

# RESULTS OF THE ANNUAL STRATEGIES FOR SUCCESS: PFS II COMMUNITY DATA, FISCAL YEAR 2015

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## Introduction

The Partnerships for Success II grant funded five counties in New Mexico to address the prevention of underage drinking and binge drinking among 12 to 21 year olds and prescription pain killer abuse among 12 to 25 year olds. The NM Office of Substance Abuse Prevention (OSAP) requires communities to collect data on a yearly basis so that real time data can be used to evaluate progress and inform future prevention programming. This is particularly tricky to do for youth.

The NM Youth Risk and Resiliency Survey (YRRS) is the comprehensive youth survey conducted in NM. It is a widely respected and highly rigorous survey that is funded by the Centers for Disease Control and Prevention (CDC). The YRRS is conducted every other year in schools that agree to participate and it typically takes at least nine months to receive any results from the survey. Therefore, while the data are valuable, they are neither timely nor yearly and do not allow communities sufficient immediate data to evaluate prevention efforts nor plan strategically. The Annual NM Strategies for Success (ASFS) instrument was created to supplement the YRRS data and help communities get immediate feedback on the prevention needs in the community. The ASFS is much shorter than the YRRS yet asks many of the same substance use questions. In addition, it includes questions that reflect specific contributing factors of intervening variables that prevention communities address including social and retail access to alcohol and prescription pain killers, perceived risk of use and risk of being caught, use on school campus, attitudes toward use, friend substance use, and finally, awareness and understanding of a media campaign targeting youth. We include the same substance use questions so that we can compare results of the ASFS with those from the YRRS. We would anticipate similar prevalence rates between the two instruments.

OSAP funded programs that implement environmental prevention strategies may use the ASFS to evaluate progress on preventing substance use among youth. PFS II programs were required to implement the ASFS if schools in their community allowed them to do so.

## Methods

### Instruments

There are two versions of the ASFS, one for middle school students (6<sup>th</sup> – 8<sup>th</sup> grades) and one for high school students (9<sup>th</sup>-12<sup>th</sup> grades). The substance use questions differ between the two versions, reflecting the differences in the NM YRRS between middle school and high school versions. Middle schoolers are asked more questions about lifetime use and fewer substance use questions in general.

### Data collection protocol

The community or county-level data collection protocol was reviewed and approved by PIRE's Institutional Review Board. Community prevention providers and local evaluators were trained on the protocol by PIRE staff. A detailed local level data collection protocol was written by each community and reviewed by PIRE staff. Included in the training was how to identify and select schools to survey, how to approach school superintendents, principals, teachers, and staff to get permission to survey the students, how to get permission from parents to survey the students, how to select classrooms within the schools to survey, and how to administer the survey itself. Most of the PFS II counties are rural and therefore there may be as little one high school or school district from which to select. Communities differed in the willingness of schools to allow them to collect data. Some communities were never given permission to collect data in one or more schools. Others were able to survey both high school and middle school students, while still others could only collect middle or high school data. Some were allowed to survey the entire school and others only some of the school. However, all communities set out detailed plans and approached the process in a scientifically rigorous manner to capture a representative sample of students in their schools. These plans were reviewed and revised as needed until PIRE staff felt that a safe and appropriate approach was reached. Prevention programs worked closely with the school administrations to collect parental permission according to whether the school chose to require parents to opt in or to opt out. If opting into the survey, permission from parents was required in order to conduct the survey.

Questionnaires were handed out in classrooms where students were assented to participate. The assent form was read aloud to students and students could choose to participate or not without repercussion. Instructions for completing the questionnaire were then read aloud to the students. The questionnaire took between 20 to 30 minutes to complete. The middle school questionnaire had 45 questions and the high school questionnaire was 52 questions. Questionnaires were made available in both English and Spanish.<sup>1</sup>

### Data Analysis

Data from all schools were aggregated, cleaned and analyzed using SAS. The ethnicity data were recoded to ensure consistency across all sites and to correspond to categories used by New Mexico's Department of Health. Other variables were recoded, including reverse-coded when appropriate, so that sum scales and mean scales could be created to measure violence and resiliency constructs. T-tests were used to test for statistically significant differences between boys and girls.

## Results

Data from the Annual SFS programs were collected at four counties utilizing the Strategies for Success survey high school instrument. Two of the four counties also collected middle school data. The distribution of SFS participants by site is captured in Tables 1 and 2 below. Programs

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<sup>1</sup> To view the survey instruments, and protocols please visit [www.nmprevention.org](http://www.nmprevention.org)

varied as to the number of participants based on the type of program and how students were identified to participate.

**Table 1.** Distribution of SFS high school program participants by site

Site	Number of Participants	Percent of Total Participants
Dona Ana	657	46.6
Grant	252	17.9
Lea	301	21.3
Luna	201	14.2
Total	1411	100.0

**Table 2.** Distribution of SFS middle school program participants by site

Site	Number of Participants	Percent of Total Participants
Grant	542	72.4
Lea	207	27.6
Total	749	100.0

Table 3 shows that the number of boys and girls are very similar in middle school and high school respectively. The mean age for high school boys was 15.1 and 15.0 for girls, and 12.8 for middle school boys and girls. SFS program participants were predominantly Hispanic for both boys (middle school 62.3% and high school 72.0%) and girls (middle school 61.7% and high school 74.8%), followed by white. Fewer middle schoolers (less than 35%) than high school students indicated that at home, they most often spoke a language other than English (see Table 3). Table 4 summarizes parental education level. Students were less likely to know their father's level of education than their mother's.

**Table 3.** Demographics for SFS program participants by gender

Demographic	Middle School (N=749) <sup>a</sup>		High School (N=1411) <sup>a</sup>	
	Boys (n=374)	Girls (n=373)	Boys (n=706)	Girls (n=698)
Grade	%		%	
6 <sup>th</sup> grade	23.5	24.7	--	--
7 <sup>th</sup> grade	30.2	30.3	--	--
8 <sup>th</sup> grade	46.3	45.0	0.4	0.3
9 <sup>th</sup> grade	--	--	72.0	72.9
10 <sup>th</sup> grade	--	--	10.6	10.6
11 <sup>th</sup> grade	--	--	12.3	12.3

Demographic	Middle School (N=749) <sup>a</sup>		High School (N=1411) <sup>a</sup>	
	Boys (n=374)	Girls (n=373)	Boys (n=706)	Girls (n=698)
12 <sup>th</sup> grade	--	--	4.7	3.9
Race/Ethnicity	%		%	
White	28.1	29.0	20.6	19.8
Hispanic	62.3	61.7	72.0	74.8
Native American	4.3	3.0	1.8	1.2
Other	5.4	6.4	5.7	4.3
Language Other than English Spoken Most Often	%		%	
Yes	31.9	34.9	41.6	46.1

<sup>a</sup> Missing data for gender n=2 & 6 for middle school and high school respectively.

**Table 4.** Parent education level of SFS program participants.

Parent Education Level	Middle School %		High School %	
	Mother	Father	Mother	Father
Not sure	23.0	35.1	15.0	24.3
Some high school or less	11.9	10.5	21.9	19.6
High school or Some college	33.1	26.1	33.0	33.5
College and above	32.0	28.3	30.2	22.7

### *Prevalence of Substance Use among Program Respondents*

Among middle school students, we examine ATOD lifetime use and past 30-day use respectively. ATOD lifetime use in middle school is indicative of students experimenting with substance use. Alcohol was by far the most commonly reported substance used in one's lifetime (32.5%), followed by marijuana (16.3%) and then prescription pain killers to get high (5.0%). Middle school girls reported slightly more lifetime use of alcohol, marijuana, and prescription painkillers than middle school boys. Past 30-day use reflects current ATOD use activities and a similar pattern can be seen. The rate of alcohol past 30-day use is the highest (overall rate 15.8%), then marijuana (overall 12.0%) and binge drinking (overall 8.0%). Rather alarmingly, girls have significantly higher rates than boys on past 30-day alcohol use and binge drinking, especially girls' binge drinking rate is twice that of the boys' rate; whereas boys were significantly higher on prevalence of chewing tobacco use. Marijuana and cigarette use are also both higher among girls although not significantly different from boys. Table 5 presents these results.

**Table 5.** Past 30-day ATOD use prevalence and Rx painkiller lifetime use to get high, differences from pretest to posttest for middle school participants

Substance <sup>a</sup> (N=749)	Overall		Boys		Girls	
	n <sup>b</sup>	%	n	%	n	%
Lifetime use						
Alcohol	243	32.5	116	31.0	127	34.1
Marijuana	122	16.3	56	15.0	66	17.7
Prescription Painkiller use to get high	37	5.0	16	4.3	21	5.7
Past 30-day use						
Cigarettes	43	5.8	18	4.8	25	6.7
Chewing Tobacco	35	4.7	27	7.2****	8	2.2
Alcohol	118	15.8	44	11.8**	74	19.9
Binge Drinking	60	8.0	20	5.4**	40	10.8
Marijuana	90	12.0	41	11.0	49	13.2

<sup>a</sup> Dichotomous substance use variable (yes or no).

<sup>b</sup> n= number of positive responses

\*\* $p < .01$ , \*\*\* $p < .001$ , comparison made between boys and girls.

Not surprisingly high school students show higher prevalence rates of past 30-day substance use than middle school students overall (see Table 6). Similar to middle school, the most common substance use behaviors overall are current alcohol (25.9%) and marijuana (19.4%) use and binge drinking (13.9%). High school girls report slightly more current use of alcohol and marijuana than high school boys though these are not significant differences, whereas high school boys have a significantly higher prevalence of chewing tobacco use than girls. Estimates in this sample are comparable to those from the 2013 YRRS for these indicators.

Two personal safety measures (i.e., rode in a car driven by someone who was drinking and driving while drinking), are included in high school student questionnaire. It is more common for students to report riding in a car driven by someone who was drinking (24.9%) than themselves driving while drinking (6.6%) (see Table 6). Girls were marginally more likely than boys to report riding in a car driven by someone who was drinking. Boys were slightly more likely than girls to report driving while drinking. Estimates in this sample are comparable to those from the YRRS for both these indicators.

**Table 6.** Past 30-day ATOD use prevalence, Rx painkiller use to get high and personal safety for high school SFS participants

Substance (N=1411)	Overall		Boys		Girls	
	n <sup>b</sup>	%	n	%	n	%
Consumption <sup>a</sup>						
Cigarettes	124	8.8	70	10.0	53	7.6
Chewing Tobacco	131	9.4	106	15.1****	22	3.2



Substance (N=1411)	Overall		Boys		Girls	
	n <sup>b</sup>	%	n	%	n	%
Alcohol	363	25.9	176	25.1	182	26.2
Binge Drinking	194	13.9	97	13.9	94	13.6
Marijuana	271	19.4	132	18.9	138	19.9
Rx painkiller use to get high	43	3.1	21	3.0	20	2.9
Behavior <sup>a</sup>						
Rode in a car driven by someone who was drinking	349	24.9	160	22.8†	186	26.8
Driving while drinking	93	6.6	52	7.4	40	5.8

<sup>a</sup> Dichotomous substance use variable (yes or no).

<sup>b</sup> Due to missing on gender, the n's of boys and girls do not add up to the n's of overall.

† $p < .10$ , \*\*\* $p < .001$ , comparison made between boys and girls.

Table 7 captures the average number of times or days Alcohol, tobacco, and other drugs were used in the past 30 days among those students who reported use in each of the individual categories. Noticeably, the overall average number of days middle school students smoked cigarettes (10.6 days) is higher than that of high school smokers (8.3 days) and middle school boys smoked cigarettes an average of 14.8 days in the past 30 days, almost twice as many days as middle and high school girls and also well above the number of days high school boys reported smoking cigarettes. Moreover, there is very little difference in the average number of times middle school and high school students reported using marijuana in the past 30 days (13.2 times for middle school students and 14 times for high school students). Average use by middle school girls (15.2 times) is close to the average of high school boys (16.8 times) and higher than high school girls. It is alarming that the average ATOD consumptions in the past 30 days are similar between middle school and high school on the majority of the measures.

**Table 7.** The average number of days/times in the past 30 days of ATOD consumption among middle school and high school SFS participants who reported use in individual categories

Substance	Middle School			High School		
	Overall	Boys	Girls	Overall	Boys	Girls
Cigarettes (days)	10.6	14.8*	7.6	8.3	8.8	7.9
Chewing Tobacco (days)	9.8	11.8†	3.1	13.6	13.9	10.2
Alcohol (days)	4.5	5.2	4.1	5.3	5.6	4.9
Binge Drinking (days)	1.8	2.1	1.7	2.3	2.4	2.1
Marijuana (times)	13.2	10.8	15.2	14.0	16.8***	11.0
Rx Painkiller use to get high (times)	NA	NA	NA	11.7	12.3	10.8

† $p < .10$ , \* $p < .05$ , \*\*\* $p < .001$ , comparison made between boys and girls.

We also examined substance use and availability on school property during the school year (see Table 8). These data are helpful for informing school administrators what youth are reporting about substance use and access to drugs and alcohol on school property and whether the school may need to make efforts to increase monitoring of youth and substance use on school property.

In middle school, the use of alcohol use on school property was the most common (6.0% overall) followed closely by marijuana use (5.2%); whereas in high school marijuana use (10.1% overall) on campus was more commonly reported than alcohol use. Middle and high school students both reported that illegal drugs on campus were more available than prescription drugs. The percent of students reporting availability of illegal and prescription drugs on campus is higher in high school than in middle school but girls (in middle and high school) tend to report more availability and use of alcohol and drugs than boys with a few exceptions (Table 8).

**Table 8.** Substance use and availability of drugs on school property in this school year

Substance <sup>a</sup>	Middle School			High School		
	Overall	Boys	Girls	Overall	Boys	Girls
Use on school property						
Cigarettes	3.0	3.0	3.0	4.7	4.8	4.5
Chewing Tobacco	3.2	5.5***	0.8	8.6	13.8***	2.9
Alcohol	6.0	4.1*	8.0	8.6	8.0	8.9
Marijuana	5.2	4.1	6.4	10.1	9.7	10.5
Prescription painkillers to get high	4.5	3.8	5.2	5.0	4.9	4.8
Availability on campus						
Illegal drug	16.5	14.7	18.4	26.3	26.2	26.1
Prescription drug	10.6	8.3*	13.0	15.1	13.3†	16.7

<sup>a</sup> Dichotomous substance use variable (yes or no).

† $p < .10$ , \* $p < .05$ , \*\*\* $p < .001$ , comparison made between boys and girls

### *Perceptions of risk of harm of substance use and Perceptions of legal consequences*

We also assessed perceived risk of harm associated with the use of various substances (Table 9). Smoking cigarettes was perceived as the most harmful followed by alcohol and marijuana. Students in both middle and high school tended to treat smoking marijuana far less harmful than using cigarettes or drinking, as can be seen in Table 9. Finally, the prevalence of middle school students who perceived moderate or great risk of harm was similar to that of high school students.

Perceptions of parental disapproval and personal disapproval of underage drinking remained very high in middle school (over 89%, see Table 9). In high school, perception of parental disapproval (86.2%) is ten points higher than personal disapproval (76.2%, Table 9). Among non-smokers in middle school, very few of them indicated an intention to smoke in the near future (Table 10).

**Table 9.** Perceptions of risk of harm of substance use, parental and personal attitudes toward ATOD use among middle school and high school SFS participants

Risk of Harm	Moderate or Great Risk (%)	
	Middle School	High School
Smoke one or more packs of cigarettes per day	83.8	84.4
Smoke marijuana once a month or more	53.7	44.0
Smoke marijuana once or twice a week	65.1	58.4
Have one or two alcoholic drinks nearly every day	67.6	66.0
Have five or more alcoholic drinks once or twice a week	73.1	75.5
Attitudes Toward ATOD use		Wrong or Very Wrong
Parents feel wrong for me to drink alcohol regularly	90.8	86.2
It is wrong for someone my age drink alcohol regularly	88.8	76.2

**Table 10.** Intention to smoke among middle school SFS participants (non-smokers only)

Intentions to Smoke <sup>a</sup> (n =646)	Yes or Probably Yes (%)
Try smoking a cigarette soon	3.0
Smoke a cigarette at any time during the next year	3.1
Smoke if one of your best friends offered a cigarette	4.2

<sup>a</sup> Limit to respondents who haven't tried smoking.

We asked students about the extent to which they perceived they might get caught by teachers or school staff for drinking on campus or the likelihood of getting arrested/cited by police for drinking underage if drinking in the community. Table 11 shows that risk is perceived differently if drinking at school versus in the community. Far fewer middle and high school students generally feel that drinking in the community is risky with respect to getting caught or facing consequences. Middle schools students were likely to perceive some risk of being caught drinking at school and facing consequences for it as well. But high school students, were less likely to perceive considerable risk in being caught drinking although they did feel that if they were caught they would have to face consequences.

**Table 11.** Perceptions of legal consequences of underage drinking at school and in the community among middle school and high school SFS participants

Perception of Risk/Legal Consequences	Middle School			High School		
	Overall	Boys	Girls	Overall	Boys	Girls
Likelihood of being caught by teachers or staff when drinking alcohol at school	75.9	77.1	74.6	58.5	57.3	59.7
Likelihood of getting into trouble with school if got caught drinking at school	91.5	91.4	91.6	84.0	85.2	82.7
Likelihood of being caught by police when drinking alcohol in the community	56.0	55.7	56.1	46.0	46.1	46.1
Likelihood of getting arrested or cited by police when drinking alcohol in the community	64.6	62.4	67.0	58.0	58.5	57.4

## Summary

FY2015 was the first year that PFS-II communities started implementing prevention programs and collecting data. These data can serve as a baseline or starting point for future comparisons. When compared with NM YRRS data, our estimates are very similar, sometimes, higher, sometimes lower, but generally in the same ballpark, which speaks to how well programs capture a random representative sample in their schools.

In middle school, alcohol and marijuana have highest rates of self-reported ATOD lifetime use. Past 30-day use of ATOD reflects a similar pattern that overall rates of alcohol, marijuana and binge drinking are higher than other substances (i.e., cigarettes and chewing tobacco). It is notable that more middle school girls reported ATOD use than boys both for lifetime use indicators and past 30-day use indicators. While on most measures this difference was not statistically significant, this would suggest a trend that has been changing over the years where girls are reporting as much if not more use than boys. That girls reported significantly more drinking and binge drinking than boys in middle school is alarming and concerning on a number of levels. Prevention programming needs to pay closer attention to middle school girls and try to better understand the context and motivation of their ATOD use in order to prevent it.

High school students show higher prevalence of past 30-day ATOD use than middle school students. The overall rates of alcohol and marijuana past 30-day use are the highest among all types of substances. High school boys and girls have very similar prevalence rates of alcohol, binge drinking, marijuana and using prescription painkillers to get high except that significantly more boys consumed chewing tobacco. YRRS data have also found few differences in the overall prevalence of consumption between boys and girls, yet when we examine only those youth reporting ATOD use and examine the average number of times or days in the past 30 days they used, girls are often reporting on average the same number of days or more than males.

This findings suggests that girls are no longer using less frequently than their male counterparts. It behooves us to try to understand the context in which girls are using and whether this frequent use is putting them also at greater risk for other consequences including sexual assault, teen pregnancy, and/or mental health consequences.

Questions about substance use on school property and availability of ATOD on campus show differences in prevalence rates between middle school and high school as well, yet they mirror similar patterns observed in ATOD use in general. With the exception of chewing tobacco, middle school girls reported higher rates of ATOD use on school property than boys. Middle school girls reported significantly more use of alcohol use on campus than middle school boys. Girls in middle school were also more aware than boys of the availability on campus of illegal and prescription drugs. Among high school students boys reported significantly more use of chewing tobacco on campus than girls. While not significant, girls reported more alcohol and marijuana use on campus and greater availability of illegal and prescription drugs on campus as well. Marijuana use on campus was as common as alcohol use for both middle and high school students.

Measures of perceived harm and attitudes associated with ATOD use show similar rates between middle school and high school students with the exception of marijuana. High schoolers perceived much lower risk of using marijuana than middle schoolers, but both middle and high school students regarded marijuana use as the least harmful of the substances asked about.

Regarding the perceived risk of getting caught in school for drinking underage or perceived risk of getting arrested/cited by police for drinking underage, high school students perceived lower risks on every measure than middle school students. Both middle and high school students reported greater perceived risk of getting caught and punished drinking at school than in the community by police. However, the prevalence of high school students who perceived great or moderate risk of being caught drinking on campus is alarmingly low. These data suggest that there is a lot of work that can be done with schools and with local law enforcement to increase the perceived risk of being caught. Getting caught is only the first step of the battle to prevent use at school but it is a very important step. Having the right system in place that provides appropriate repercussions when caught (not Zero Tolerance) and support for evaluation of substance use and treatment if needed are critical in reducing use among youth and keeping them connected and involved with school, a known protective factor against substance use. OSAP programs are required to work with schools when possible and these data are very informative for this overall effort.

Middle school students, and middle school girls in particular, appear to be experimenting in numbers that remain high. Marijuana use and the low perceived risk of marijuana use is concerning and is likely to only increase as recreational marijuana becomes legal in more states across the country. Youth clearly do not perceive it to be as dangerous as smoking cigarettes or drinking alcohol. Youth also do not appear to have much concern about using substances as school or in the community. These are not youth in prevention programs necessarily and so they

are not getting the prevention messages as directly as youth in OSAP direct services prevention programs. There is considerable work that must be done with school administrators, teachers, and staff to develop comprehensive strategies for addressing use at school such as developing an increase in the perception of risk of getting caught using substances at school, decreasing access to substances at school, and providing effective consequences for substance use that only include expulsion or suspension as a last resort. Youth need safe and supportive environments at school that increase school connectedness and achievement both academically and psychologically. These youth do not report feeling that there are consequences in community for their risky behaviors either. Law enforcement must play a critical role in monitoring youth and deterring substance use. Finally, parents have the most important role in setting and conveying expectations for their youth, monitoring their child's behavior at home and outside of school, and setting strong examples of substance free living.