

2013 Prevention Outcomes Annual Report





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ERRATA STATEMENT

The 2013 Prevention Outcomes Annual Report contained data errors in Table 5 for Spartanburg, Sumter, and Union Counties, and Table 6 for Newberry, Spartanburg, Sumter, and Union Counties. The corrections are below and in the body of the report.

Table 5. FY '13 Alcohol Compliance Check Buy Rates by County

County Name	Total Eligible Purchase Attempts	Buy	Buy Rate
Spartanburg	286	29	10.1%
Sumter	140	44	31.4%
Union	0	0	N/A

Table 6. FY '13 Tobacco Compliance Check Buy Rates by County

County Name	Total Eligible Purchase Attempts	Buy	Buy Rate
Newberry	18	2	11.1%
Spartanburg	166	13	7.8%
Sumter	4	1	25.0%
Union	0	0	N/A

EXECUTIVE SUMMARY

This report summarizes prevention outcomes generated by the South Carolina county authority substance abuse prevention system in Fiscal Year 2012-2013. 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 3,208 participants with matched pre- and post-tests. Most (92%) participants were between the ages of 10 and 14. There were similar numbers of female and male participants. Most participants identified as Black or African American (49.1%), White (39.7%), or "Other" (5.4%) race.
- ➤ The results showed statistically significant positive changes on four of the five risk factor measures: perceived risk, decision-making, favorable attitudes, and perceived peer norms.
- For substance use, there was a 24% reduction in alcohol use and a 20% reduction in inhalant use, which were both statistically significant. These were improvements from FY '12, which showed no statistically significant reductions.
- ➤ For all substances, more than 95% of participants that were non-users at pre-test remained non-users at post-test for each substance. The large majority of substance users at pre-test were using less or not at all for that substance by post-test.
- Average ages of first use for cigarettes, other tobacco products, and alcohol were between 10.9 and 11.3. First use of marijuana averaged 12.2 years.
- ➤ There were 24 county program implementations analyzed representing 15 different curricula.
- ➤ 99.2% of the participants were served in an evidence-based program.

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

➤ County authority prevention staff returned forms on 7,830 alcohol compliance checks and 1,274 tobacco compliance checks. These are increases over FY '12 totals. For alcohol, 12.0% of attempts generated sales, compared to 11.5% for tobacco. This is the second lowest sale rate that we have ever tracked for tobacco checks, which suggests a successful impact from consistent enforcement. Nevertheless, it should be noted that sales are up from FY '12 (10.4%). For the alcohol sale rate, the rate dropped to 12.0%, which is the lowest sale rate that has been tracked for alcohol.

- ➤ 1,147 merchants were served in the Palmetto Retailer Education Program.
- ➤ AETs reported a total of 1,011 public safety checkpoints, an all-time high. More than 405 DUIs were given during the FY '13 checkpoints. In addition, there were 574 saturation patrols reported that generated another 5,675 tickets. This operation accounted for 229 DUIs.
- Far more youth were served in a diversion program for youth alcohol offenses (763 served in the Alcohol Education Program) than tobacco (293 served in the Tobacco Education Program).
- ➤ The FFY 2014 Youth Access to Tobacco Study (Synar) showed that 10.6% of retailers sell cigarettes to underage youth, which is down from 11.7% in FFY 2013.
- Many other prevention activities are not well suited to generating valid outcomes. 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 (SABG).

Beginning in FY '05, county 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 through FY '10.

In FY '11, there was only a minor change made in the content of the survey, one item dropped, but the data entry process underwent a major change. Instead of local entry to student responses into the KIT Prevention online reporting system, PIRE created a "form" version of the survey where responses can be read by a batch scanner in the DAODAS office. No changes were made to the survey or to the surveying process through FY '13. The deadline for pre- or post-tests to be included in the final database for FY '13 was June 1. This report, prepared by the Pacific Institute for Research and Evaluation, focuses on the findings based on the year-end cumulative database for FY '13, 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 data collection 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 and the Youth Access to Tobacco Study (Synar).

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.

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 '14 Youth Access to Tobacco Study (Synar).

Section VII will address other prevention interventions not included in the previous sections and the distribution of prevention services across CSAP service categories.

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 '13.

Focusing on State Data Indicators

In many ways, this annual outcomes report serves as a companion document to the *South Carolina Profile on Alcohol, Tobacco, and Other Substance Related Indicators*, (http://daodas.state.sc.us/SC%20Profile%202009.pdf). This overview of data indicators related to youth and adult drug use, consequences, and risk factors is an important measuring stick for the overall direction of the state in addressing its ATOD issues. In particular, the report provides updates on progress for the four state ATOD priorities determined by the Governor's Council on Substance Abuse Prevention and Treatment:

- Underage drinking
- Alcohol-related car crashes (including youth crashes)
- Youth tobacco use (including smokeless tobacco use)
- Substance use during pregnancy

However, attributing the effectiveness, or lack thereof, of specific prevention efforts by the state or counties to any changes in the indicators found in the state profile is highly speculative. Therefore, this document focuses more on efforts with clearly attributable outcomes or in-depth analyses of process data to inform our efforts. Understanding and building upon our measurable efforts while working toward the goal of "moving the needle" on state indicators is a positive complementary approach.

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 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 has been largely unchanged since 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 then gave the surveys to DAODAS or PIRE staff to have the responses scanned. Providers were instructed on participant protection procedures that would likely ensure 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. 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,

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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.

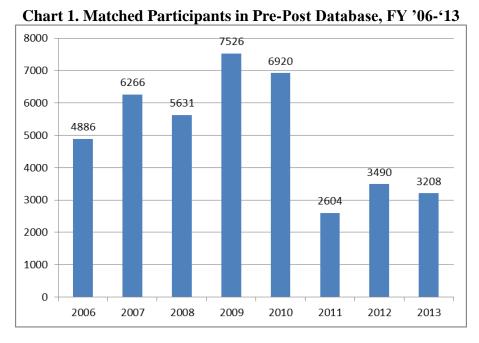
the hope is that program implementation receives the attention that is necessary to be of greatest benefit to the community. In addition, the analysis of pre-post data across multiple programs and sites will assist the state in further understanding which programs, implemented under which conditions, 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 posttest 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 given to DAODAS/PIRE 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 3,208 matched participants (Chart 1). The ending of the Safe and Drug-Free Schools funding at the end of FY '10 accounts for much of the drop from earlier years.

The year-end scanned pre-test database contained 3,825 surveys, meaning 83.9% of those pre-tests ended up with a matched post-test. The 3,825 total youth that received a pre-test do not necessarily reflect all school age youth to receive curriculum program services. DAODAS' prevention reporting system showed 12,473 total participants in recurring services for FY '13, and most of these 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, though this gap appears larger than it should be.

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.

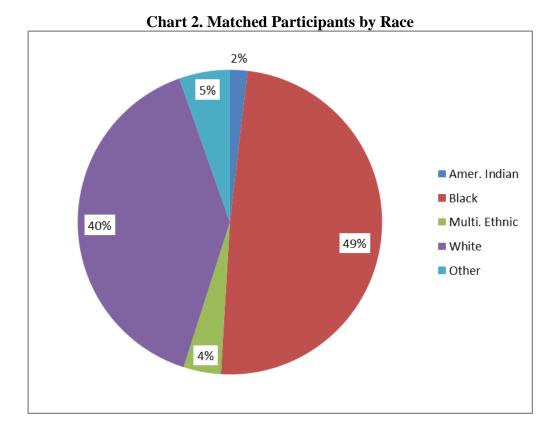
Table 1. Age Distribution of Program Participants

Age	% of Participants		
Age	FY '13	FY '12	
10	11.7	14.8	
11	21.6	15.1	
12	23.3	22.7	
13	22.1	23.0	
14	13.4	16.7	
15	4.8	3.5	
16	1.4	2.2	
17	1.0	1.4	
18	.6	.5	

Age. A majority (92.1%) of participants were between the ages of 10 and 14, with an average age of 12.3, which is very similar to the FY '12 average age of 12.4. Consistent with the last two years, middle school students make up a sizable portion of the total population. Table 1 shows the complete breakdown. The only programs that were primarily for older age students had small numbers of participants served.

Gender. The matched participants were fairly evenly split by gender (50.7% male, with .7% of the participants unidentified for gender). The only program that did not have a relatively even gender breakdown was Girl Power.

Race/Ethnicity. Of the matched participants, 49.1% were Black or African American, 39.7% were White, 5.4% were of "other" race, 1.9% were American Indian or Alaskan Native, and 4.0% were in the multiethnic race category (Chart 2). There were small numbers of participants (.3% or below) that were Asian, Native Hawaiian, or Other Pacific Islander. These percentages closely match FY '12; however, the percentage of Hispanic, Latino, or Spanish origin students dropped slightly from 7.0% to 5.0%.



Risk-Factor Measures

Table 2 (below) shows the results for the five risk factors included on the DAODAS Standard Survey. As shown in the table, there was a statistically significant (p<.05) positive change from pre- to post-test for four of the five measures—perceived risk, decision-making, favorable attitudes, and perceived peer norms. The largest positive percentage changes were for perceived risk (10.8% improvement) and decision-making (4.6% improvement). For most measures, the percentage changes for FY '13 were more desirable than in FY '12.

Table 2. Overall Results, Risk-Factor Measures: County Authorities, FY '13 and '12

Risk-Factor Measure	Possible Range of Scores	Pre-Test Average	Post-Test Average	FY '13 % Change	FY '12 % Change
Perceived Risk	0-3	2.0	2.2	10.8**	7.8**
Decision-Making	0-3	1.8	1.9	4.6**	2.9**
Favorable Attitudes	0-2	1.5	1.6	3.7**	1.9**
Perceived Peer Norms	0-10	8.3	8.5	2.3**	0.8**
Perceived Parental Attitudes	0-3	2.8	2.8	-0.5*	-0.7**

^{**} 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 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 pretest scores. Both middle and high school students had significant improvement for perceived risk, decision-making skills, favorable attitudes, and perceived peer norms. The high school group had larger percentage improvements for most risk factor measures, which is often the case for the group with lower pre-test scores (i.e., they have more room for improvement).

Gender. Table A2 shows data results separated by gender. Results show statistically significant positive changes for perceived risk, decision-making skills, favorable attitudes, and perceived peer norms for both females and 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 Black or African American participant group had significant positive change on perceived risk, decision-making skills, favorable attitudes, and perceived peer norms. The White participant group was nearly identical, but they exhibited only a marginally significant improvement in favorable attitudes. The Black or African American participant group had larger percentage improvements for most risk factor measures compared to the White participant group. Participants of Hispanic, Latino, or Spanish descent or origin had a statistically significant positive change for decision-making skills only. Non-Hispanic participants had significant positive changes on all risk factors except perceived parental attitudes.

^{*} Approaching statistically significant difference (p<.10, but not p<.05)

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' 13 results, along with the corresponding changes in use for FY '12, are shown in Table 3.

Table 3. Overall Results, Substance Use Rates, FY '12-'13

Risk-Factor Measure: 30 Day Use	% Using at Pre- Test	% Using at Post- Test	FY '13 % Change	FY '12 % Change
Cigarettes	6.1	5.1	-15.6	4.6
Other Tobacco	4.5	4.2	-6.3	20.9
Alcohol	10.0	7.6	-23.8**	-1.9
Marijuana	5.2	4.7	-9.4	12.8
Other Illegal Drugs	2.6	2.3	-12.2	17.6
Inhalants	4.5	3.6	-20.4**	-10.8
Non-Medical Prescription Drugs	3.1	2.6	-15.7	18.6
Non-Medical OTC Drugs	2.6	2.9	12.9	7.5

Negative changes are desired for these items

There were two statistically significant changes in substance use. There was a decrease from 10.0% to 7.6% of participants using alcohol, which corresponds to a 23.8% decrease and there was a decrease from 4.5% to 3.6% of participants using inhalants, which corresponds to a 20.4% decrease.

Relative to the prior years, these data are somewhat disappointing, as there were only two statistically significant changes. For instance, in FY '11, the number of users decreased for all substances, and the changes were significant for four of those substances. In past years, the number of users typically decreased for all substances and to the level of significance for six to eight substances annually. Nevertheless, these results do represent improvement from FY '12, where there were no statistically significant improvements.

Chart 3 depicts the pre-test prevalence for each of the eight substances along with the percentage decreases in the number of users.

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

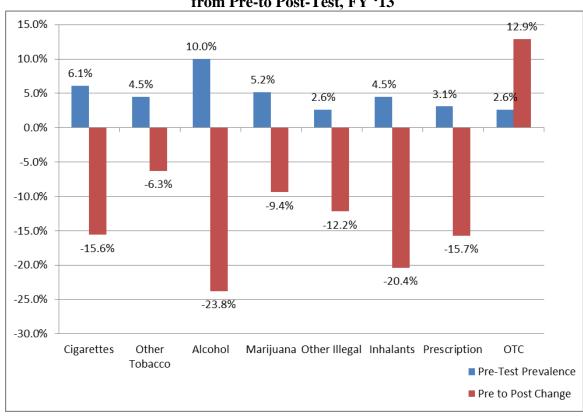


Chart 3. Substance Use, Pre-Test Rates and Percentage Change in Users from Pre-to Post-Test, FY '13

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.

Charts 4 and 5 show that the vast majority of participants who begin programs as non-users remain non-users. For each substance, more than 95% of non-users maintained non-use. These results are similar to FY '12, but noting that the result for alcohol was more favorable than last year.

Chart 4. Percent of Pre-Test Non-Users Who Remained Non-Users, FY '13 and '12

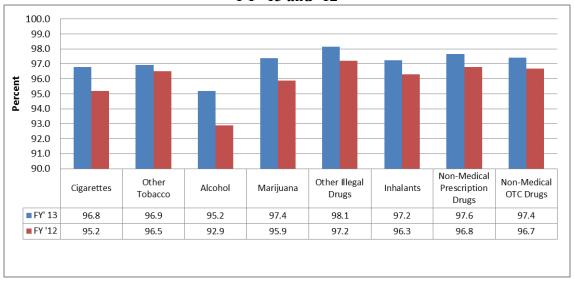
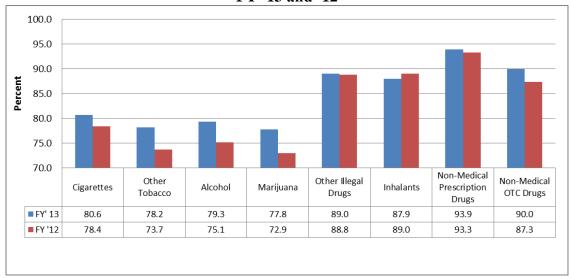


Chart 5. Percent of Pre-Test Users Who Reduced Their Level of Use, FY '13 and '12



Marijuana and other tobacco users 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 percentages that did still represent a strong majority. A considerably higher percentage of pre-test marijuana users reduced their level of use in FY '13 compared to FY '12.

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. The middle school participant group had no

statistically significant changes in the percentage of substance users. There were statistically significant decreases in cigarette, other tobacco, alcohol, and marijuana use for high school students. Overall, these results are somewhat more favorable than the FY '12 results.

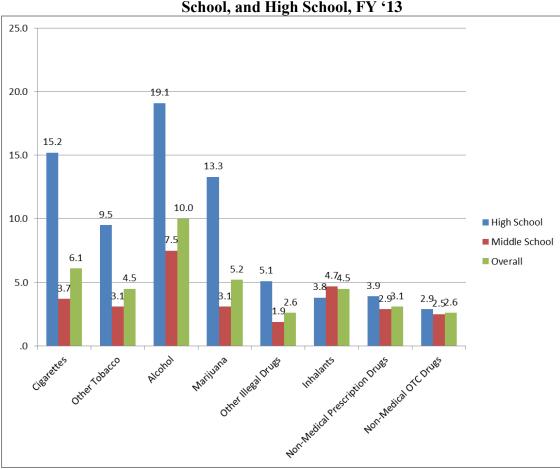


Chart 6. Overall Results, Rates of Substance Use at Pre-Test: Overall, Middle School, and High School, FY '13

It should be noted in Chart 6 that the high school group had higher percentages of every substance, except inhalants. Alcohol was the most commonly used drug by far for both groups, followed by cigarettes and marijuana for both groups.

Gender. Table A2 shows data results separated by gender. Males generally had a higher baseline level of substance use than females. Not surprisingly, there was more room for improvement for males, where decreases over time in cigarette and alcohol use were found. No changes were statistically significant for females.

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. There was no consistent pattern distinguishing substance use rates between the two largest race groups in the dataset, White participants and Black or African American participants. There was

one statistically significant change, which was a 22.6% decrease in the percentage of Black or African American users of alcohol.

Non-Hispanic individuals showed statistically significant decreases in cigarette, alcohol, and inhalant use, where these statistically significant decreases were not observed for Hispanic individuals.

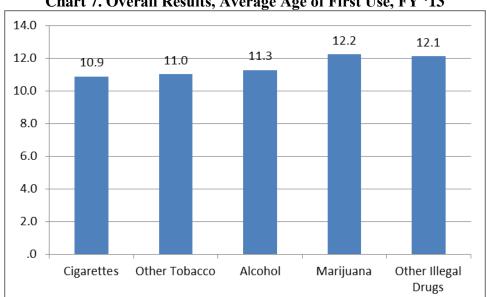


Chart 7. Overall Results, Average Age of First Use, FY '13

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 7, 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 12.2 and 12.1, respectively. These figures are comparable to the results for FY '12.

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, nearly identical to last year, just under two out of every three students (63.9%) report they had talked to their parents about the dangers of drugs in the past year. Additionally, almost identical to last year, 74.7% 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 (OTC) drugs. There were 3,208 matched participants, meaning there was a valid pre- and post-test for these individuals. This number is a decrease from 3,490 in FY '12. Most (92.1%) participants were between the ages of 10 and 14. Gender percentages were essentially equal. Most participants identified as Black or African American (49.1%), White (39.7%), or "Other" (5.4%) race. Five percent of participants were of Hispanic, Latino, or Spanish descent or origin.

The results showed statistically significant positive changes on four of the five risk factor measures: perceived risk (10.8%), decision-making (4.6%), favorable attitudes (3.7%), and perceived peer norms (2.3%). There were two statistically significant changes in substance use. There was a 23.8% decrease in the percentage using alcohol and a 20.4% decrease in the percentage using inhalants.

The vast majority of participants who begin programs as non-users remained non-users. For each substance, more than 95% of non-users maintained non-use. The large majority of substance users at pre-test were using less or not all for that substance by post-test.

Demographic analyses reveal positive changes in risk factor measures for both middle school and high school age youth and for both females and males. In addition, risk factor results were generally positive across race groups. There were differences in risk factor results by ethnicity, with non-Hispanic individuals having a greater number of statistically significant improvements. Changes in substance use rates were mixed across some demographic groups.

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 12.2 and 12.1, respectively.

SECTION III: PROGRAM OUTCOMES

Across the provider network, 15 different programs were implemented in this and the prior fiscal year, down from 17 in FY '11 and 20 in FY '10. In this section, we compare the outcomes for the programs with 20 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 Results, By Program

Program	# of Sites	Measures with Significant Change
All Interventions	37	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Perceived Parental Attitudes Alcohol Inhalants
Alcohol-Drug True Stories	1	None
All Stars	6	Perceived Risk Perceived Peer Norms Perceived Parental Attitudes Alcohol
Class Action	2	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Other Tobacco Alcohol Cigarettes Marijuana
G.I.R.L. Power Series	1	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Perceived Parental Attitudes
Keep a Clear Mind	1	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Perceived Parental Attitudes Other Tobacco
Keepin' It Real	2	Perceived Risk
Life Skills Training	9	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Inhalants
Project Alert	6	Perceived Risk Perceived Peer Norms

Program	# of Sites	Measures with Significant Change
Project Northland	2	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Alcohol
Project TND	1	Perceived Risk Decision-Making Favorable Attitudes Perceived Peer Norms Perceived Parental Attitudes Cigarettes Marijuana Alcohol
Project Toward No Tobacco Use (TNT)	1	Perceived Risk Perceived Peer Norms Perceived Parental Attitudes
Too Good For Drugs	2	Perceived Risk Perceived Peer Norms Perceived Parental Attitudes Alcohol
Why Try	1	Favorable Attitudes
Youth Board	1	-
Youth Mentor Program	1	-

Italics indicate undesired change.

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

Alcohol-Drug True Stories (hosted by Matt Damon) is a movie with testimonials by real people about their experiences with alcohol and drugs. There is also a discussion guide that accompanies the movie, which used together represent an evidenced-based practice listed by the National Registry of Evidence-based Programs and Practices. This program was implemented with 56 matched youth at one site. There were no statistically significant changes in risk factors or substance use.

All Stars is a comprehensive evidence-based ATOD prevention curriculum. This program was used by six sites with a total of 532 matched participants. There were two desirable risk factor changes (perceived risk and perceived peer norms).

Class Action is a comprehensive evidence-based ATOD prevention curriculum. This program was used by two sites with a total of 156 matched participants. There were desirable changes on four of the five risk factors (perceived risk, decision-making, favorable attitudes, and perceived peer norms). In addition, there were statistically significant decreases in other tobacco and alcohol use.

G.I.R.L. Power Series is a single-county prevention program. G.I.R.L. (Gifted, Intelligent, Responsible Ladies) Power is a seven-session program assisting young girls with development of positive social skills, emphasizing respect for self and others, handling peer pressure, manners, and being comfortable in your own skin. There were desirable changes on all five risk factors for the 20 girls attending this program.

Keep a Clear Mind is a comprehensive evidence-based ATOD prevention curriculum. This program was implemented at one site with 53 matched participants. There were desirable changes on four of the five risk factors (perceived risk, decision-making, favorable attitudes, and perceived peer norms).

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 two sites with a total of 236 matched participants. The results show a statistically significant improvement in perceived risk.

Life Skills Training, a skill-based, evidence-based ATOD prevention curriculum, was the most commonly implemented program with nine sites and 678 matched participants. There were desirable changes on four of the five risk factors (perceived risk, decision-making, favorable attitudes, and perceived peer norms) and a decrease in inhalant use.

Project Alert, a comprehensive evidence-based ATOD prevention curriculum for middle school students, was delivered at six sites to 535 matched participants. The results showed a desirable change for perceived risk.

Project Northland, an evidence-based ATOD prevention curriculum with a strong focus on alcohol and influencing the environment, was used by two sites with a total of 81 matched participants. The results show a statistically significant improvement in perceived risk, decision-making, favorable attitudes, and perceived peer norms, as well as a statistically significant decrease in alcohol use.

Project TND, a prevention curriculum intended for high school students, was used by one site with 82 total matched participants. The results showed desirable changes for all risk factor measures (perceived risk, decision-making, favorable attitudes, perceived peer norms, and perceived parental attitudes). There were also significant decreases in cigarette and marijuana use.

Project Toward No Tobacco Use (TNT), a comprehensive, evidence-based tobacco prevention program for middle school youth was used by one site, with 63 matched participants. The results showed improvements for perceived risk and perceived peer norms, but also showed an undesirable change in perceived parental attitudes.

Too Good for Drugs is an evidence-based program with specific lessons for each middle and high school grade. Two sites, with a total of 672 matched participants, used this program. The results showed a statistically significant, desirable change for perceived risk; however, there were statistically significant, undesirable changes for perceived peer norms and perceived parental attitudes.

Why Try is a comprehensive evidence-based ATOD prevention curriculum, which was implemented at one site with 37 participants. There was an undesirable, statistically significant change in favorable attitudes.

Youth Board and Youth Mentor Program were both implemented at only one site with five and two matched participants, respectively. Due to anonymity concerns, these results are not reported.

Evidence-Based vs. Non-Evidence-Based Programs

County authorities are not required to use evidence-based interventions exclusively, though most do. In FY '13, 99.2% (all but 27 of matched pre-post tests) of participants were served in evidence-based programs. Due to the large difference in numbers of participants served in evidence-based versus non-evidence based programs, we do not compare the pre-post results by these groups. In past years, we have generally seen superior outcomes from the evidence-based programs.

Summary of Section III

There were 24 county authority program implementations of 15 different programs in FY '13. The large majority (99.2%) of participants with matched pre- and post-tests were served in evidence-based programs. Comparing outcomes across programs, the best results were seen for Class Action, Life Skills Training, Project Northland, and Project TND, which showed desirable changes in at least four risk factors and a decrease in the use of at least one substance.

SECTION IV: METHODOLOGY AND ANALYSIS ISSUES

In this section, we describe the evaluation design that generated the outcomes from preand 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, 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. However, when the program was 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 benefits.

<u>Floor and Ceiling Effects</u>. 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 providers 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.

<u>Short Duration Between Pre- and Post-Surveys</u>. 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-tests 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.

<u>Ineffective Interventions</u>. 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 the right match for their target population and setting, and this may have been an important factor in the different levels of success across locations.

<u>Fidelity</u>. 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.

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.

<u>Testing Pre- and Post-Survey Differences in Substance Use</u>: 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). In FY'08, the ASIP program 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'13 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, 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:

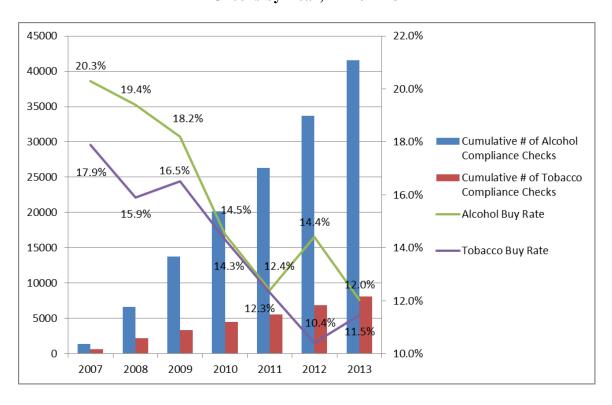
- Publicity to alcohol and tobacco sales staff that enforcement operations will be increasing,
- Awareness-raising with the community to increase its acceptance of increased compliance operations,

- 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 was required to use the DAODAS Compliance Check Form when cooperating with local law enforcement to implement alcohol or tobacco compliance checks. The form requests 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.

In FY'13, there were 7,830 alcohol and 1,274 tobacco compliance check forms returned. Compared to FY'12, this is an increase for alcohol (7,422) and tobacco (1,242). The FY '11 totals were 6,108 and 1,127, '10 totals were 6,438 and 1,088, '09 totals were 7,121 and 1,182, and FY' 08 totals were 5,261 and 1,599, respectively. In FY '13, 39 counties returned alcohol compliance check forms, while 34 counties returned tobacco forms. There may have been additional compliance checks for which a form did not get returned to DAODAS, so the data received may not reflect every compliance check during the year. It should, however, contain the vast majority. As shown in Chart 8, the data suggested that buy rates returned to a low of 12.0% for alcohol (12.4% in FY' 11 and 14.4% in FY' 12), but buy rates were slightly up from 10.4% to 11.5% for tobacco. Tables 5 and 6 show the buy rate for each county.

Chart 8. Percentage of Stores Selling and Cumulative Number of Compliance Checks by Year, FY '07-'13



Most FY '13 alcohol compliance checks were conducted at convenience stores (66.0%). The next most common type of location was large grocery stores (9.0%), then liquor stores (8.2%), drug stores (4.6%), restaurants (4.2%), "other" (3.2%), bars (2.7%), and small grocery stores (2.1%). In most cases, the youth attempted to buy beer (76.2%) although a substantial 13.1% attempted to buy alcopops or alcohol energy drinks and 8.5% attempted to buy liquor. The most common age for the youth volunteers was 18 (26.0%) or 19 (24.5%). More buyers were male (64.1%). The large majority of alcohol checks were conducted by White youth (85.6%), followed by Black or African American youth (12.9%). These figures are similar to the FY' 12 figures.

For tobacco compliance checks, 72.1% were conducted at convenience stores, followed by large grocery stores (11.4%), and drug stores (8.4%). Buyers typically attempted to buy cigarettes (75.2%), with smokeless tobacco, cigars, or blunts being the other products targeted. In FY '08, only 5% of attempts were for other tobacco products, meaning these products have been increasingly targeted over the years. The most common age for the youth volunteers was 17 (49.1%). More buyers were male (55.5%). More than 83.0% of tobacco compliance checks were conducted by White youth, with the majority of the remainder being done by Black or African American youth (12.3%).

Table 5. FY '13 Alcohol Compliance Check Buy Rates by County

County Name	Total Eligible Purchase Attempts	Buy	Buy Rate
Abbeville	1	0	0.0%
Aiken	87	15	17.2%
Allendale	0	0	N/A
Anderson	50	19	38.0%
Bamberg	33	0	0.0%
Barnwell	58	12	20.7%
Beaufort	0	0	N/A
Berkeley	685	62	9.1%
Calhoun	15	1	6.7%
Charleston	437	86	19.7%
Cherokee	51	8	15.7%
Chester	46	4	8.7%
Chesterfield	101	16	15.8%
Clarendon	20	5	25.0%
Colleton	56	20	35.7%
Darlington	440	34	7.7%
Dillon	63	11	17.5%
Dorchester	69	6	8.7%
Edgefield	0	0	N/A
Fairfield	18	3	16.7%
Florence	318	25	7.9%
Georgetown	37	11	29.7%
Greenville	2382	170	7.1%

County Name	Total Eligible Purchase Attempts	Buy	Buy Rate
Greenwood	128	8	6.3%
Hampton	0	0	N/A
Horry	190	32	16.8%
Jasper	8	2	25.0%
Kershaw	85	13	15.3%
Lancaster	30	3	10.0%
Laurens	51	9	17.6%
Lee	51	4	7.8%
Lexington	314	60	19.1%
Marion	0	0	N/A
Marlboro	67	9	13.4%
McCormick	0	0	N/A
Newberry	69	8	11.6%
Oconee	69	11	15.9%
Orangeburg	76	24	31.6%
Pickens	477	60	12.6%
Richland	173	47	27.2%
Saluda	0	0	N/A
Spartanburg	286	29	10.1%
Sumter	140	44	31.4%
Union	0	0	N/A
Williamsburg	52	15	28.8%
York	576	54	9.4%

Table 6. FY '13 Tobacco Compliance Check Buy Rates by County

Table 6. F 1 15 Tobacco Comphanice Check Buy Rates by County					
County Name	Total Eligible Purchase Attempts	Buy	Buy Rate		
Abbeville	0	0	N/A		
Aiken	20	2	10.0%		
Allendale	0	0	N/A		
Anderson	15	0	0.0%		
Bamberg	26	1	3.8%		
Barnwell	4	0	0.0%		
Beaufort	10	0	0.0%		
Berkeley	50	6	12.0%		
Calhoun	15	1	6.7%		
Charleston	0	0	N/A		
Cherokee	8	2	25.0%		
Chester	0	0	N/A		
Chesterfield	7	2	28.6%		
Clarendon	22	5	22.7%		
Colleton	10	3	30.0%		
Darlington	68	4	5.9%		
Dillon	0	0	N/A		
Dorchester	3	0	0.0%		
Edgefield	0	0	N/A		
Fairfield	4	0	0.0%		
Florence	362	42	11.6%		
Georgetown	6	1	16.7%		
Greenville	147	6	4.1%		
Greenwood	3	0	0.0%		
Hampton	7	4	57.1%		
Horry	15	4	26.7%		
Jasper	0	0	N/A		
Kershaw	23	7	30.4%		
Lancaster	15	0	0.0%		
Laurens	17	2	11.8%		
Lee	9	1	11.1%		
Lexington	75	11	14.7%		
Marion	0	0	N/A		
Marlboro	4	1	25.0%		
McCormick	0	0	N/A		
Newberry	18	2	11.1%		
Oconee	3	0	0.0%		
Orangeburg	20	4	20.0%		
Pickens	54	8	14.8%		
Richland	78	13	16.7%		
Saluda	0	0	N/A		
Jaiuua	U	U	IN/A		

County Name	Total Eligible Purchase Attempts	Buy	Buy Rate
Spartanburg	166	13	7.8%
Sumter	4	1	25.0%
Union	0	0	N/A
Williamsburg	0	0	N/A
York	1	1	100.0%

For alcohol, the sale rate for alcopops/alcohol energy drinks was just below the sale rate for beer (11.7% vs. 13.8%). The sale rate for liquor was 11.4%, and the sale rate for wine or wine coolers was 16.0%, though among a smaller sample of checks (169). The type of product purchased was a significant factor on the alcohol sale rate in most past years due to a high sale percentage for liquor, but that difference was not as pronounced in FY '13.

In Table 7 below, some of the higher and lower sale proportions are shown for some types of alcohol products. Heineken (33.3%) and Twisted Tea (34.8%) had the highest sale proportions, as they were sold about one third of the times they were requested.

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

Notable Low Sales		Notable High	Notable High Sales		
Product	Sale %	Product	Sale %		
Seagrams	2.3%	Strawberita	20.0%		
Mad Dog	4.3%	Mikes Hard Lemonade	22.4%		
Natural Light	5.5%	Sparks	25.0%		
Rum	5.7%	Bud Ice	28.6%		
Budweiser	6.1%	Heineken	33.3%		
Michelob Ultra	6.5%	Twisted Tea	34.8%		

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 67.6% and 63.6% of the time. More than 79% of outlets had posted signage stating that they check IDs, but the percentage of stores that had age-verification equipment was closer to half. For alcohol and tobacco, analyses suggested that each feature was statistically significantly associated with a sale being less likely to occur.

Table 8. Compliance Check Merchant Practices

Compliance Check Feature	Alcohol (%)	Tobacco (%)	
Sales Completed	12.1	11.5	
Merchant Asked Buyers Age	20.4	20.2	
Merchant Asked to See ID	86.8	73.2	
Merchant Studied ID	67.6	63.6	
Visible ID-Checking Signage in Store	80.5	79.6	
Age-Verification Equipment Used	42.3	53.4	

Table 9 shows that small grocery stores and drug stores had lower sales rates for alcohol than other types of businesses, while bars and restaurants had the highest. Convenience stores had the highest tobacco sales rates. The type of business was a statistically significant factor on the alcohol sale rate (p<.001). Type of business was only marginally, statistically significant for tobacco sales (p=.053).

Table 9. Percentage of Completed Sales by Type of Business

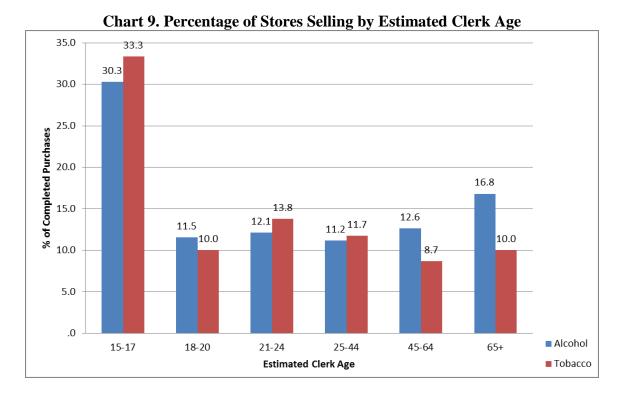
Type of Business	N (Alcohol Purchase Attempts)	% Sales Completed— Alcohol	N (Tobacco Purchase Attempts)	% Sales Completed— Tobacco
Bar/Tavern	215	21.4%	0	-
Convenience Store Only	470	11.3%	74	16.2%
Convenience Store/Gas Station	4694	11.8%	844	12.7%
Drug Store	359	7.5%	107	7.5%
Large Grocery	704	9.9%	145	6.9%
Liquor/ABC/Package Store	645	12.4%	0	-
Restaurant	332	22.0%	0	-
Small Grocery	162	6.8%	58	5.2%

Table 10 displays the percentages of sales completed based on multiple demographic characteristics of the clerks and buyers. Clerk race was the only statistically significant predictor of alcohol sales (p=.005) and buyer race was the only statistically significant predictor of tobacco sales (p=.033). The former was due to Hispanic clerks being more likely to sell alcohol and buyers of Hispanic or "other" race being less likely to successfully complete a tobacco sale. There was no difference in sale rates for either product based on buyer gender.

Table 10. Percentage of Retailer Sales by Demographic Characteristics

Compliance Check Characteristic	% Sales Completed— Alcohol	% Sales Completed— Tobacco
Clerk Female	11.6	10.4
Clerk Male	12.8	13.2
Clerk Black	13.5	9.8
Clerk Hispanic	17.3	20.8
Clerk Other	10.8	11.3
Clerk White	11.5	12.0
Buyer Female	12.9	12.7
Buyer Male	11.6	10.5
Buyer Black	11.8	12.1
Buyer Hispanic	14.6	1.9
Buyer Other	15.8	.0
Buyer White	12.0	11.7
Gender Diff.	11.3	10.6
Gender Same	13.0	12.4
Race Diff.	12.8	11.0
Race Same	11.3	12.1

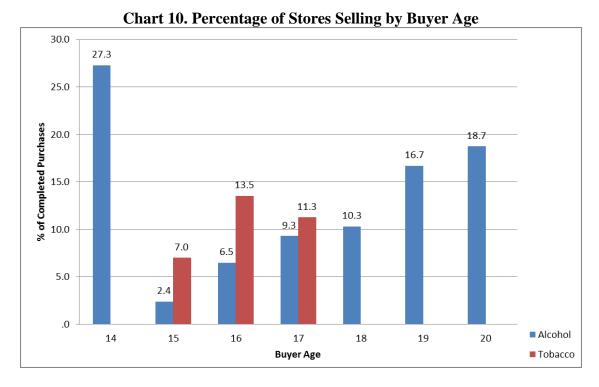
Youth buyers were asked to estimate the age of the clerk who handled their attempted purchase. Clerk age had a statistically significant effect on the sales rate for alcohol (p<.001), but not for tobacco. As seen in Chart 9, clerks estimated to be 15-17 had a much higher sale rate for alcohol.



The age of the purchaser had a statistically significant effect on sale rates only for tobacco (p<.001). Chart 10 below shows that sales generally were more common for older than younger buyers.

Analyses were conducted to see if the time of the inspection was a significant factor in whether a sale is made. This was limited to weekday checks. First, an analysis was done based on whether the inspection was done before or after 3 pm, approximating whether youth would normally be in or out of school. In addition, 6 pm was used as a day/night proxy. Neither analyses indicated that time of day is a significant factor.

The average clerk fine for an alcohol sale, at the time of ticketing, was \$ 635.46, and the most common amount was \$678.00. The average fine for a tobacco sale ticket was \$424.17, with \$470.00 being the most common amount.



The compliance check form includes a section where officers should ask offenders if they have ever taken a merchant education class. Five of 74 (6.8 %) indicated they had.

Bar Checks

The other primary enforcement activity aimed at retailers are bar checks. The intent of bar checks can vary between (1) doing a sweep of patrons in a bar/restaurant to look for those who are underage or have fake IDs, (2) looking for retailer violations such as selling to underage customers or some other violation of an alcohol license, or (3) building rapport with retailers or reminding them to be mindful of relevant laws during a "walk through" or "casual contact." One "bar check" or visit to an establishment could serve multiple purposes.

There were a total of 761 bar checks reported in FY '13. Twenty-three counties reported bar checks with the 9th (31.5%) and 14th (22.9%) AET Circuits doing the most. Most bar checks included a fake ID sweep (358), followed by "causal contacts" (348) and inspecting the retailers for violations (140).

A total of 107 tickets were written for fake IDs. Another 561 alcohol-related violations were written against customers during these bar checks. Officers issued 93 verbal or written warnings.

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. In FY'13, 10 counties representing eight circuits conducted shoulder taps a total of 25 different times, down from 31 in FY'12 and 64 in FY'11. Altogether, 208 individuals were approached in FY'13. Eight purchased alcohol for the youth, resulting in a 3.8% violation rate. In FY'12 the rate was 7%, and it was 5% in FY'11. Nine other alcohol-related charges were written during these operations.

Public Safety Checkpoints/Saturation Patrols

A total of 1,011 public safety checkpoints, often called sobriety checkpoints, were implemented in FY'13, the highest total ever for the AETs and an increase from the 928 in FY '12. There were 34 different counties with checkpoints in FY'13, an increase from 32 different counties with checkpoints in FY '12. Checkpoints done by the 6th and 11th judicial circuits comprised 55% of the total checkpoints across the state.

A total of 93,879 cars went through those checkpoints across the state. AET reports for these checkpoints show that there were 405 DUIs (25 underage), 118 felony arrests, 233 fugitives apprehended, 5 Fake IDs, 2 stolen vehicles recovered, 674 drug possession charges, 27 underage tobacco possession charges, and 806 open container violations. These ticket totals for underage drinking, DUI, drug possessions, and open container are somewhat higher than FY '12, but they are generally comparable.

In FY '13, 574 saturation patrols were reported. These patrols resulted in 5,675 total tickets, mostly for "other" offenses (2,444) and speeding (1,143). There were 14 underage drinking tickets, 229 DUIs (17 underage), 396 open container violations, 11 fake ID violations, and 257 drug offenses.

Colleton County represented more than one third of the reported saturation patrols (221). Twenty two counties reported at least one patrol.

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 counties turned in AET party dispersal reporting forms in FY '13, which was the same as FY '12. Pickens

County alone accounted for 41.2% of the total 153 parties dispersed across the state. The number of parties dispersed was similar to FY '12 (154).

The 153 parties had an estimated total 12,662 attendees. A total of 1,069 tickets were written during these operations, including 801 for underage drinking violations (715 of those for 17 to 20 years old), 43 for transfer of alcohol to an underage person, 48 for unlicensed keg possession, 17 for fake IDs, and 65 for drug possession. The most common alcoholic beverage confiscated was beer.

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 149 parties prevented in FY'13, more than the 137 prevented in FY'12 and the 131 in FY '11.

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 '13, 23 counties turned in tobacco agreements compared to 22 in FY '12, 23 in FY '11, 22 in FY '10, 19 in FY '09, and 16 in FY '08. 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.

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 '13 and collectively served 1,147 retail staff, which is down from 1,675 in FY '12. Thirty seven of the 46 counties served at least one retailer in PREP, and Greenville (175) served the most.

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. Among those who passed in FY '13, the average score was 93.6%.

Diversionary 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. There were 763 youth served in AET in FY '13, a decrease from FY '12 when 1,082 youth were served. This reflects a general decrease over time, as 1,420 youth were served in FY '11, but 1,086 youth were served in FY '10. The bulk of the youth served in FY '13 came from Pickens (208), Spartanburg (140), and Charleston (103).

For tobacco, county agencies offer the Tobacco Education Program (TEP) for youth as a program they can complete when charged with underage tobacco possession in lieu of paying a fine. In FY '13, 293 youth participated in TEP, which is down from 361 in FY '12. Thirteen counties delivered TEP in FY '13, with Chester (82) and Dorchester (77) serving the most youth.

TEP is evaluated with a post-test-only design comprised of true/false questions and four items that assess attitudes and intentions. About 39% of participants got all 11 true/false questions correct (well above the 30% for FY '10), and a total of 78% got nine, 10, or 11 correct (higher than the 68% in FY '10), which is considered passing. 14% of participants indicated they see themselves quitting tobacco products in the near future.

Alcohol Enforcement Team Awareness Activities

AET awareness activities included holding town hall meetings, doing educational sessions for youth or adults, conducting local media campaigns, 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 366 media placements (articles, TV stories, etc.) during FY '13. There were 100 presentations and media events occurring during "Out of Their Hands" conducted the entire month of April 2013. This includes all forms of media including television, radio, and social media as well as presentations conducted at schools, colleges, and universities. The number of media placements in FY '13 is up from 323 media placements in FY '12.

Alcohol Enforcement Team Training

Since the beginning of the expansion of AET statewide in FY '08 (July 2007), there has been a commitment to following the AET Model established by a small number of counties. This model is based on national "best practices." A key component of the AET model utilized in South Carolina involves developing local law enforcement support for underage drinking prevention and enforcement efforts. In order to develop local law enforcement support, an initial training date was held in October 2007. This training was

conducted by the national Underage Drinking Enforcement Training Center (UDETC) funded by the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP). UDETC is managed by Pacific Institute for Research and Evaluation (PIRE) and is located in Calverton, Maryland.

It was decided after that initial OJJDP/UDETC training to establish additional training on various underage drinking enforcement topics. With the assistance of UDETC, a training cadre was formed from South Carolina (DAODAS and PIRE) staff members as well as local personnel. These instructors have conducted training on Alcohol Enforcement Team training topics such as Fake IDs, Public Safety Checkpoints, Source Investigation, Special Alcohol Events Management, Current Alcohol Trends and Fads, Alcohol Screener Devices, and other topics to increase capacity of law enforcement officers, prevention specialists, and other community partners to enforce underage drinking laws and educate citizens in the value of enforcing those laws.

In FY' 13, there were 35 training sessions conducted in 17 counties in South Carolina. Seven hundred and fourteen individuals attended the training sessions, with 522 individuals employed as law enforcement officers. Two hundred and two youth participated; however, their involvement was as role-players in mock party dispersal training. This training module was combined with primary training topics such as the Two-Day AET Training, AET Activities Training, and Fake ID Training.

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 saturation patrols.

County authority prevention staff and AET Coordinators returned forms on 7,830 alcohol compliance checks and 1,274 tobacco compliance checks. These are increases over FY '12 totals. For alcohol, 12.0% of attempts generated sales, compared to 11.5% for tobacco. This is the second lowest sale rate that we have ever tracked for tobacco checks, which suggests a successful impact from consistent enforcement. Nevertheless, it should be noted that sales are up from FY '12 (10.4%). For alcohol, the rate dropped to 12.0%, which is the lowest sale rate that has been tracked for alcohol.

Most merchants asked to see the buyers' IDs (86.8% and 73.2% for alcohol and tobacco, respectively) and most merchants studied the IDs (67.6% and 63.6% for alcohol and tobacco, respectively). Findings by race suggested that Hispanic clerks were more likely to sell alcohol and Hispanic buyers were less likely to have completed sales for tobacco. Not surprisingly, clerks estimated to be young (ages 15-17) were more likely to sell alcohol.

The counties served 1,147 merchants in the Palmetto Retailers Education Program (PREP) in FY '13.

AETs reported a total of 1,011 public safety checkpoints, an all-time high. Among the violations, there were 405 DUIs. In addition, there were 574 saturation patrols reported. This operation generated another 5,675 tickets. There were 229 DUIs.

AETs dispersed 153 parties, with one county accounting for 41.2% of those operations. Together, 1,069 tickets (801 for underage drinking) were written during those dispersals. Another 149 parties were reported as having been prevented due to proactive use of advanced information. A total of 208 individuals were approached by the cooperating youth to purchase alcohol as part of Shoulder Tap operations, with 8 purchasing (3.8% sales).

In FY '13, we formally collected data on bar checks for the second year. There were 761 establishments checked. These resulted in 107 fake ID violations and 561 other alcohol-related charges to patrons.

Far more youth were served in a diversion program for youth alcohol offenses (763 served in the Alcohol Education Program) than tobacco (293 served in the Tobacco Education Program).

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. Between Jan. 1 and Feb. 28, 2013 (considered the FFY 2014 study), 190 youth volunteers ages 15-17, under trained adult supervision, conducted 408 random, unannounced cigarette purchase attempts in all 46 counties. These outlets were randomly sampled from the estimated 8,000 outlets in the state.

The FFY '14 results indicated an estimated overall sales rate (also known as a Retailer Violation Rate or RVR) of 10.6%. This rate is far better than 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. The 95% confidence interval for this year's violation rate is from 7.6% to 13.6%, meaning that statistical projections tell us that if we had taken multiple samples from every store in the state, it would be 95% likely the calculated violation rate would fall in that range. The FFY '13 rate was 11.7%.

We note that the findings discussed below from sub-analyses are based on unweighted data, meaning that the percentages differ from what they would if they were weighted. Nevertheless, the information should provide helpful information for general associations and patterns (by demographics, etc.) regarding the sales rate.

The age of the youth volunteer was not statistically significantly related to successful purchases, as was found last year. In addition, like last year, there was no statistically significant difference by gender. White youth were sold to less frequently than other youth (10.8% vs. 22.4%), which was a statistically significant difference (p=.002). Perceived age, race, and gender of the clerk were unrelated to whether a sale occurred, similar to last year.

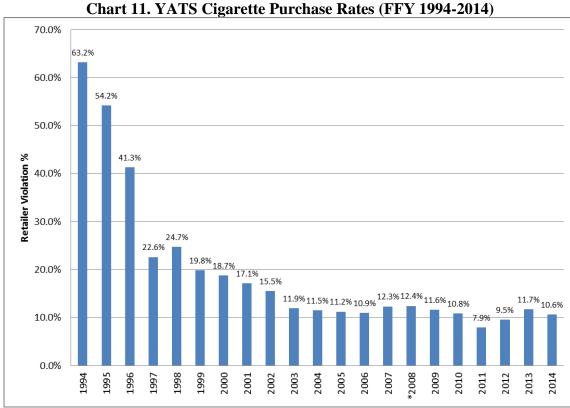
Past analyses have shown an important link between regular local tobacco compliance checks and our success with Synar rates. For example, with the FFY'10 Synar data, we compared county Synar data to the levels of tobacco compliance check enforcement in that same county for the previous year. We found that counties with enforcement had better buy rates than those that did not (10% vs. 15%), though the difference was not significant. However, the difference was significant (p<.001) when comparing those counties with more than 40 compliance checks to those with less than 40 (5% vs. 15% violation rates).

For the present report, we analyzed FFY '14 Synar data and FY '12 tobacco compliance check data. In this case, the difference in rates between counties with any enforcement (11.2% sales) and those with no enforcement (18.6%) approached significance (p=.096). However, the difference between those counties with more than 40 compliance checks and those with fewer did not approach statistical significance (14.4% vs. 20.5%).

Number of tobacco outlets in a county had no relationship to the buy rate. These results are similar to the findings in recent years.

In reviewing the FFY '14 Synar data in relation to FY '12 compliance check numbers, we also analyzed totals of tobacco and alcohol compliance checks (80 or more total versus less than 80 total) under the premise that total enforcement, regardless of the substance targeted, may impact retailer's attentiveness to preventing under sales of either substance. This also showed no impact of higher levels of enforcement.

To note, survey data suggest that reducing youth retail access to tobacco requires continued attention. According to the 2011 Youth Tobacco Survey, 19% of high school students report getting their cigarettes from a store or vending machine, compared to 11% of youth buying their alcohol themselves, according to the 2011 Youth Risk Behavior Survey.



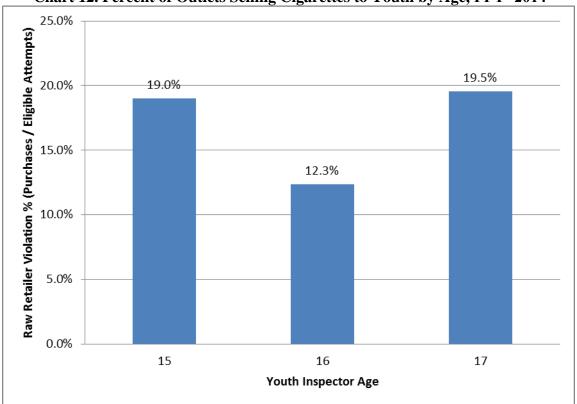
*Starting with the FFY 2008 study, the state did not allow 14-year-old inspectors, which consistently were sold to less often than the 15- to 17-year-old inspectors. It can be assumed that, beginning with FFY 2008, RVR rates would have been lower without this change.

Table 11. FFY 2014 Youth Access to Tobacco Raw Buy Rates

	Total Eligible			
County Name	Attempts	No Buy	Buy	Buy Rate
Abbeville	2	2	0	0.0%
Aiken	10	10	0	0.0%
Allendale	2	2	0	0.0%
Anderson	15	14	1	6.7%
Bamberg	2	1	1	50.0%
Barnwell	2	2	0	0.0%
Beaufort	8	6	2	25.0%
Berkeley	19	16	3	15.8%
Calhoun	2	1	1	50.0%
Charleston	38	28	10	26.3%
Cherokee	7	7	0	0.0%
Chester	5	5	0	0.0%
Chesterfield	3	3	0	0.0%
Clarendon	3	3	0	0.0%
Colleton	5	5	0	0.0%
Darlington	8	8	0	0.0%
Dillon	3	3	0	0.0%
Dorchester	9	5	4	44.4%
Edgefield	1	1	0	0.0%
Fairfield	2	2	0	0.0%
Florence	13	12	1	7.7%
Georgetown	6	6	0	0.0%
Greenville	46	22	24	52.2%
Greenwood	2	2	0	0.0%
Hampton	5	5	0	0.0%
Horry	29	20	9	31.0%
Jasper	7	7	0	0.0%
Kershaw	6	6	0	0.0%
Lancaster	6	4	2	33.3%
Laurens	5	5	0	0.0%
Lee	3	2	1	33.3%
Lexington	18	17	1	5.6%
Marion	4	4	0	0.0%
Marlboro	6	6	0	0.0%
McCormick	1	1	0	0.0%
Newberry	3	3	0	0.0%
Oconee	4	3	1	25.0%
Orangeburg	7	5	2	28.6%
Pickens	7	7	0	0.0%

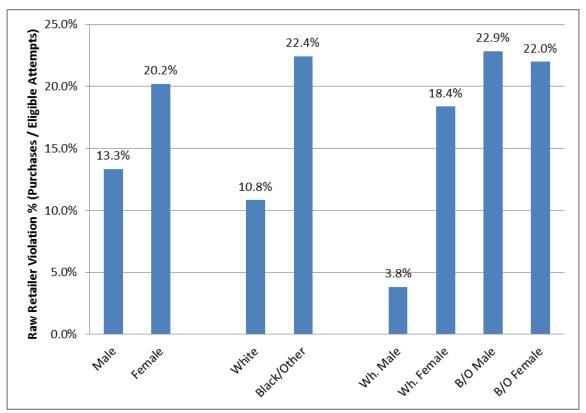
County Name	Total Eligible Attempts	No Buy	Buy	Buy Rate
Richland	20	20	0	0.0%
Saluda	2	2	0	0.0%
Spartanburg	22	22	0	0.0%
Sumter	10	9	1	10.0%
Union	2	2	0	0.0%
Williamsburg	9	9	0	0.0%
York	19	15	4	21.1%

Chart 12. Percent of Outlets Selling Cigarettes to Youth by Age, FFY '2014



Note: The differences by age are not statistically significant.

Chart 13. Percent of Outlets Selling Cigarettes to Youth by Youth Gender & Race, FFY 2014



Note: The differences between white youth and other youth are statistically significant.

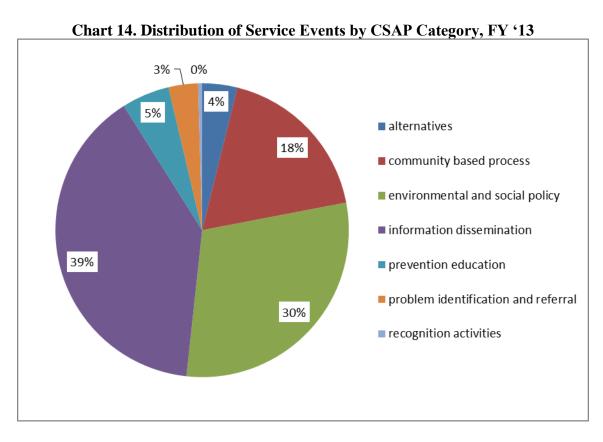
SECTION VII: OTHER PREVENTION INTERVENTIONS

In the previous chapters, we have described the cumulative outcomes, to the extent possible, of youth curricula, environmental approaches, and the Youth Access to Tobacco Study. Prevention professionals deliver an even wider range of services than this list, however. Below are some of the other common prevention programs offered:

- Parenting Programs
- Working with Coalitions
- Information Dissemination
- Alternative Activities
- HIV/AIDS Programming

These types of programs are important components of a well-rounded county prevention effort. However, they do not lend themselves well to measurable outcomes and there are no consistent statewide tools to capture outcome data on them.

State Distribution of Service Events



The KIT Prevention online reporting system had prevention staff code each service activity in one of seven CSAP prevention categories. Chart 11 shows the distribution of the 1,137 service events by category. It should be noted that not just Block Grant funded efforts are entered into KIT Prevention, and therefore comprise the data represented in

the chart. All Community Action for a Safer Tomorrow (CAST) services and activities are entered along with some other local efforts funded by various sources.

The largest categories, representing 87% of service events, are community-based processes, 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.

APPENDIX A: ADDITIONAL DATA TABLES

Table A1. Overall Results by Age

	Midd	le School (n=	2509)	High School (n=679)			
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	
Perceived Risk, 0-3	2.0	2.2	9.5**	1.8	2.1	15.9**	
Decision-Making Skills, 0-3	1.9	1.9	3.6**	1.7	1.9	8.9**	
Favorable Attitudes, 0-2	1.6	1.7	2.0**	1.2	1.3	11.9**	
Perceived Peer Norms, 0-10	8.7	8.8	1.4**	7.1	7.6	6.4**	
Perceived Parental Attitudes, 0-3	2.9	2.9	-1.0**	2.6	2.7	1.4*	

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	3.7	4.0	8.7	15.2	9.3	-38.7**
Other Tobacco	3.1	3.6	13.4	9.5	6.6	-30.5**
Alcohol	7.5	6.5	-14.1	19.1	11.7	-38.8**
Marijuana	3.1	3.2	4.9	13.3	10.3	-22.3**
Other Illegal Drugs	1.9	1.9	2.1	5.1	3.6	-29.8
Inhalants	4.7	4.0	-14.5	3.8	2.2	-40.0
Non-Medical Prescription Drug Use	2.9	2.5	-14.8	3.9	3.3	-14.9
Non-Medical Over-The-Counter Drug Use	2.5	2.8	12.7	2.9	3.5	21.0

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

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

Table A2. Overall Results by Gender

	Fe	males (n=15	58)	Males (n=1627)			
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	
Perceived Risk, 0-3	2.0	2.2	10.6**	1.9	2.1	10.8**	
Decision-Making Skills, 0-3	1.9	2.0	4.0**	1.8	1.9	5.4**	
Favorable Attitudes, 0-2	1.6	1.7	3.2**	1.5	1.5	4.0**	
Perceived Peer Norms, 0-10	8.5	8.7	1.8**	8.2	8.4	2.8**	
Perceived Parental Attitudes, 0-3	2.9	2.8	5	2.8	2.8	6	

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	5.3	5.0	-4.5	6.9	5.2	-23.8*
Other Tobacco	2.4	3.1	28.0	6.5	5.3	-18.3
Alcohol	9.3	8.0	-13.9	10.6	7.3	-31.1**
Marijuana	4.8	4.1	-14.3	5.6	5.4	-3.8
Other Illegal Drugs	2.6	2.1	-17.0	2.6	2.5	-4.9
Inhalants	4.4	3.6	-17.3	4.6	3.6	-20.6
Non-Medical Prescription Drug Use	3.1	2.7	-11.9	3.1	2.6	-17.6
Non-Medical Over-The-Counter Drug Use	2.1	2.9	39.3	3.0	3.0	-1.7

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

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

Table A3. Overall Results by Race Group

	Black/African American participants (n=1562)			White	White participants (n=1262)			"Other" race participants (n=142)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	
Perceived Risk, 0-3	1.9	2.2	14.9**	2.0	2.1	7.1**	2.1	2.2	4.9	
Decision-Making Skills, 0-3	1.8	1.9	6.5**	1.8	1.9	2.7**	1.9	1.9	3.7	
Favorable Attitudes, 0-2	1.5	1.6	5.8**	1.6	1.6	1.7*	1.5	1.6	2.0	
Perceived Peer Norms, 0-10	8.2	8.5	3.7**	8.5	8.6	1.4**	8.6	8.6	2	
Perceived Parental Attitudes, 0-3	2.8	2.8	7*	2.8	2.8	4	2.9	2.9	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	5.2	4.3	-17.4	7.4	6.2	-16.4	4.9	4.3	-12.4
Other Tobacco	3.4	2.7	-20.9	6.0	6.2	4.0	3.5	3.6	2.0
Alcohol	10.2	7.9	-22.6**	10.1	8.0	-20.3*	7.1	8.0	12.4
Marijuana	5.7	5.1	-11.7	4.8	4.9	1.9	3.6	3.6	.8
Other Illegal Drugs	3.2	2.3	-28.6	2.5	2.4	-3.2	.7	2.9	305.6
Inhalants	5.1	3.9	-24.0*	3.9	3.3	-16.2	5.0	2.2	-56.5
Non-Medical Prescription Drug Use	2.7	2.9	5.5	3.4	2.6	-23.7	3.6	1.4	-59.7
Non-Medical Over-The-Counter Drug Use	2.4	2.9	22.5	2.5	2.7	6.8	7.0	5.1	-28.0

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

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

Table A3. Overall Results by Race Group (continued)

	Multi-eth	nic participant	s (n=127)	American Indian/Native American participants (n=59)			
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	
Perceived Risk, 0-3	2.0	2.3	14.5**	2.2	2.1	-2.6	
Decision-Making Skills, 0-3	1.8	2.0	9.0**	2.0	1.9	-5.6	
Favorable Attitudes, 0-2	1.5	1.6	7.3*	1.7	1.7	-2.7	
Perceived Peer Norms, 0-10	8.3	8.4	.9	8.7	8.7	.8	
Perceived Parental Attitudes, 0-3	2.8	2.8	1.0	2.9	2.9	6	

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	7.1	8.0	12.8	3.4	3.4	1.8
Other Tobacco	4.8	5.6	17.6	6.8	3.6	-47.3
Alcohol	10.4	3.2	-69.2**	5.1	5.4	5.5
Marijuana	4.8	3.2	-33.3	6.8	1.8	-73.6
Other Illegal Drugs	.8	2.4	206.3	.0	1.7	-
Inhalants	3.1	4.8	52.4	1.7	3.4	100.6
Non-Medical Prescription Drug Use	3.9	.8	-79.4	3.4	1.7	-49.3
Non-Medical Over-The-Counter Drug Use	.8	3.2	305.1	1.7	3.4	104.1

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

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

Table A4. Overall Results by Ethnicity

		ts of Hispanic escent or Orig		Participants Not of Hispanic, Latino, or Spanish Descent or Origin (n=2878)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.1	4.6	1.9	2.2	11.2**
Decision-Making Skills, 0-3	1.8	2.0	7.8**	1.9	1.9	4.2**
Favorable Attitudes, 0-2	1.5	1.6	.9	1.5	1.6	3.7**
Perceived Peer Norms, 0-10	8.3	8.5	1.9	8.3	8.5	2.4**
Perceived Parental Attitudes, 0-3	2.8	2.8	-1.8*	2.8	2.8	2

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Cigarettes	6.3	6.3	1.3	6.1	4.7	-22.0**
Other Tobacco	5.0	3.8	-23.6	4.2	4.1	-4.0
Alcohol	10.1	6.9	-31.2	9.9	7.6	-23.3**
Marijuana	5.7	4.5	-21.2	5.2	4.6	-11.2
Other Illegal Drugs	2.5	3.8	52.0	2.6	2.3	-12.4
Inhalants	5.6	3.8	-32.5	4.5	3.5	-21.3**
Non-Medical Prescription Drug Use	3.1	2.5	-19.2	3.1	2.6	-15.3
Non-Medical Over-The-Counter Drug Use	3.8	4.5	19.1	2.5	2.8	9.1

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

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

Table A5. Overall Results by Program

	All Programs (n=3208)			Alcohol D	rug True Stor	ies (n=56)	All Stars (n=532)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.2	10.8**	1.8	1.9	6.5	2.0	2.1	5.2**
Decision-Making Skills, 0-3	1.8	1.9	4.6**	1.7	1.7	1.7	1.9	1.9	1.0
Favorable Attitudes, 0-2	1.5	1.6	3.7**	1.3	1.3	-1.4	1.6	1.7	1.4
Perceived Peer Norms, 0-10	8.3	8.5	2.3**	7.7	7.8	1.4	8.5	8.6	2.1**
Perceived Parental Attitudes, 0-3	2.8	2.8	5*	2.7	2.7	2	2.9	2.9	-1.1*

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	6.1	5.1	-15.6	13.7	14.5	6.0	4.2	4.2	7
Other Tobacco	4.5	4.2	-6.3	7.8	18.2	131.9	3.6	3.6	.0
Alcohol	10.0	7.6	-23.8**	16.0	9.1	-43.2	9.5	6.7	-30.1*
Marijuana	5.2	4.7	-9.4	9.8	13.0	32.2	3.8	3.4	-10.2
Other Illegal Drugs	2.6	2.3	-12.2	9.8	1.9	-80.7	2.7	2.3	-14.2
Inhalants	4.5	3.6	-20.4**	7.8	5.7	-27.8	4.0	2.7	-33.7
Non-Medical Prescription Drug Use	3.1	2.6	-15.7	7.8	7.4	-5.5	3.4	2.1	-39.0
Non-Medical Over-The-Counter Drug Use	2.6	2.9	12.9	8.0	10.9	36.4	1.9	3.1	60.5

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

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

Table A5. Overall Results by Program (continued)

	Class Action (n=156)			Girl P	ower Pearls (n=20)	Keep a Clear Mind (n=53)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	1.9	2.1	12.4**	2.1	3.0	42.2**	2.5	2.9	17.0**
Decision-Making Skills, 0-3	1.7	1.9	11.2**	1.8	2.3	25.3**	1.0	1.4	47.2**
Favorable Attitudes, 0-2	1.2	1.4	16.8**	1.4	2.0	43.4**	1.7	1.9	12.1**
Perceived Peer Norms, 0-10	6.9	7.4	7.6**	8.0	9.7	21.1**	9.3	9.5	2.7**
Perceived Parental Attitudes, 0-3	2.8	2.8	2	2.8	3.0	6.5**	2.8	2.6	-5.8*

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	14.8	9.1	-38.7*	.0	.0	-	9.8	13.5	37.3
Other Tobacco	11.0	2.6	-76.6**	.0	.0	-	8.0	21.2	164.4*
Alcohol	24.8	10.3	-58.5**	.0	.0	-	3.9	.0	-100.0
Marijuana	9.7	4.5	-53.6*	.0	.0	-	.0	.0	-
Other Illegal Drugs	1.3	1.9	51.2	.0	.0	-	.0	1.9	-
Inhalants	1.9	3.2	65.6	.0	.0	-	.0	.0	-
Non-Medical Prescription Drug Use	3.9	2.6	-33.3	.0	.0	-	2.0	2.0	2.0
Non-Medical Over-The-Counter Drug Use	2.0	2.6	31.6	.0	5.0	-	3.9	4.0	2.0

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

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

Table A5. Overall Results by Program (continued)

	Keepin' It Real (n=236)			Li	ifeskills (n=67	8)	Proje	ect ALERT (n=	=535)
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.2	8.3**	1.9	2.3	19**	1.9	2.0	5.8**
Decision-Making Skills, 0-3	2.0	2.1	1.5	1.8	1.9	8.2**	1.8	1.8	1.2
Favorable Attitudes, 0-2	1.7	1.7	3.0	1.5	1.6	6.1**	1.6	1.6	-1.0
Perceived Peer Norms, 0-10	8.9	9.0	1.3	8.2	8.5	3.0**	8.4	8.5	1.3*
Perceived Parental Attitudes, 0-3	2.9	2.9	7	2.8	2.8	5	2.8	2.8	.2

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	3.8	3.8	0	7.0	6.4	-8.8	4.5	3.4	-25.1
Other Tobacco	2.1	.9	-60.3	4.1	5.2	26.1	5.1	4.0	-22.4
Alcohol	7.7	5.1	-33.6	11.1	9.8	-11.9	8.7	7.2	-17.3
Marijuana	1.3	.4	-66.4	6.1	6.7	10.7	5.3	4.4	-17.6
Other Illegal Drugs	2.6	1.3	-50.0	3.6	2.7	-25.1	2.1	2.5	17.7
Inhalants	4.3	3.0	-30.2	7.6	4.6	-39.1**	4.0	3.2	-19.5
Non-Medical Prescription Drug Use	1.7	2.6	49.7	4.0	3.0	-26.2	4.0	3.4	-13.8
Non-Medical Over-The-Counter Drug Use	3.8	2.2	-43.9	3.3	4.0	23.3	2.5	2.3	-7.7

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

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

Table A5. Overall Results by Program (continued)

	Project Northland (n=81)			Pro	oject TND (n=	82)	Project TNT (n=63)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	1.8	2.5	37.6**	1.4	2.0	45.8**	2.0	2.4	15.7**
Decision-Making Skills, 0-3	1.7	2.1	23.6**	1.6	2.1	31.0**	1.9	1.9	.8
Favorable Attitudes, 0-2	1.3	1.6	22.0**	.4	.9	98.4**	1.7	1.8	3.3
Perceived Peer Norms, 0-10	7.7	8.8	14.0**	6.0	7.5	24.1**	8.7	9.1	4.0**
Perceived Parental Attitudes, 0-3	2.9	2.9	.2	2.1	2.4	11.6**	3.0	2.9	-2.1**

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	9.9	2.6	-74.1	22.5	13.6	-39.6**	1.6	1.6	.0
Other Tobacco	8.6	2.6	-70.4	5.0	.0	-100.0	4.8	1.6	-66.6
Alcohol	21.0	5.2	-75.3**	21.5	12.3	-42.6*	4.8	4.8	.0
Marijuana	7.4	3.8	-48.0	23.8	14.8	-37.6**	.0	1.6	-
Other Illegal Drugs	2.5	1.3	-47.4	3.8	2.5	-34.1	1.6	3.2	96.9
Inhalants	7.6	5.1	-32.4	.0	.0	-	6.3	4.8	-25.0
Non-Medical Prescription Drug Use	3.7	.0	-100.0	3.8	.0	-100.0	3.2	3.2	.0
Non-Medical Over-The-Counter Drug Use	.0	2.6	-	2.5	.0	-100.0	.0	.0	-

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

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

Table A5. Overall Results by Program (continued)

	Too Go	Too Good for Drugs (n=672)			Vhy Try (n=37	7)	Youth Board (n=5)		
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change	Pre Average	Post Average	% Change
Perceived Risk, 0-3	2.0	2.1	5.4**	1.9	1.7	-7.4	-	-	-
Decision-Making Skills, 0-3	2.0	2.0	.4	1.7	1.8	4.1	-	-	-
Favorable Attitudes, 0-2	1.6	1.6	-0.2	1.5	1.2	-17.0**	-	-	-
Perceived Peer Norms, 0-10	8.8	8.6	-1.8**	8.1	8.2	1.8	-	-	-
Perceived Parental Attitudes, 0-3	2.9	2.8	-1.7**	2.8	2.8	3.0	-	-	-

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	3.3	4.1	23.9	14.3	3.0	-78.8	-	-	-
Other Tobacco	3.1	3.8	21.0	8.8	8.6	-2.8	-	-	-
Alcohol	5.1	7.0	36.6*	16.7	8.6	-48.6	-	-	-
Marijuana	3.7	4.6	21.7	8.3	8.6	2.9	-	-	-
Other Illegal Drugs	2.0	2.3	16.8	2.9	5.7	94.2	-	-	-
Inhalants	3.2	4.6	45.1	5.6	.0	-100.0	-	-	-
Non-Medical Prescription Drug Use	1.5	2.4	62.7	.0	.0	-	-	-	-
Non-Medical Over-The-Counter Drug Use	2.3	2.5	8.4	2.8	.0	-100.0	-	-	-

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

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

Table A5. Overall Results by Program (continued) Programs

	Youth Mentor Program (n=2)				
Risk Factor Scores, Range (Positive score is favorable)	Pre Average	Post Average	% Change		
Perceived Risk, 0-3	-	-	-		
Decision-Making Skills, 0-3	-	-	-		
Favorable Attitudes, 0-2	-	-	-		
Perceived Peer Norms, 0-10	-	-	-		
Perceived Parental Attitudes, 0-3	-	-	-		

Substance Use, % Users in Past 30 Days (Negative change is favorable)	Pre Average	Post Average	% Change
Cigarettes	-	1	-
Other Tobacco	-	1	-
Alcohol	-	1	-
Marijuana	-	1	-
Other Illegal Drugs	-	1	-
Inhalants	-	-	-
Non-Medical Prescription Drug Use	-	-	-
Non-Medical Over-The-Counter Drug Use	-	-	-

APPENDIX B: EVALUATION INSTRUMENT

STUDENT PREVENTION **PRE-SURVEY**

Your responses are very important to us, and we would like your opinion on these issues. All your responses will be strictly confidential.

RIGHT NOW, please put the private code you were given here AND put it on the other pages of the survey.

Please choose the responses you think are most accurate and fill in those bubbles as much as you can.

1. How much do you think people risk harming themselves physically and in other ways when they	No Risk	Slight Risk	Moderate Risk	Great Risk
a) Smoke one or more packs of cigarettes per day?	0	0	0	0
b) Smoke marijuana once or twice a week?	0	0	0	0
c) Try one or two drinks of an alcoholic beverage (beer, wine, liquor)?	0	0	0	0
d) Have five or more drinks of an alcoholic beverage once or twice a week?	0	0	0	0

Please respond to the following questions and statement about decision-making.	Never	Sometimes, But Not Often	Often	All the Time
a) How often do you stop to think about your options before you make a decision?	0	0	0	0
b) How often do you stop to think about how your decisions may affect others' feelings?	0	0	0	0
c) How often do you stop and think about all of the things that may happen as a result of your decisions?	0	0	0	0
d) I make good decisions.	0	0	0	0

3. How do you think your close friends would feel about you smoking one or	Neither Approve Nor Disapprove	Somewhat Disapprove	Strongly Disapprove
more packs of cigarettes a day?	0	0	0

			<u> </u>	
Private Student Code:				

4. How do you feel about someone your age	Neither Approve Nor Disapprove	Somewhat Disapprove	Strongly Disapprove
a) Smoking one or more packs of cigarettes a day?	0	0	0
b) Trying marijuana once or twice?	0	0	0
c) Using marijuana once a month or more?	0	0	0
d) Having one or two drinks of an alcoholic beverage nearly every day?	0	0	0

5. How many of your closest friends do you think have	All of Them	Most of Them	Some of Them	None of Them
a) Used marijuana during the past 30 days?	0	0	0	0
b) Been drunk during the past 30 days?	0	0	0	0
c) Had some kind of alcoholic beverage during the past 30 days?	0	0	0	0
d) Used a drug like cocaine or heroin during the past 30 days?	0	0	0	0

6. What would your best friends think if you	They Would Be Angry With Me	They Would Be a Little Upset	They Wouldn't Care One Way or Another	They Would Accept Me	They Would Be Glad
a) Tried using marijuana?	0	0	0	0	0
b) Got drunk once in a while?	0	0	0	0	0

7. How do you think your closest friends feel about the following statements:	They Strongly Agree	They Agree	They Disagree	They Strongly Disagree	
a) "People who use drugs are stupid."	0	0	0	0	
b) "It is cool to get drunk."	0	0	0	0	

Private Student Code:				
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8. How wrong do your parents feel it would be for YOU to	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
a) Drink beer, wine, or hard liquor (for example, vodka, whiskey, or gin) regularly?	0	0	0	0
b) Smoke cigarettes?	0	0	0	0
c) Smoke marijuana?	0	0	0	0

For the questions below, list how many days out of the past 30 days that you used the drug listed. You should write a number between 0 (if you did not use in the past 30 days) and 30 (used every day).

9.	During the past 30 days, on how many days did you smoke part or all of a cigarette?	days
10.	During the past 30 days, on how many days did you use other tobacco products (such as dip, snuff, chew, or cigars)?	days
11.	During the past 30 days, on how many days did you drink one or more drinks of an alcoholic beverage?	days
12.	During the past 30 days, on how many days did you use marijuana?	days
13.	During the past 30 days, on how many days did you use any other illegal drug?	days
14.	During the past 30 days, on how many days did you sniff glue, breathe the contents of an aerosol spray can, or inhale other gases or sprays in order to get high?	days
15.	During the past 30 days, on how many days did you take a prescription medication (such as Ritalin, Adderall, Xanax) without a doctor's prescription?	days
16.	During the past 30 days, on how many days did you use an over-the-counter medicine (one you can buy without a doctor's prescription) to get high rather than for the reason it was made?	days

Private	Student	Code:			

For the questions below, list what age you were when you first used the drug listed or, if you have never used that drug, fill in "never used."

	Never Used			
17. How old were you the <u>first time</u> you smoked part or all of a cigarette?	0	Or Age		
18. How old were you the <u>first time</u> you used any other tobacco product?				
19. How old were you the <u>first time</u> you had a drink of an alcohol beverage? Please <u>do not</u> include any time when you only had a sip or two from an alcoholic drink and <u>do not</u> include having alcohol as part of a religious service.	Or Age			
20. How old were you the <u>first time</u> you used marijuana?	0	Or Age		
21. How old were you the <u>first time</u> you used any other illegal drug?	0	Or Age		
22. During the past 12 months		Yes	No	
 a) Have you talked with at least one of your parents about of tobacco, alcohol, or drug use? By parents, we mean biological parents, adoptive parents, stepparents, or ad guardianswhether or not they live with you. 	0	0		
b) Do you recall hearing, reading, or watching an advertise the prevention of substance use?	0	0		
Please answer the following questions about yourself. (Ren	nember, this sur	vey is cor	nfidential	
23. How old are you? ○ 10 ○ 11 ○ 12 ○ 13 ○	14 O 15 C) 16 🔘	17 01	
24. Are you male or female? O Male O Female				
25. Are you Hispanic or Latino? ○ Yes ○ No				
26. Which of these groups describes you? Black/ American Native Hawaiian White African Indian or Other Pacific Asi	ian Multie	thnic	Other	

THE END

Islander

0



0

0

0

0

American

0

Alaska Native

0