms returned to provide any level of summary information. Six circuits conducted shoulder taps on a total of approximately 25 different times. Approximately 365 individuals were approached with 37 purchasing alcohol for the youth (approximately 10%).

A majority of counties that implemented shoulder taps had a successfully lower percentage of adults who purchased for youth than their objective indicated.

Other Alcohol Enforcement Team Activities

In addition to compliance checks, public safety checkpoints, merchant education, shoulder taps, and controlled party dispersals, AETs also implement a number of other strategies, though with less frequency, and engage in a wide range of awareness-raising activities. Less common operations include:

- Fake ID Checks/Bar Checks: This is when officers do a sweep of an establishment looking for customers with fake IDs or when they remain undercover in an on-premise establishment and observe possible violations, such as use of fake ID or serving an underage person.
- Saturation Patrols: This is very concentrated traffic enforcement looking for driving under the influence and other traffic violations.

There were only year-end reports submitted for fake ID/bar checks. Only about one-third of counties planning to implement bar checks met the number of checks they anticipated, including a few that did none. A small number of counties implemented far more than they had initially planned.

AET awareness activities included holding town hall meetings, doing educational sessions for youth or adults, conducting a local media campaign, and “casual contacts,” which are typically law enforcement officers making community contacts with youth or merchants to keep a high visibility presence and warn them of upcoming enforcement efforts. AETs reported 367 media placements (articles, TV stories, etc.) during FY '09. About two-thirds of the time, counties met or exceeded their planned number of events and number of people reached. This is less than FY '08, when almost all underage drinking awareness efforts were accomplished at or beyond expectations. There were no outcomes gathered from these types of activities, which would be expected as they are essentially information dissemination efforts.

Summary of Section V

The most common environmental strategies implemented were alcohol compliance checks, tobacco compliance checks, and merchant education, though Alcohol Enforcement Teams also generated considerable activity on operations such as public safety checkpoints, controlled party dispersals, and shoulder taps. County authority prevention staff and AET Coordinators returned forms on 7,121 alcohol compliance checks and 1,182 tobacco checks. This is a major increase from FY '08 for alcohol compliance checks but a decrease for tobacco. For alcohol, 18.2% of attempts generated sales, compared to 16.5% for tobacco. This is a lower alcohol sale rate but higher tobacco sale rate, compared to FY '08. These compliance checks most frequently were done at convenience stores and attempting to purchase either beer or cigarettes.

The sale rate for tobacco products other than cigarettes was 22%, significantly higher than for cigarettes. Blunts and cigars had particularly high sale rates. The type of alcohol purchased did not have a significant effect on the sale rate.

Most merchants asked to see the buyers' IDs, though about 9% to 11% of those who studied the ID still sold. Having posted signage about checking IDs or having age verification equipment were both statistically significantly associated with being less likely to sell ($p < .001$).

A total of 529 public safety checkpoints were reported, which is up from last year's 452. More than 8,600 tickets were written during the FY '09 checkpoints. The counties served 1,899 merchants in the Palmetto Retailers Education Program (PREP) in FY '09, down from 2,097. The pass rate for the course was 98%. AETs dispersed 144 parties, through three counties accounted for 60% of those operations. Just less than 1,000 tickets (791 for underage drinking) were written during those dispersals. Another 231 parties were reported as having been prevented due to proactive use of advanced information. During shoulder tap operations, 365 individuals were approached by the cooperating youth to purchase alcohol, with 37 purchasing (10% sales). Other AET operations included fake ID/bar checks and saturation patrols. Counties were able to get a total of 19 multi-jurisdictional tobacco enforcement agreements signed, up three from the year before.

SECTION VI: YOUTH ACCESS TO TOBACCO STUDY (SYNAR)

Each year, as part of a federal requirement, South Carolina conducts a study to determine the extent to which youth younger than 18 can successfully buy cigarettes from retail outlets. In the 2009 study (FFY 2010), South Carolina continued using a simple random sampling methodology rather than a census design (visiting every store). This strategy began in the 2007 study. Between Jan. 1 and Feb. 28, 2009, 226 youth volunteers ages 15-17, under trained adult supervision, conducted 499 random, unannounced cigarette purchase attempts in all 46 counties. These outlets were randomly sampled from the estimated (there is no official account of tobacco sales outlets in South Carolina) 7,800 outlets in the state.

The FFY '10 results indicated an estimated overall sales rate (also known as a Retailer Violation Rate or RVR) of 10.8%. This rate is far below the federal standard of 20.0% and substantially lower than the RVR of 63.2% in FFY 1994, which was the first year of the study. This year's rate is also the lowest in the history of the SC Synar Study.

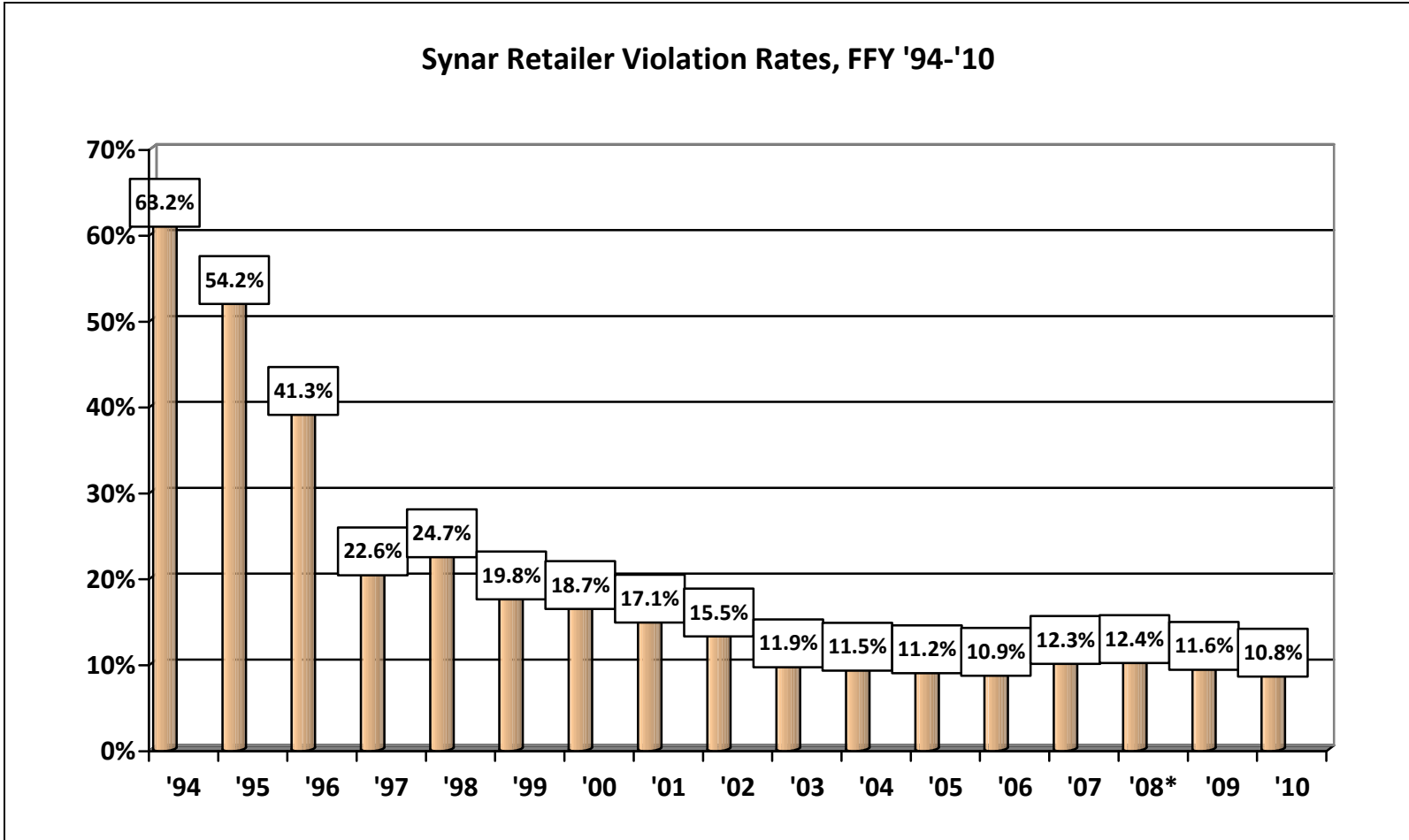
The RVR for over-the-counter transactions was 10.8%, and the RVR for vending machines was 25.0%, though there were only eight machines (all the ones in the state accessible to those under age 18 that we are aware of) in the study.

Regions ranged in retailer violation rates from 5.4% to 13.6%, though these region rates have proven to be unstable under our sampling design. Region 2 had the highest sales rate in 2007 but was the lowest in 2009 and 2006 and second lowest in 2008. Region 4 had the highest rate in 2009.

The age of the youth volunteer was not statistically significant overall though the sales rate increased with each year of age, from 9% to 13%. Upon closer examination, age of the buyer was more of a factor for males than females. The sale rate for 15-year-old males (6.1%) was near significantly lower ($p=.068$) than the 17-year-old male sale rate (14.8%). Sales rates varied by gender (13% for females; 10% for males), but the difference was not significant. This is in contrast to last year when males were almost significantly higher than females (15% for males; 9% for females). White youth were sold to less often than other races (9% vs. 12%). However, further analysis shows that white youth and Black or African American males were sold to at almost the same rate (9-10%), but Black or African American or other race females were sold to almost 16% of the time. Black or African American clerks had the lowest sale rate at 7%; there was no substantial difference by clerk gender. Clerks estimated to be the youngest had the highest sale rates; 17% of those estimated to be teenagers or in their 20s sold.

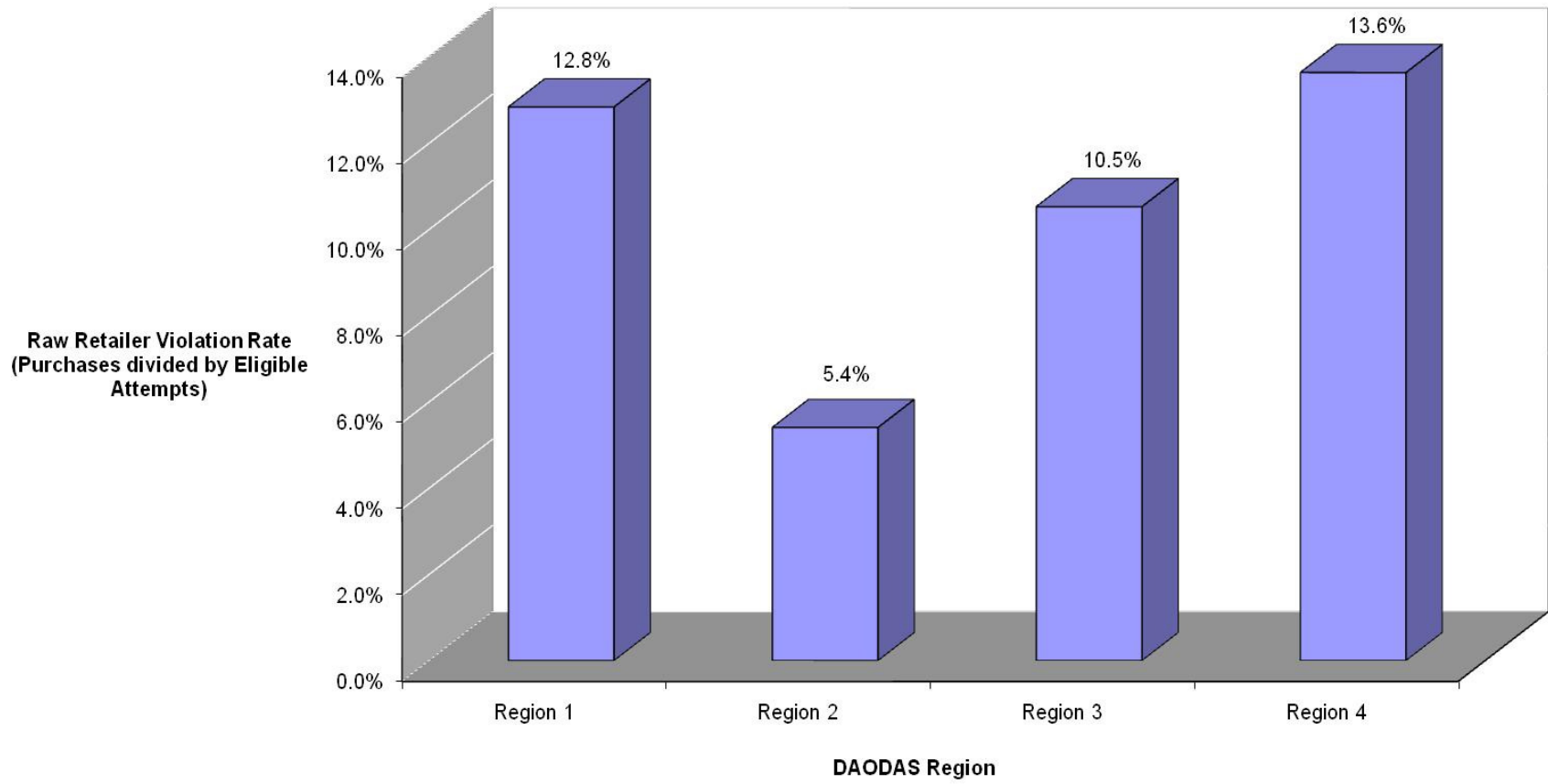
For the first time, we have analyzed the FFY 2010 Synar buy rates while factoring in the level of local tobacco enforcement in FY '08. FY '08 enforcement numbers were determined to be the most appropriate because FY '08 would be the most recent complete year prior to the FFY 2010 Synar inspections. When looking at Synar rates in counties

with any enforcement compared to those with no enforcement, the enforcement counties had a better violation rate (9.6% vs. 14.9%), though this did not reach the level of significance. However, when comparing those counties with 40 or more tobacco compliance checks to those that had less than 40, the relationship was highly significant: 4.7% violation rate for counties with high enforcement and 14.7% for those with low enforcement (p=.0005). While the high enforcement counties were more often larger counties (8 of 10 were among the top half of counties by population), an analysis of Synar rates by those counties with more than 100 tobacco outlets compared to those with fewer than 100 outlets showed almost exactly equal rates.



*The FFY 2008 study was the first that did not allow 14-year-old inspectors, which consistently were sold to less often than the 15- to 17-year-old inspectors. Barring this change in methods, the RVR would reasonably have been lower in 2008 than in 2007.

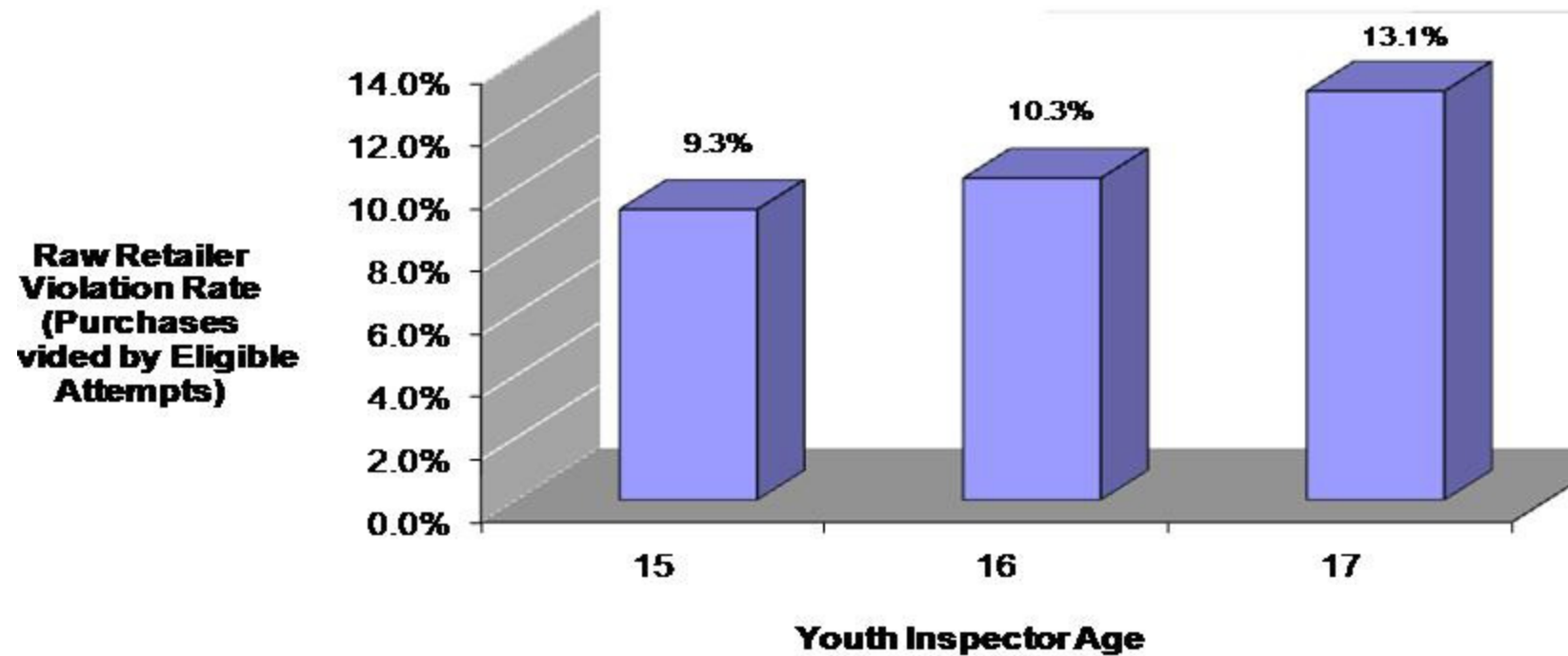
Percentage of Outlets Selling Cigarettes by DAODAS Region, FFY 2010



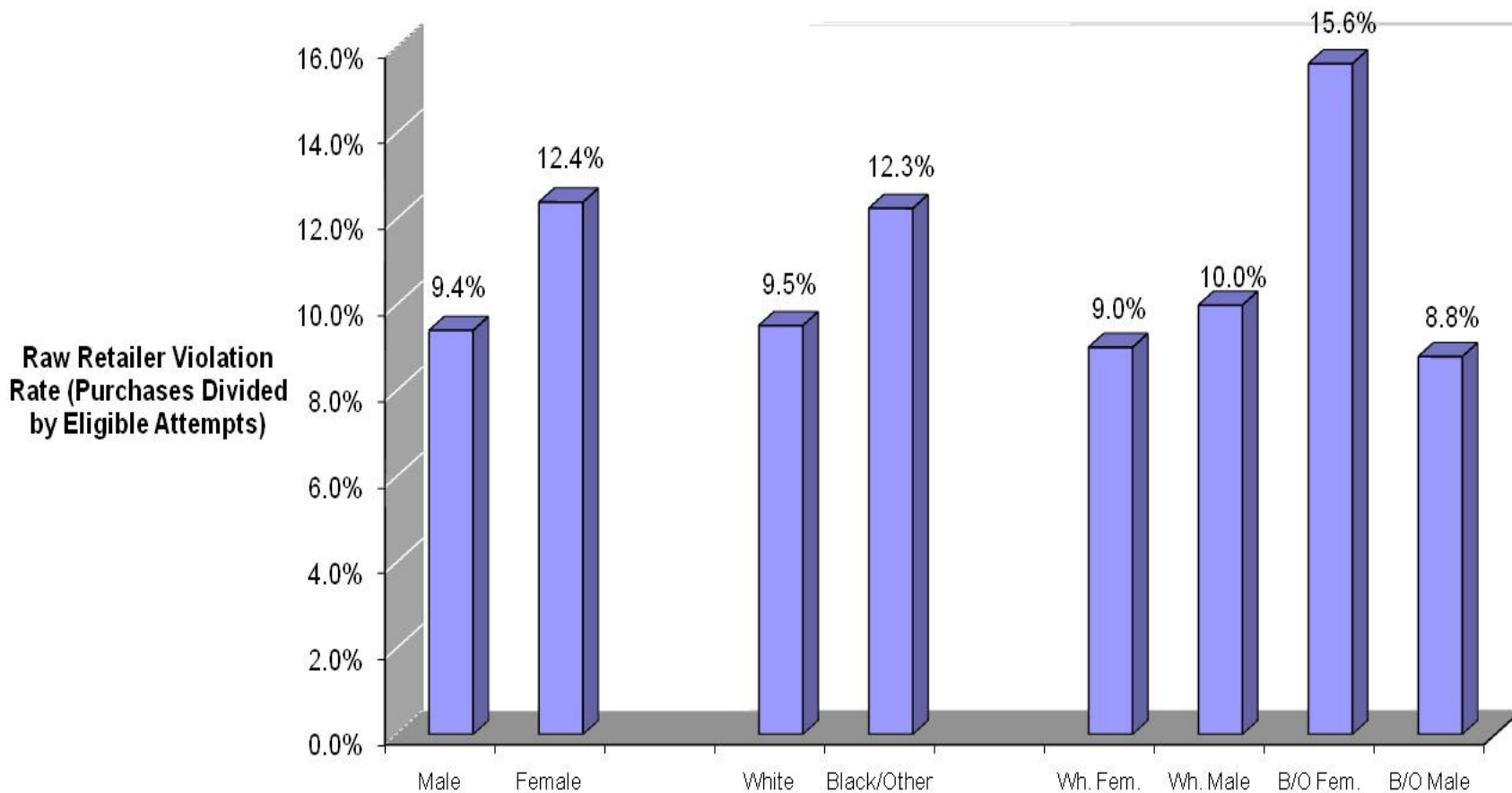
FFY 2010 Synar Raw Buy Rates

CountyName	Total Eligible Purchase Attempts	No Buy	Buy	Buy Rate
ABBEVILLE	2	1	1	50.0%
AIKEN	21	17	4	19.0%
ALLENDALE	3	3	0	0.0%
ANDERSON	17	16	1	5.9%
BAMBERG	3	2	1	33.3%
BARNWELL	4	4	0	0.0%
BEAUFORT	14	14	0	0.0%
BERKELEY	12	11	1	8.3%
CALHOUN	2	1	1	50.0%
CHARLESTON	29	22	7	24.1%
CHEROKEE	9	6	3	33.3%
CHESTER	8	8	0	0.0%
CHESTERFIELD	6	5	1	16.7%
CLARENDON	5	5	0	0.0%
COLLETON	8	8	0	0.0%
DARLINGTON	14	14	0	0.0%
DILLON	6	6	0	0.0%
DORCHESTER	10	9	1	10.0%
EDGEFIELD	1	1	0	0.0%
FAIRFIELD	1	1	0	0.0%
FLORENCE	19	19	0	0.0%
GEORGETOWN	7	7	0	0.0%
GREENVILLE	38	34	4	10.5%
GREENWOOD	10	6	4	40.0%
HAMPTON	5	5	0	0.0%
HORRY	34	27	7	19.4%
JASPER	9	9	0	0.0%
KERSHAW	9	9	0	0.0%
LANCASTER	8	6	2	25.0%
LAURENS	11	11	0	0.0%
LEE	2	1	1	50.0%
LEXINGTON	26	26	0	0.0%
MARION	6	4	2	33.3%
MARLBORO	8	8	0	0.0%
MCCORMICK	3	2	1	33.3%
NEWBERRY	5	4	1	20.0%
OCONEE	8	7	1	12.5%
ORANGEBURG	12	9	3	25.0%
PICKENS	10	9	1	10.0%
RICHLAND	32	31	1	3.1%
SALUDA	2	2	0	0.0%
SPARTANBURG	28	26	2	7.1%
SUMTER	10	9	1	10.0%
UNION	4	4	0	0.0%
WILLIAMSBURG	5	3	2	40.0%
YORK	19	18	1	5.3%

Percent of Outlets Selling Cigarettes to Youth By Youth Age, FFY 2010



Percent of Outlets Selling Cigarettes to Youth By Youth Gender & Race, FFY 2010



SECTION VII: OTHER PREVENTION INTERVENTIONS

In the previous chapters, we have described the cumulative outcomes, to the extent possible, of youth curricula, some environmental approaches with a focus on compliance checks, and the Youth Access to Tobacco Study. Prevention professionals deliver an even wider range of services than this list, however. In this section, we address some of the other types of prevention interventions that may be delivered by the county agencies.

Parenting Programs

Several counties had a year-end report for a parenting program. Parenting programs typically focus on enhancing adults' skills in areas such as communication, rule-setting, appropriate discipline, and positive interaction. Three of the parenting education programs currently work with parents involved in a divorce proceeding.

There is no standard evaluation tool in the state for parenting programs. Reviewing counties' outcome objectives revealed targeted outcomes of decreased exposure on children's behalf to parents arguing, stronger influence over children's decision-making, and increased knowledge of how to deal with divorce. In these cases where there were measurable outcomes, they were positive in comparison to the initial expectations. From reviewing process objective data, projected numbers of participants were not met in one county and one program was never implemented in another. One county, however, far exceeded their targeted numbers.

Working with Coalitions

A large number of prevention professionals in the county system work with one or more coalitions to strengthen collaborative efforts and best utilize scarce resources, though many did not dedicate a management plan to those efforts. Of those who did, relatively few had measurable outcome objectives, which is understandable for this type of work. There were too few reports to summarize the impact of working with coalitions; this is the type of activity that is generally agreed to be very important but does not produce easily assessable outcomes.

Information Dissemination

Information dissemination is a considerable portion of the activities of a prevention specialist. Information dissemination includes all presentations, health fairs, and one-time activities focused on providing information and raising awareness. By nature, one-time activities are difficult to prove as generating change because pre- and post-tests typically are not feasible when contact is brief. In terms of numbers reached, number of informational activities, or amount of information distributed, most counties reported exceeding their targets, some by very large numbers. It is unclear whether they set

targets far lower than what was reasonable or if they were able to reach far more than expected. As encouraged by DAODAS, most agencies said that outcomes could not accurately be assessed for their information dissemination plans. Like coalition work, information dissemination is considered an important part of prevention but not one that can easily produce documented outcomes.

Alternative Activities

Alternatives typically are activities for youth that encourage positive youth development and/or occupy young peoples' time so that they are involved in constructive activities. Counties implemented a range of programming under this heading, including large drug-free community events, ropes course team-building activities, after-school programs and events, and drug-free outings for specific youth groups. Few counties attempted to evaluate their alternatives activities in terms of impact on behavior or attitudes. Most considered the attendance counts as their primary measure of success, which is appropriate. Results were mixed for reaching the targeted amount of people.

HIV/AIDS Programming

County authorities' HIV/AIDS programming was primarily focused on testing treatment clients and providing education to those clients and other community members. There were eight counties with related objectives in FY '09.

Regarding client testing, roughly half of the counties with objectives on that topic fell short of their targets, though some other exceeded their expectations. Counties more frequently met their expectations regarding community presentations and often had positive outcomes to share such as increased knowledge of HIV/AIDS or increased willingness to use a condom. As these activities are primarily information dissemination, however, many did not have measurable outcomes.

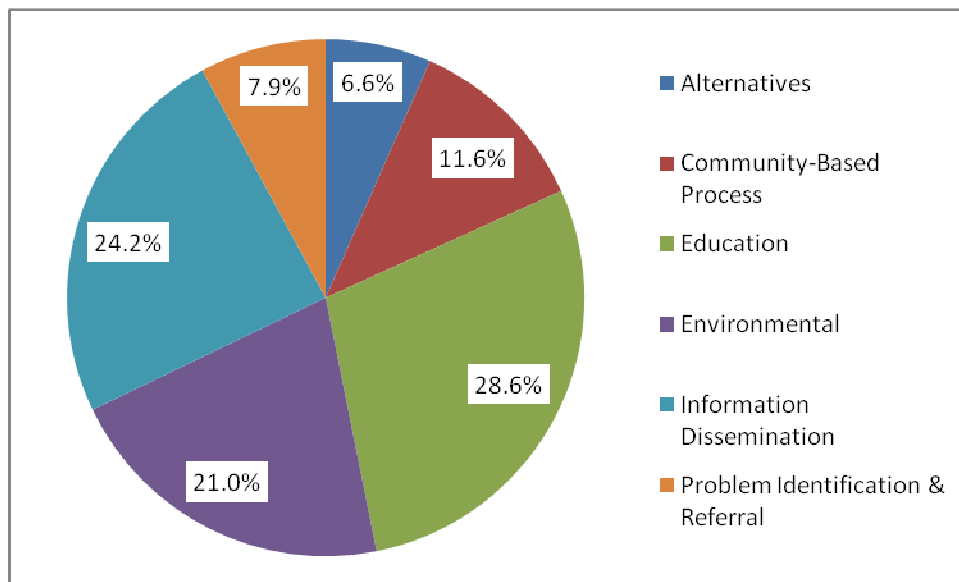
Faith-based Programming

Varied programming takes place within faith-based settings. In FY'09, there were four county authorities with year-end reports describing faith-based activities, compared to just one last year, although that one county was extremely active in this area. FY '09 efforts included working with a ministerial association, increasing faith-based groups' involvement in prevention, training youth ministers or chaplains, and providing anger management classes to members of faith-based entities. The majority of efforts in this category met their outcome objectives. Outcome objectives were completely varied, though generally achieved.

State Distribution of Service Events

The KIT Prevention online reporting system had prevention staff code each service activity in one of six CSAP prevention categories. Chart 9 shows the distribution of the 22,396 service events by category. The largest categories, representing almost three-quarters of service events, are education (small group sessions with consistent participants such as curriculum programs), information dissemination, and environmental. The number of service events may not be a perfect measure of overall effort devoted to a particular category but should provide a general sense of how local efforts are focused.

Chart 9. Distribution of Service Events by CSAP Category, FY '09



Summary of Section VII

Many of the prevention activities described in this section (coalition work, information dissemination, alternative activities, HIV/AIDS testing and education, faith-based programming) are not well suited to generating valid outcomes. Therefore, there is little information from which to formulate conclusions, though there are instances of both successes and shortcomings in the reports county prevention professionals provided.

APPENDIX A: ADDITIONAL DATA TABLES

Table A1. Overall Results by Age

Risk Factor Scores, Range (Positive score is favorable)	Middle School (n=5,355)			High School (n=2,027)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.3	12.1**	1.8	2.0	11.8**
Decision-Making Skills, 0-3	1.8	1.9	5.6**	1.7	1.8	4.1**
Favorable Attitudes, 0-2	1.6	1.7	5.4**	1.3	1.3	7.8**
Perceived Peer Norms, 0-10	8.5	8.7	2.7**	7.3	7.5	3.1**
Perceived Parental Attitudes, 0-3	2.8	2.9	0.5*	2.7	2.7	0.8

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	4.8	3.7	-22.5**	16.0	12.4	-22.4**
Other Tobacco	3.2	2.7	-15.7*	10.1	9.0	-11.1
Alcohol	8.4	5.8	-31.4**	21.8	16.8	-22.9**
Marijuana	2.1	1.5	-26.2**	12.3	8.4	-32.1**
Other Illegal Drugs	1.2	0.9	-30.6**	4.4	3.2	-26.7**
Inhalants	4.3	2.6	-39.7**	4.3	2.3	-46.5**
Non-Medical Prescription Drug Use	2.0	1.3	-31.8**	4.4	4.0	-7.1
Non-Medical Over-The-Counter Drug Use	1.8	0.8	-52.5**	3.6	2.8	-20.2

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A2. Overall Results by Gender

Risk Factor Scores, Range (Positive score is favorable)	Females (n=3,626)			Males (n=3,826)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.1	2.3	10.4**	1.9	2.2	14.0**
Decision-Making Skills, 0-3	1.9	1.9	3.7**	1.7	1.9	6.9**
Favorable Attitudes, 0-2	1.6	1.7	4.5**	1.4	1.5	7.8**
Perceived Peer Norms, 0-10	8.4	8.6	2.3**	8.0	8.3	3.4**
Perceived Parental Attitudes, 0-3	2.8	2.8	0.2	2.8	2.8	0.8**

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	6.2	4.8	-22.9**	9.3	7.3	-22.0**
Other Tobacco	1.9	1.5	-20.2	8.1	7.1	-12.5**
Alcohol	10.6	8.0	-24.9**	13.3	9.4	-29.5**
Marijuana	3.4	2.2	-36.1**	6.2	4.5	-27.5**
Other Illegal Drugs	1.5	1.0	-32.9**	2.6	2.0	-23.8**
Inhalants	3.9	2.2	-44.4**	4.5	2.7	-40.2**
Non-Medical Prescription Drug Use	2.6	1.8	-33.0**	2.6	2.3	-12.3
Non-Medical Over-The-Counter Drug Use	1.9	1.1	-42.9**	2.6	1.6	-37.1**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A3. Overall Results by Race Group

Risk Factor Scores, Range (Positive score is favorable)	Black/African American participants (n=3,339)			White participants (n=3,335)			"Other" race participants (n=390)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	1.9	2.2	11.6**	2.0	2.3	12.3**	2.0	2.3	14.6**
Decision-Making Skills, 0-3	1.8	1.9	4.6**	1.8	1.9	6.0**	1.8	1.9	5.9**
Favorable Attitudes, 0-2	1.4	1.5	7.9**	1.6	1.6	4.2**	1.5	1.6	8.2**
Perceived Peer Norms, 0-10	8.1	8.3	2.6**	8.3	8.5	2.7**	8.0	8.3	3.1**
Perceived Parental Attitudes, 0-3	2.8	2.8	0.7*	2.8	2.8	0.1	2.8	2.8	1.7

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	6.2	4.6	-25.4**	9.4	7.7	-18.8**	5.9	4.9	-17.0
Other Tobacco	2.6	2.2	-14.1	7.7	7.0	-9.4	3.4	2.6	-23.0
Alcohol	10.9	7.0	-35.6**	12.8	10.1	-21.1**	12.7	10.3	-18.8
Marijuana	5.4	3.9	-27.4**	4.4	2.9	-34.8**	4.1	3.1	-25.0
Other Illegal Drugs	2.3	1.5	-32.8**	1.9	1.3	-32.1**	1.6	1.8	16.1
Inhalants	3.7	2.1	-43.6**	4.2	2.6	-37.7**	6.5	3.6	-44.0*
Non-Medical Prescription Drug Use	2.3	1.4	-37.2**	3.0	2.5	-16.1	1.6	2.8	83.2
Non-Medical Over-The-Counter Drug Use	2.0	1.5	-28.6*	2.4	1.3	-46.0**	2.8	1.8	-36.3

* Pre- and post-test averages are approaching being statistically significantly different (significant at the p<.10 level, but not p<.05 level)

** Pre- and post-test averages are statistically significantly different (significant at p<.05 level)

Table A3. Overall Results by Race Group (continued)

Risk Factor Scores, Range (Positive score is favorable)	Multi-ethnic participants (n=252)			American Indian/Native American participants (n=88)			Asian participants (n=45)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.2	10.0**	1.9	2.2	15.2**	2.1	2.5	17.9**
Decision-Making Skills, 0-3	1.8	1.8	-0.5	1.8	1.9	4.2	1.7	2.1	19.4**
Favorable Attitudes, 0-2	1.5	1.6	3.6	1.4	1.5	4.0	1.5	1.6	8.8*
Perceived Peer Norms, 0-10	8.1	8.4	4.0**	8.0	8.3	3.1	8.2	8.8	6.7**
Perceived Parental Attitudes, 0-3	2.8	2.8	0	2.6	2.8	5.9**	2.8	2.8	-0.5

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	9.2	4.0	-56.3**	12.9	9.2	-28.9	2.2	0	-100
Other Tobacco	6.0	2.4	-60.0**	6.0	3.5	-42.0	6.8	2.2	-67.4
Alcohol	11.6	8.8	-23.8	10.8	10.3	-4.6	13.6	2.2	-83.7*
Marijuana	4.8	4.0	-17.0	4.8	2.3	-51.7	0	0	N/A
Other Illegal Drugs	2.8	3.2	13.9	1.2	2.3	93.3	2.3	0	-100
Inhalants	5.6	2.4	-57.0	11.8	5.8	-51.1*	4.6	2.2	-51.2
Non-Medical Prescription Drug Use	3.6	3.2	-11.4	2.4	0	-100	0	4.4	N/A
Non-Medical Over-The-Counter Drug Use	2.4	1.6	-33.3	3.6	0	-100	0	0	N/A

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A4. Overall Results by Ethnicity

Risk Factor Scores, Range (Positive score is favorable)	Participants of Hispanic, Latino, or Spanish Descent or Origin (n=413)			Participants Not of Hispanic, Latino, or Spanish Descent or Origin (n=6,947)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.2	14.6**	2.0	2.2	12.0**
Decision-Making Skills, 0-3	1.8	1.9	7.0**	1.8	1.9	5.2**
Favorable Attitudes, 0-2	1.4	1.6	8.3**	1.5	1.6	5.9**
Perceived Peer Norms, 0-10	7.9	8.2	3.5**	8.2	8.4	2.7**
Perceived Parental Attitudes, 0-3	2.7	2.8	2.0*	2.8	2.8	0.4*

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	7.6	5.9	-22.8	7.8	6.0	-23.1**
Other Tobacco	2.9	2.2	-25.3	5.2	4.5	-13.5**
Alcohol	15.9	11.2	-29.8**	11.7	8.5	-27.3**
Marijuana	4.7	3.7	-21.5	4.8	3.3	-30.3**
Other Illegal Drugs	2.7	2.7	0	2.0	1.5	-26.4**
Inhalants	7.1	3.4	-51.8**	4.1	2.4	-40.9**
Non-Medical Prescription Drug Use	3.4	3.9	13.4	2.5	1.9	-23.6**
Non-Medical Over-The-Counter Drug Use	3.2	2.2	-30.6	2.2	1.3	-38.6**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the p<.10 level, but not p<.05 level)

** Pre- and post-test averages are statistically significantly different (significant at p<.05 level)

Table A5. Overall Results by Program

Risk Factor Scores, Range (Positive score is favorable)	All Programs (n=7,527)			All Stars (n=1,064)			Class Action (n=57)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.2	12.2**	2.0	2.2	9.3**	1.9	2.0	7.9
Decision-Making Skills, 0-3	1.8	1.9	5.2**	1.8	1.8	2.6**	1.7	1.7	0.2
Favorable Attitudes, 0-2	1.5	1.6	6.1**	1.5	1.5	4.8**	1.0	1.0	-2.2
Perceived Peer Norms, 0-10	8.2	8.4	2.8**	8.0	8.3	3.1**	6.1	6.4	4.0
Perceived Parental Attitudes, 0-3	2.8	2.8	0.6**	2.8	2.8	-0.4	2.4	2.5	2.9

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	7.8	6.0	-22.7**	6.0	5.8	-3.4	7.1	7.0	-1.7
Other Tobacco	5.1	4.4	-13.8**	4.2	4.0	-4.3	30.4	22.8	-24.9
Alcohol	11.9	8.7	-27.2**	10.6	8.2	-22.3**	21.4	14.0	-34.5
Marijuana	4.8	3.3	-30.6**	4.2	2.8	-31.7**	8.9	8.8	-1.8
Other Illegal Drugs	2.1	1.5	-28.2**	2.6	1.3	-47.8**	5.4	1.8	-67.4
Inhalants	4.3	2.5	-42.3**	3.5	2.0	-43.3**	5.4	1.8	-67.4
Non-Medical Prescription Drug Use	2.6	2.1	-21.2**	2.6	1.9	-28.0	12.5	7.0	-43.8
Non-Medical Over-The-Counter Drug Use	2.3	1.4	-39.6**	2.4	1.4	-40.3	5.4	1.8	-67.4

* Pre- and post-test averages are approaching being statistically significantly different (significant at the p<.10 level, but not p<.05 level)

** Pre- and post-test averages are statistically significantly different (significant at p<.05 level)

Table A5. Overall Results by Program (continued)

Risk Factor Scores, Range (Positive score is favorable)	ICRC After-School Recreation (n=92)			Keep a Clear Mind (n=43)			Keepin' It Real (n=543)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.3	2.5	9.5**	2.3	2.6	15.2**	2.0	2.2	10.0**
Decision-Making Skills, 0-3	1.9	2.1	8.4*	1.9	2.0	5.2	1.9	2.0	3.7**
Favorable Attitudes, 0-2	1.8	1.6	-14.5**	1.3	1.6	17.7**	1.6	1.6	3.1**
Perceived Peer Norms, 0-10	9.2	8.5	-7.3**	8.0	8.2	3.2	8.6	8.8	2.9**
Perceived Parental Attitudes, 0-3	2.8	2.7	-3.4	2.4	2.4	1.0	2.9	2.9	0.3

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	0	3.3	N/A	0	0	N/A	5.0	4.6	-7.6
Other Tobacco	0	1.1	N/A	0	0	N/A	3.3	2.8	-16.9
Alcohol	2.2	3.3	46.8	0	0	N/A	9.8	6.6	-32.3**
Marijuana	1.1	2.2	95.5	0	0	N/A	3.7	2.6	-30.1
Other Illegal Drugs	0	2.2	N/A	0	0	N/A	1.9	0.7	-60.0
Inhalants	1.1	2.2	95.5	0	0	N/A	3.1	3.1	0
Non-Medical Prescription Drug Use	1.1	2.2	96.4	0	0	N/A	2.4	1.3	-46.3
Non-Medical Over-The-Counter Drug Use	0	1.1	N/A	0	0	N/A	1.3	0.4	-71.3*

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A5. Overall Results by Program (continued)

Risk Factor Scores, Range (Positive score is favorable)	Life Skills Training (n=715)			Lions-Quest Skills for Adolescence (n=105)			Project Alert (n=578)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.1	2.2	7.6**	2.0	2.1	3.3	2.0	2.2	12.5**
Decision-Making Skills, 0-3	1.9	2.0	6.0**	1.8	1.7	-7.0*	1.8	1.9	7.6**
Favorable Attitudes, 0-2	1.7	1.7	3.9**	1.3	1.4	7.0	1.5	1.6	5.8**
Perceived Peer Norms, 0-10	8.7	8.8	1.2**	7.8	7.5	-3.4*	8.2	8.2	0.7
Perceived Parental Attitudes, 0-3	2.9	2.9	0.6	2.7	2.7	0	2.8	2.8	-0.5

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	5.5	3.9	-28.3*	5.8	3.8	-34.6	10.1	8.9	-12.1
Other Tobacco	3.7	2.2	-38.6*	3.9	1.9	-50.6	8.7	8.7	0.1
Alcohol	5.6	4.5	-20.3	15.4	13.3	-13.3	13.3	11.8	-11.2
Marijuana	3.5	2.4	-32.2**	10.6	8.6	-19.0	6.0	5.0	-16.7
Other Illegal Drugs	2.0	1.5	-21.4	3.9	2.9	-25.2	2.7	2.8	4.9
Inhalants	4.6	2.8	-39.4**	5.8	5.7	-1.0	4.8	3.7	-24.0
Non-Medical Prescription Drug Use	3.0	2.0	-33.6	2.9	1.0	-67.0	3.2	3.3	3.1
Non-Medical Over-The-Counter Drug Use	1.8	0.8	-54.3	3.9	3.8	-1.0	3.0	2.1	-31.1

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A5. Overall Results by Program (continued)

Risk Factor Scores, Range (Positive score is favorable)	Project Northland (n=1,802)			Project TND (n=543)			Project TNT (n=228)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	1.9	2.2	11.1**	1.9	1.9	2.5	1.8	2.4	37.0**
Decision-Making Skills, 0-3	1.8	1.9	3.8**	1.7	1.7	0.6	1.6	2.0	24.9**
Favorable Attitudes, 0-2	1.4	1.5	5.1**	1.3	1.3	0	1.0	1.5	46.6**
Perceived Peer Norms, 0-10	7.9	8.1	2.8**	7.5	7.5	-0.7	7.2	8.1	13.2**
Perceived Parental Attitudes, 0-3	2.8	2.8	-0.1	2.7	2.7	1.1	2.6	2.8	8.0**

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	10.7	8.4	-21.3**	9.1	9.9	8.9	32.5	10.5	-67.6**
Other Tobacco	6.8	6.5	-5.3	8.9	7.5	-15.7	11.0	4.4	-59.9**
Alcohol	14.9	12.5	-16.0**	18.7	15.5	-17.2	30.0	10.1	-66.3**
Marijuana	6.2	4.8	-23.0**	6.0	5.0	-16.1	15.4	3.1	-79.9**
Other Illegal Drugs	2.6	1.9	-25.8	1.9	1.1	-40.3	2.6	1.3	-50.0
Inhalants	4.2	3.5	-16.4	3.4	2.2	-34.2	9.2	1.8	-80.9**
Non-Medical Prescription Drug Use	2.5	2.3	-8.8	3.9	3.1	-19.9	4.9	4.4	-9.5
Non-Medical Over-The-Counter Drug Use	2.1	1.8	-15.6	3.0	2.6	-13.1	4.9	1.3	-73.0**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the p<.10 level, but not p<.05 level)

** Pre- and post-test averages are statistically significantly different (significant at p<.05 level)

Table A5. Overall Results by Program (continued)

Risk Factor Scores, Range (Positive score is favorable)	Responding in Peaceful and Positive Ways (n=328)			Second Step (n=46)			Street Smart (n=68)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.2	2.3	5.1**	1.7	1.7	-2.8	2.0	1.8	-5.9
Decision-Making Skills, 0-3	1.9	1.9	2.0	1.5	1.4	-2.2	1.8	1.9	5.1
Favorable Attitudes, 0-2	1.7	1.8	6.3**	1.1	0.9	-16.0	1.5	1.5	-1.6
Perceived Peer Norms, 0-10	8.9	9.0	1.9**	7.1	6.6	-7.1**	8.6	8.9	3.2
Perceived Parental Attitudes, 0-3	2.9	3.0	0.6	2.5	2.4	-1.4	2.9	2.8	-2.5

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	1.2	1.2	0	28.9	32.6	12.9	3.0	0	-100
Other Tobacco	0.3	0	-100	26.7	32.6	22.3	1.5	0	-100
Alcohol	2.7	2.4	-10.9	26.7	32.6	22.3	4.6	0	-100
Marijuana	0.6	0	-100	24.4	26.1	6.8	0	0	N/A
Other Illegal Drugs	0.3	0	-100	6.7	15.2	128	1.5	0	-100
Inhalants	0.9	0.6	-33.0	8.9	8.7	-2.1	1.5	0	-100
Non-Medical Prescription Drug Use	0.3	0	-100	15.6	15.2	-2.2	1.5	0	-100
Non-Medical Over-The-Counter Drug Use	0.9	0	-100	11.1	8.7	-21.7	3.0	0	-100

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A5. Overall Results by Program (continued)

Risk Factor Scores, Range (Positive score is favorable)	Teen Institute (n=53)			Too Good For Drugs (n=1,053)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.3	2.5	8.0	2.0	2.6	29.3**
Decision-Making Skills, 0-3	2.0	2.1	5.9	1.8	2.0	10.3**
Favorable Attitudes, 0-2	1.6	1.8	18.3**	1.7	1.9	11.8**
Perceived Peer Norms, 0-10	8.4	8.6	1.6	8.7	9.4	7.8**
Perceived Parental Attitudes, 0-3	2.9	2.9	0.6	2.9	3.0	2.5**

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	3.8	0	-100	1.8	0	-100**
Other Tobacco	0	0	N/A	1.3	0	-100**
Alcohol	5.7	1.9	-66.6	7.6	0.2	-97.5**
Marijuana	1.9	0	-100	1.0	0	-100**
Other Illegal Drugs	1.9	0	-100	0.6	0	-100**
Inhalants	1.9	0	-100	6.2	0.5	-92.0**
Non-Medical Prescription Drug Use	1.9	0	-100	0.8	0	-100**
Non-Medical Over-The-Counter Drug Use	1.9	0	-100	2.0	0.1	-94.9**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

Table A6. Overall Results for Evidence-Based Vs. Non-Evidence-Based Programs

Risk Factor Scores, Range (Positive score is favorable)	Non-Evidence-Based Programs (n=397)			Evidence-Based Programs (n=7,124)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.1	2.2	3.1	2.0	2.2	12.8**
Decision-Making Skills, 0-3	1.8	1.9	4.9**	1.8	1.9	5.2**
Favorable Attitudes, 0-2	1.5	1.5	0.3	1.5	1.6	6.4**
Perceived Peer Norms, 0-10	8.4	8.2	-1.7*	8.2	8.4	3.1**
Perceived Parental Attitudes, 0-3	2.8	2.8	-1.7*	2.8	2.8	0.7**

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	4.6	4.3	-6.5	8.0	6.1	-23.2**
Other Tobacco	2.6	3.3	28.5	5.2	4.4	-15.2**
Alcohol	9.7	10.1	3.7	12.0	8.6	-28.6**
Marijuana	2.8	2.8	-1.1	4.9	3.4	-31.5**
Other Illegal Drugs	1.5	2.0	31.2	2.1	1.5	-30.6**
Inhalants	2.6	2.0	-20.3	4.4	2.5	-42.9**
Non-Medical Prescription Drug Use	2.6	3.3	29.3	2.6	2.0	-23.8**
Non-Medical Over-The-Counter Drug Use	1.3	2.0	58.6	2.3	1.3	-42.2**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

**Table A7. Overall Results for Safe and Drug-Free School Programs
vs. Block Grant-Funded Programs**

Risk Factor Scores, Range (Positive score is favorable)	Drug-Free Schools Programs (n=3,761)			Block Grant Programs (n=3,758)		
	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.3	15.2**	2.0	2.2	9.3**
Decision-Making Skills, 0-3	1.8	1.9	4.9**	1.8	1.9	5.5**
Favorable Attitudes, 0-2	1.5	1.6	6.5**	1.5	1.6	5.7**
Perceived Peer Norms, 0-10	8.2	8.4	3.3**	8.2	8.4	2.3**
Perceived Parental Attitudes, 0-3	2.8	2.8	0.9**	2.8	2.8	0.2

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	7.0	5.5	-21.3**	8.7	6.6	-23.7**
Other Tobacco	4.4	3.6	-18.4**	5.7	5.1	-10.5
Alcohol	11.1	7.5	-33.0**	12.7	9.9	-22.1**
Marijuana	4.6	3.2	-30.7**	5.0	3.5	-30.3**
Other Illegal Drugs	1.8	1.2	-35.5**	2.3	1.8	-22.2*
Inhalants	4.3	1.7	-61.2**	4.2	3.3	-23.1**
Non-Medical Prescription Drug Use	2.5	1.7	-33.6**	2.7	2.4	-10.0
Non-Medical Over-The-Counter Drug Use	2.1	1.3	-37.6**	2.4	1.4	-41.0**

* Pre- and post-test averages are approaching being statistically significantly different (significant at the $p < .10$ level, but not $p < .05$ level)

** Pre- and post-test averages are statistically significantly different (significant at $p < .05$ level)

APPENDIX B: EVALUATION INSTRUMENTS