2009 Pennsylvania Youth Survey

Statewide Report

Conducted by
Pennsylvania Commission on Crime and Delinquency

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Section 1
Summary of Results

Strengths to Build on

- Very few Pennsylvania students reported using illicit drugs other than marijuana and inhalants in the past 30 days. For example, past-30-day prevalence rates for Ecstasy, cocaine and methamphetamine are 1.1%, 0.6% and 0.3%, respectively.
- Relatively few Pennsylvania students reported the nonmedical use of prescription drugs. Across the overall sample, past-30-day prevalence rates are 5.0% for pain relievers, 2.8% for stimulants and 1.9% for tranquilizers.
- Other antisocial behaviors with low prevalence rates include *Attempting to Steal a Vehicle* (1.7%), *Bringing a Weapon to School* (2.3%) and *Being Arrested* (4.3%).
- Less than 10% of the respondents reported a willingness to try or use cocaine, hallucinogens or inhalants.
- Relatively few Pennsylvania students (10.0%) reported gambling for money in the past 30 days. Even fewer, 3.8%, bet money using the internet in the past year.
- Only 3.0% of surveyed students reported having been threatened with a weapon on school property in the past year, and only 1.1% reported having been attacked with a weapon on school property in the past year.
- Majorities of respondents reported that smoking one or more packs of cigarettes per day (66.5%) and regular use of marijuana (63.0%) pose a "great risk" of harm.
- The percentage of students who believe it would be either "wrong" or "very wrong" to use marijuana is 79.8%, followed by cigarettes (77.3%) and drinking alcohol regularly (71.6%). Disapproval of other illicit drug use ("LSD, cocaine, amphetamines or another illegal drug") was even higher, at 94.3%.
- Relatively few students reported that they would be seen as "cool" by their peers if they drank alcohol regularly (11.4%), smoked marijuana (10.3%) or smoked cigarettes (5.1%).

- Large majorities of Pennsylvania students reported that their parents believe it is "very wrong" for them to smoke marijuana (85.6%), smoke cigarettes (80.6%) or drink alcohol regularly (73.5%).

Opportunities for Improvement

- In grades 8, 10 and 12, alcohol is the most frequently used substance. Across the overall sample, 49.3% of Pennsylvania students reporting one or more occasions of use in their lifetimes and 25.5% reporting one or more occasions of use in the past 30 days.
- Binge drinking—defined as the consumption of five or more drinks in a row in the last two weeks—was reported by 13.6% of surveyed Pennsylvania students, making this dangerous behavior more common than past-30-day cigarette or marijuana use.
- Across the overall sample, 11.4% of Pennsylvania students reported past-30-day marijuana use and 11.0% reported past-30-day cigarette use.
- Sixth graders reported the highest rate of past-30-day use for inhalants (6.8%). Eighth and 10th graders reported rates of 8.2% and 5.5% for inhalant use, respectively. Compared to national findings, Pennsylvania 8th, 10th and 12th graders reported higher rates of past-30-day inhalant use.
- Nearly one out of ten Pennsylvania students (9.7%) reported *Being Drunk or High at School* in the past year, and about one out of 20 (5.2%) reported *Selling Drugs* in the past year.
- Across the seven other antisocial behaviors, Pennsylvania students reported the highest rates for *Attacking Someone with Intent to Harm*, with 9.5% having reported attacking "someone with the idea of seriously hurting them."
- Excluding students who indicated that "I don't drive," 18.5% of 12th graders reported that they drove under the influence of marijuana, and 16.5% drove under the influence of alcohol.
- In contrast to the lower rates for other substance categories, a near majority of 8th graders (42.7%) and majorities of 10th and 12th graders (60.2% and 72.0%, respectively) reported a willingness to try or use alcohol.
- Across the overall sample, 22.5% of Pennsylvania students reported having "bet money or anything of value" on sporting events in the past year.
- Non-physical forms of bullying are the most prevalent. More than one half of Pennsylvania students (51.4%) reported that other students tell lies about them or spread false rumors, 43.0% have been called names or teased, and 32.5% have been left out of things on purpose.
- For physical bullying, 18.1% have been hit, kicked, pushed, or shoved in the past year and 20.7% have had other students take their money or damage their things.
- Across the overall sample, 18.3% of Pennsylvania students reported having "been threatened to be hit or beaten up on school property."
- As with a number of other statewide health behavior surveys, many Pennsylvania students reported having symptoms of depression. Nearly one third (31.6%) reported feeling "depressed or sad most days" and 27.8% reported that "at times I think I am no good at all."
- Only 26.2% of surveyed 12th graders assigned a "great risk" of harm to drinking alcohol regularly.

Section 2
Survey Methodology

Introduction

From 1989 through 1997, Pennsylvania conducted a biennial statewide survey of students regarding their use of alcohol, tobacco and other drugs. The *Generation at Risk* survey was administered to approximately 60,000 6th, 7th, 9th and 12th graders. The survey was an important tool for professionals and policy makers who dealt with substance abuse and related issues. Results from the study provided a benchmark of alcohol, tobacco, and drug use among young Pennsylvanians, and helped indicate whether prevention and treatment programs were achieving their intended results. The survey had been expanded over the years to include questions on a range of issues such as physical fighting, carrying weapons, gangs, drinking and driving, and attitudes about school.

Prior to conducting the planned 1999 survey, an advisory group representing the Pennsylvania Departments of Health, Education, and Public Welfare, and other state agencies including the Governor's Policy Office, the Children's Partnership, Juvenile Court Judges' Commission and the Commission on Crime and Delinquency, suggested the survey be redesigned to include additional information on risk and protective factors associated with delinquency and substance abuse. This redesign effort resulted in the development of the *Pennsylvania Youth Survey (PAYS)*.

Since 2001, the *PAYS* has been administered every two years, in the fall semester, to 6th, 8th, 10th and 12th grade public school students across the state. The 2009 *PAYS* was administered to more than 140,000 public school students in grades 6 through 12. Upon completion of the project, community-level reports will be issued to more than 300 schools, school districts, and counties. The validated statewide probability sample, which is the subject of this report, consists of 22,647 students in grades 6, 8, 10 and 12 from 110 schools.

The data gathered in the *PAYS* serve two primary needs. First, the survey results provide an important benchmark for alcohol, tobacco, and other drug (ATOD) use and delinquent behavior among young Pennsylvanians, and help indicate whether prevention and treatment programs are achieving their intended results. Second, the survey assesses risk factors that are related to these behaviors and the protective factors that guard against them. This information allows community leaders and school administrators to direct prevention resources to areas where they are likely to have the greatest impact.

The 2009 *PAYS* was sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD). The PCCD contracted with SmartTrack, Inc., to conduct the survey, which was administered in the fall of 2009.

The Survey Questionnaire

The *Communities That Care Youth Survey (CTCYS)* was adopted as the basis for the *PAYS*. Based on the work of Dr. J. David Hawkins and Dr. Richard F. Catalano, the *CTCYS* is designed to identify the levels of risk factors related to problem behaviors such as ATOD use—and to identify the levels of protective factors that help guard against those behaviors. In addition to measuring risk and protective factors, the *CTCYS* also measures the actual prevalence of drug use, violence and other antisocial behaviors among surveyed students. Three articles (Pollard, Hawkins & Arthur, 1999; Arthur, Hawkins, Pollard, Catalano & Baglioni, 2002; Glaser, Van Horn, Arthur, Hawkins & Catalano, 2005) describe the *CTCYS*, its uses and its ongoing development.

As in previous years, two versions of the *PAYS* questionnaire were made available to Pennsylvania schools: the standard questionnaire and a version that does not include the items that make up the family domain risk and protective factors. The standard questionnaire, which is presented in Appendix B of this report, was used by 64.4% of the respondents in the statewide sample, while the non-family questionnaire was used by 35.6%.

Changes to the Questionnaire

While the majority of the items contained in the 2009 *PAYS* questionnaire are identical to those contained in the 2007 questionnaire, a number of changes were introduced in this survey cycle.

- Items from the 2007 questionnaire assessing the abuse of prescription drugs were replaced with six new questions designed to measure prevalence-of-use rates across the three prescription drug categories: pain relievers, stimulants and tranquilizers. These questions were taken from the latest version of the *CTCYS*.
- The risk factor scale *Laws and Norms Favorable to Handguns* was dropped from the questionnaire. All other risk and protective factor scales from the 2007 questionnaire were retained in full.
- The 2009 questionnaire includes six items addressing student experiences with gambling. Two of the six gambling questions—the past-12-months and past-30-days gambling for "money or anything of value" items—are identical to questions used on the 2005 and 2007 surveys. The sports betting, lottery ticket, and table gaming questions are similar to questions used in the 2007 survey. These changes were made in consultation with the Pennsylvania Department of Health.
- Starting in 2009, the *PAYS* asked students a series of eight questions about bullying at school and internet safety.
- The ordering of items throughout the questionnaire was changed so that data points most critical to the prevention planning process, including data needed for the Drug-Free Communities grant program, would be collected in the first sections of the survey. This change improves the response rate for these key items.
- For some survey items, the layout of the question and ordering of the response options was changed in order to improve readability.

It is important to note that some of these changes—particularly the reordering of the survey items, changes to question layout, and the reordering of some response options sets—has impacted the way students respond to the survey items. These effects are more pronounced for the items that constitute a number of the risk and protective factor scales. For this reason, risk and protective factor results from the 2009 *PAYS* will not be compared to results from previous administrations of the survey. Response patterns to other items, such as ATOD behavior questions, were less impacted by the survey redesign. While historical comparisons for these and other items will be made in this report, the impact of the questionnaire redesign on trend comparability should be taken into consideration.

The Statewide Sample

Sample Design

The target population of the 2009 *PAYS* is 6th, 8th, 10th and 12th grade students enrolled in regular public schools across Pennsylvania. The survey's original sample plan employed a two-stage stratified probability design. The first stage was the selection of schools. In the first sampling stage, schools were stratified by grade. Schools with small grade enrollment (less than 50 students) were combined with other schools prior to sampling. The second stage of sampling was to involve the random selection of classes within the sampled schools and grades.

Specialized sampling software, *PCSample*, was used to select a representative sample of public schools. The software is designed for stratified systematic sampling with random starts. To ensure a good distribution of schools by region and enrollment size, schools were sorted by region and in descending order of grade enrollment before sampling. Within a stratum, schools were selected with probability proportional to size, with size being the grade enrollment of the school. While most selected schools were only asked to survey one grade level, a few schools had two grade levels selected for participation in the statewide sample. The sample is designed to yield a self-weighting sample within strata so that every eligible student has an equal chance of selection. A self-weighting sample is desirable because it tends to improve the precision of the estimates.

Sample Size

Sample size depends on the distribution of the variables to be measured, the desired precision of the estimates, and the statistical confidence desired. The level of precision is conveyed by providing the survey estimate plus or minus its margin of error.

The sample size also needs to be adjusted by a design effect to account for the stratified sample design of the *PAYS*. The design effect is the ratio of the variance of the estimate obtained from a complex sample design to the variance of the estimate obtained from a simple random sample of the same size. For a population size N, the sample size needed to achieve a $\pm$ d% margin of error for an estimated proportion p, given a design effect (deff) for p, is given by

$$n = \frac{1}{\left(\frac{d}{1.96}\right)^2\left(\frac{N-1}{p(1-p)N(deff)}\right)+\frac{1}{N}}.$$

Sample sizes were computed to yield a 5.0% margin of error, within each grade level, for prevalence estimates of 50.0%. Assuming a design effect of 4.0, a sample size of approximately 1,500 completed questionnaires per stratum (grade) was needed to produce this level of statistical precision. With the second stage of the sample set at two classrooms (approximately 50 students) for each school, and the

following assumptions about response rate incorporated into the model, approximately 78 schools would need to be recruited within each grade level.

- Number of desired completed questionnaires per grade level ≈ 1,500
- Number of sampled students needed per grade level (assuming a student response rate of 56%) ≈ 2,700
- Number of sampled students wanted within each participating school = 50 (roughly two classes)
- Number of desired participating schools per grade level (2700/50) = 54
- Number of sampled schools needed per grade level (@ 70% response rate) = 78

Revision of the Sample Design

As recruiters began to contact the sampled schools, the challenges associated with this survey of implementing a two-stage sample design became more apparent.

- Unlike many large-scale, school-based survey projects, *PAYS* is administered in the fall semester rather than the spring semester. As a result, some schools are unable to provide class lists and other necessary information at an early enough stage in the survey planning process.
- Sufficient resources were not available to train survey coordinators at the more than 300 sampled schools. Survey coordinators are needed to prepare the classroom-level sampling frame and select the participating classrooms.
- Since 2001, a fundamental goal of the *PAYS* project has been to provide school districts and counties with local data for prevention planning. Since most districts require near-census levels of participation in order to generate representative data, classroom sampling is inappropriate for many participating districts. Most school districts participating in the *PAYS* requested the ability to survey full grade levels.

Faced with insufficient time and resources to coordinate a statewide, two-stage sample, and giving consideration to the data collection needs of individual counties and districts, it was decided that the first stage of the original sample design would be retained, but the second-stage classroom sampling would be replaced with a grade-level census. More specifically, the revised sampling model was a single-stage design with stratification by grade level, with the sampling unit defined as grade levels within schools. Schools were instructed to survey all students in the selected grade level.

It is important to note that the redesign of the sample did have an impact on respondent selection probabilities. Consequently, adjustments to these probabilities were incorporated into the weighting formula. It should also be noted that the number of schools in the sample is greater than what would have been specified if a single-stage design had been implemented from the beginning. The positive impact of this larger number of schools is a larger final sample size. The negative impact is that recruitment and administration support resources were spread more thinly.

The Sample Frame

A list of all public schools with enrollment in the 6th, 8th, 10th or 12th grade, the four grade levels included in the statewide sample, was provided by the Pennsylvania Department of Education. These enrollment data were the starting point for the development of the sampling frame. Each record on the frame generally represents a school (some records represent school districts). The original frame contained 2,101 schools

and 591,952 students enrolled in the four grade levels. The frame cleaning process involved the following tasks:

- Remove 1,234 records with no enrollment in grades 6, 8, 10 and 12.
- Remove 87 records that have school names "SD" (school district) and school number "0000" or "9999." These records represent a school district collectively, and not individual schools.
- Remove 18 special schools (cyber schools, distance learning schools, juvenile detention centers, adult education centers, special education, and alternative schools).

For purposes of developing the sampling frame, the sampling unit was defined as each unique grade-by-school combination. Therefore, separate school rosters were developed for the 6th, 8th, 10th and 12th grades. As a result, most schools were included in more than one roster. For example, a middle school would typically be included in both the 6th and 8th grade rosters.

Enrollment totals for the final sample frame are presented in Table 1.

Participation

Participation rates were calculated separately for both schools and students as a ratio of the number participating divided by the number selected. A combined participation rate consists of the two separate school and student participation rates multiplied by each other.

School Participation: 309 school-grade combinations were included in the sample. Out of these, 117, or 37.9%, participated in the survey.

Student Participation: The 117 participating school-grade combinations had enrollments totaling 35,502 students. Out of these, 24,016, or 67.7%, returned scannable questionnaires or completed an online survey session for the appropriate grade levels. (Note: 110 schools were included in the sample, but seven of these had two grade levels included.)

Overall Participation: 37.9% * 67.7% = 25.6%

Given the nature of the *PAYS*, the level of student participation within surveyed schools, nearly 70%, is good. This is because it is impossible at most schools to conduct a full census of an individual grade level. Most schools select a single class period for survey administration. If 10th graders are being surveyed during the second period, the survey administration coordinator usually includes all classes during that period that have significant numbers of 10th graders. Most schools do not institute a process for surveying 10th graders who attend classes with predominantly 9th grade or 11th grade students. (Note that for the same reason, it is also impossible at most schools to construct an exhaustive grade-level sampling frame for a second-stage classroom selection.) In addition, most schools do not provide an alternative survey day for students who are absent on the day of survey administration.

The school participation rate, 37.9%, holds the most room for improvement. Ideally, more than 75% of sampled schools would elect to join the survey effort, which would both increase the sample size and reduce the risk of participation bias at the school level. Participation bias occurs if there is a systematic difference between the 37.9% of sampled schools that joined the survey effort and the 62.1% that did not. If such a difference exists and it is correlated with the way students respond to the survey, the results of the survey will less accurately reflect the state as a whole.

Weighting

A weight has been associated with each response record to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

$$W = W_1 * f_1 * f_2 * f_3$$

W_1 = The inverse of the probability of selecting the school/grade combination

f_1 = A school-level nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools.

f_2 = A student-level nonresponse adjustment factor calculated by school

f_3 = A poststratification adjustment factor calculated by grade. With this factor applied, the distribution of the sample across grade levels matches the grade distribution in the statewide enrollment figures.

Survey Validation

Five strategies were used to assess the validity of the completed survey forms. The first two strategies eliminated students who appeared to exaggerate their drug use and other antisocial behavior. The third strategy eliminated students who reported use of a fictitious drug. The fourth strategy eliminated the surveys of students who repeatedly reported logically inconsistent patterns of drug use. The fifth strategy eliminated students who answered less than 25% of the questions on the survey.

- In the first strategy, surveys from students who reported a combined average of four or more daily uses for illicit drugs other than marijuana were eliminated from the survey dataset. This strategy removes surveys that are not taken seriously.
- The second strategy supplements the drug use exaggeration test by examining the frequency of four other antisocial behaviors: *Attacking Someone with Intent to Harm*, *Attempting to Steal a Vehicle*, *Being Arrested*, and *Getting Suspended*. Respondents who reported an unrealistically high frequency of these behaviors—more than 80 instances within the past year—were removed from the analysis.
- In the third strategy, students were asked if they had used a fictitious drug, Derbisol, in the past 30 days or in their lifetimes. If students reported the use of Derbisol for either of these time periods, their surveys were not included in the analysis of the findings.
- The fourth strategy was used to detect logical inconsistencies among responses to the drug-related questions. Students were identified as inconsistent responders in the following circumstances only: (1) if they were inconsistent on two or more of the following four drugs: alcohol, cigarettes, smokeless tobacco and marijuana; or (2) if they were inconsistent on two or more of the remaining drugs. An example of an inconsistent response would be if a student reported that he or she had used alcohol three to five times in the past 30 days but had never used alcohol in his or her lifetime.
- For the fifth strategy, students who answered less than 25% of the questions on the survey were removed from the analysis. This test is used to identify students who did not take the survey seriously or were incapable of fully participating.

PAYS students were cooperative and produced a high percentage of valid surveys. All but 1,369 students (5.7% of 24,016) completed valid surveys. Of the 1,369 surveys identified and eliminated by one or more

of the five strategies described above, 360 exaggerated drug use (strategy 1), 240 exaggerated other antisocial behavior (strategy 2), 696 reported the use of the fictitious drug (strategy 3), 601 responded in a logically inconsistent way (strategy 4) and 312 answered fewer than 25% of the questions on the survey (strategy 5). The elimination total produced by these five strategies equals more than 1,369 because a number of respondents were identified by more than one strategy.

The filtering out of these 1,369 records resulted in a revised total of 22,647 respondents.

Administration

Survey administration procedures were the same as those used in previous waves of the *PAYS* and were standardized throughout the state. Following school or district commitment to participate, surveys were sent directly to the participating schools. Within the school, the survey booklets were distributed to individual classrooms that were eligible for participation. Each teacher received an appropriate number of booklets and collection envelopes. Students had one classroom period in which to complete the survey. In some schools, some or all of the student respondents completed the survey in a computer lab using an internet-based survey administration system. All together, 17.4% of the survey participants included in the statewide sample took the survey online. The contractor, SmartTrack, Inc., managed the online administration.

A passive consent procedure was used by most school districts for this survey administration. That is, students were given the consent notification and were asked to give it to their parents. It was then up to the parents to notify the school if they did not want their child to participate in the survey.

The teachers reviewed the instructions with their students and asked the students to complete the survey. The instructions informed the students that there were no right or wrong answers. The instructions also explained the proper way to mark the answers. Students were asked to complete the survey but were also told that participation is voluntary. Furthermore, students were told that they could skip any question that they were not comfortable answering. Both the teacher and the written instructions on the front of the survey form assured students that the survey was anonymous and confidential. Upon completion of the survey the survey collection envelopes were sealed and returned to SmartTrack, Inc., for processing.

Confidence Intervals

The maximum 95% confidence intervals for grade-level estimates range from a low of ±2.4 percentage points for the 10th and 12th grade subsamples to a high of ±2.9 percentage points for the 8th grade subsample. Estimates for the overall sample have confidence intervals of ±1.3 percentage points.

These confidence intervals are for prevalence rates of 50%. For less prevalent behaviors, such as heroin use and taking a handgun to school, the confidence interval narrows substantially. Also note that the variance estimates used for these confidence interval calculations include a design effect of 4.0 to adjust for the complex design of the 2009 *PAYS* sample.

Table 1. Confidence Intervals for Sample

Grade	Enrollment		Sample		Confidence Interval
	Number	Percentage	Number	Percentage	
6th	131,228	22.6%	4,884	21.6%	±2.8%
7th	--	--	--	--	--
8th	139,259	23.9%	4,406	19.5%	±2.9%
9th	--	--	--	--	--
10th	159,711	27.5%	6,694	29.6%	±2.4%
11th	--	--	--	--	--
12th	151,521	26.0%	6,663	29.4%	±2.4%
Totals	**581,719**	**100.0%**	**22,647**	**100.0%**	**±1.3%**

Note: Rounding can produce totals that do not equal 100%. The distribution of the sample across grade levels is before the application of the weights.

Through this report survey results are presented for the overall sample, for individual grade levels, and for individual gender groups. Ethnic subsamples are not large enough, given the complex nature of the sample design, to support the analysis of results within individual ethnic groups.

Exploring *PAYS* Results Online via SmartTrack™

This report includes a detailed review of findings from each content area of the *PAYS* questionnaire. Some data users, however, may wish to go beyond these key metrics. In order to facilitate this process, the 2009 *PAYS* statewide results can be explored using the SmartTrack™ online data browsing system.

SmartTrack's internet-based reporting tools allow for instant presentation of various reports, ranging from frequency distributions to crosstabulations. Data can be viewed in both table and graph formats (via Excel), and users can review results for any appropriate aggregation or subsample.

Here is an example of an Excel chart generated using SmartTrack. In this report, an educator is examining student perception of the risk associated with smoking cigarettes.

How much do you think people risk harming themselves (physically or in other ways) if they:						
	No risk	Slight risk	Moderate risk	Great risk	Skips	Totals
Smoke one or more packs of cigarettes per day?	07.22%	05.60%	27.15%	59.23%	0.80%	100%

For more information on accessing *PAYS* results, or any other questions about SmartTrack, you can visit the website at www.thesmarttrack.com, email info@thesmarttrack.com, or call (866) 714-8080.

Demographic Profile of Surveyed Youth

The survey measures a variety of demographic characteristics. Table 2 shows selected characteristics of surveyed youth: sex, ethnicity and the primary language spoken at home. The primary language spoken at home refers to the primary language the student speaks at home (rather than what the parents speak at home). Please note that the data in Table 2 show the variable distributions before the statistical weights are applied.

A higher percentage of surveyed students were female (48.8% female versus 47.3% male). A majority of

students identified themselves as White (72.5%). The largest minority group is Latino (7.9%), followed by African American (4.8%), Asian (2.8%) and American Indian (0.6%). Note that while the "Other/Multiple" category listed on all tables includes students who selected "Other" as their primary ethnicity, this category also includes those students who selected multiple ethnicities. Therefore, for example, students who reported both African American and Latino ethnicity would be classified in the "Other/Multiple" category for the purposes of this report.

Nearly all of the surveyed students (92.3%) reported English as the language they most often speak at home.

Table 2. Selected Demographic Characteristics of Surveyed Youth

	Number of Students	*Percentage of Students*
Overall Valid Surveys	22,647	100.0%
Sex		
Male	10,716	47.3%
Female	11,062	48.8%
Did not respond	869	3.8%
Ethnicity		
White	16,426	72.5%
African American	1,082	4.8%
Latino	1,784	7.9%
American Indian	125	0.6%
Asian	634	2.8%
Other/Multiple	2,365	10.4%
Did not respond	231	1.0%
Primary Language Spoken at Home		
English	20,902	92.3%
Spanish	974	4.3%
Other Language	579	2.6%
Did not respond	192	0.8%

Note: Rounding can produce totals that do not equal 100%.

Section 3
Alcohol, Tobacco and Other Drug Use

Measurement

Alcohol, tobacco and other drug (ATOD) use is measured in the *PAYS* by a set of 36 questions. The questions are similar to those used in the *Monitoring the Future* study, a nationwide study of drug use by middle and high school students. Consequently, national data as well as data from other similar surveys can be easily compared to data from the *PAYS*.

Prevalence-of-use tables and graphs show the percentages of students who reported using ATODs. These results are presented for both lifetime and past-30-day prevalence of use periods. Lifetime prevalence of use (whether the student has ever used the drug) is a good measure of student experimentation. Past-30-day prevalence of use (whether the student has used the drug within the last month) is a good measure of current use. In addition to the standard lifetime and past-30-day prevalence rates for alcohol use, binge drinking behavior (defined as a report of five or more drinks in a row within the past two weeks) is also measured.

A multi-question indicator—"any illicit drug (other than marijuana)"—measures the use of one or more of the following drugs: inhalants, cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids. The purpose of this drug combination rate is to provide prevention planners with an overall gauge of so-called "hard" drug use (Johnston, O'Malley, Bachman & Schulenberg, 2009a).

The survey also includes six questions designed to measure nonmedical use of prescription drugs. The questions cover three general categories of nonmedical prescription drug use: pain relievers, tranquilizers and stimulants.

Results Summary

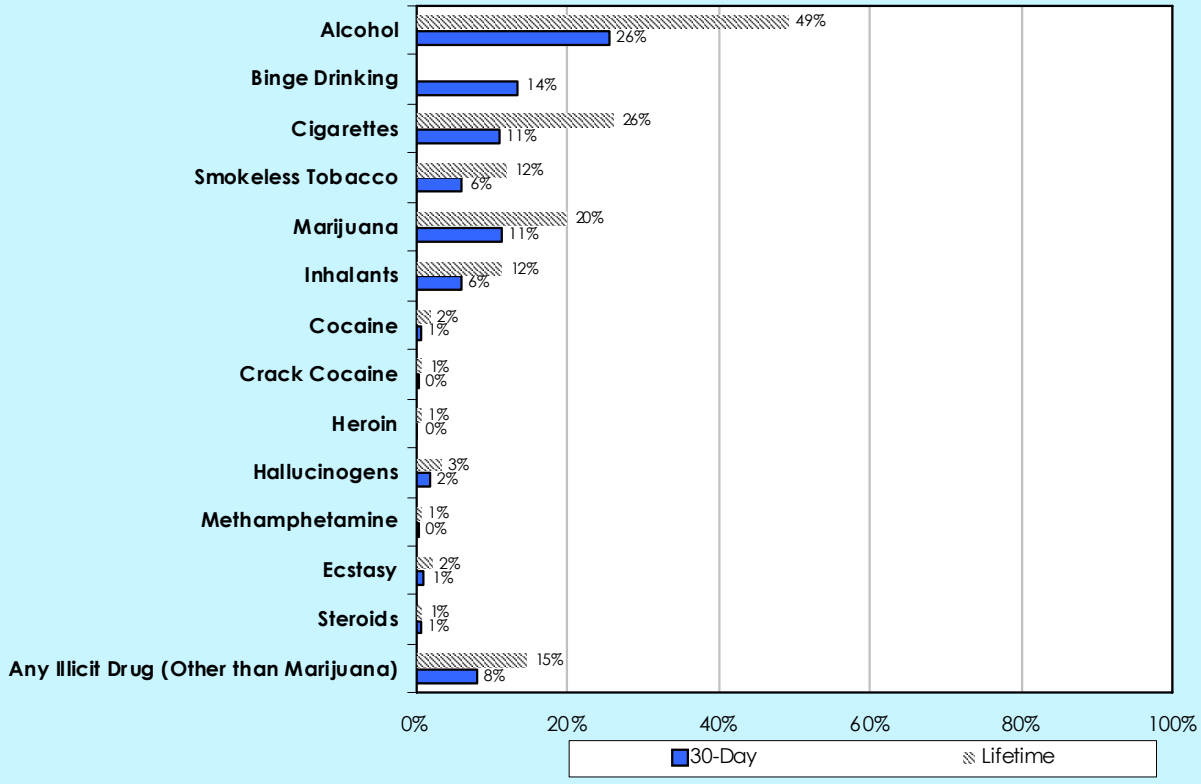
Overall Results

ATOD prevalence rates for the combined sample of 6th, 8th, 10th and 12th graders are presented in Graph 1, and in the overall results column of Tables 3 and 4. As these results show, Pennsylvania students recorded the highest lifetime prevalence-of-use rates for alcohol (49.3%), cigarettes (26.3%), marijuana (20.0%), smokeless tobacco (12.1%) and inhalants (11.5%). Other lifetime prevalence rates ranged from 0.6% for methamphetamine to 3.3% for hallucinogens. The rate of illicit drug use excluding marijuana is

summarized by the indicator "any illicit drug (other than marijuana)," with 14.7% of surveyed students reporting use of these drugs in their lifetimes.

Pennsylvania students reported the highest past-30-day prevalence-of-use rates for alcohol (25.5%), marijuana (11.4%), cigarettes (11.0%), smokeless tobacco (6.2%) and inhalants (5.9%). Other past-30-day prevalence rates ranged from 0.2% for heroin to 1.8% for hallucinogens. Overall, 8.1% of Pennsylvania students reported the use of any illicit drug (other than marijuana) in the past 30 days.

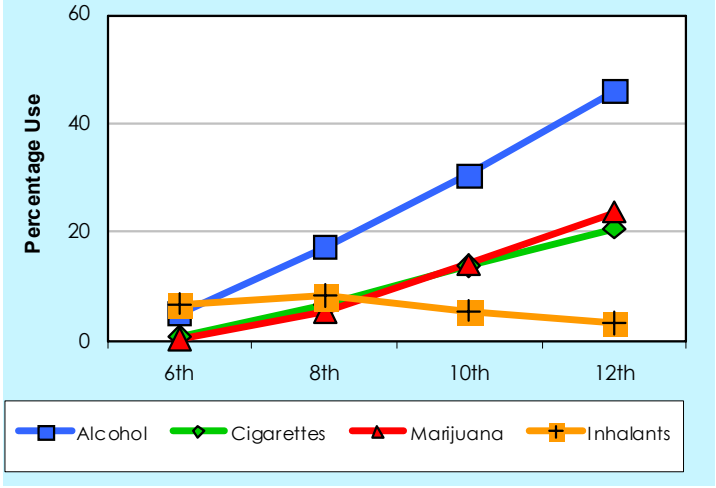
Graph 1. Overall Lifetime and Past-30-Day Prevalence of Alcohol, Tobacco and Other Drug Use



Grade-Level Results

ATOD prevalence rates for individual grade levels are presented in Graph 2 and Tables 3 and 4. Typically, prevalence rates for the use of most substances increase as students enter higher grades. In many communities, however, inhalant use provides an exception to this pattern, often peaking during the late middle school or early high school years. This may be because inhalants are relatively easy for younger students to obtain. Past-30-day alcohol use in Pennsylvania ranges from a low of 5.1% among 6th graders to a high of 46.0% among 12th graders. Past-30-day marijuana use ranges from a low of 0.3% among 6th graders to a high of 23.7% among 12th graders. Past-30-day cigarette use ranges from a low of 0.9% among 6th graders to a high of 20.8% among 12th graders. Past-30-day inhalant use ranges from a low of 3.3% among 12th graders to a high of 8.2% among 8th graders.

Graph 2. Past-30-Day Use of Selected ATODs



Comparisons to National Results

Comparing and contrasting findings from a state-level survey to relevant data from a national survey provides a valuable perspective on local data. In this report, national comparisons for ATOD use will be made to the 2009 *Monitoring the Future* study. The *Monitoring the Future* survey project, which provides prevalence-of-use information for ATODs from a nationally representative sample of 8th, 10th and 12th graders, is conducted annually by the Survey Research Center of the Institute for Social Research at the University of Michigan (see www.monitoringthefuture.org). For a review of the methodology of this study, please see Johnston et al. (2009a).

In addition to a complete report of prevalence-of-use rates for each surveyed grade, Tables 3 and 4 present national results from the *Monitoring the Future* study. Across the three comparison grades (8th, 10th and 12th), students in Pennsylvania reported lower average levels of lifetime marijuana, Ecstasy and cocaine use than their national counterparts. The largest grade-level differences in lifetime substance use were for marijuana in the 8th and 10th grades (9.8% and 25.1% versus 15.7% and 32.3% for *Monitoring the Future*) and alcohol in the 8th grade (45.0% versus 36.6% for *Monitoring the Future*).

For past-30-day ATOD use, students in Pennsylvania reported a higher average level of inhalant use than their national counterparts. The largest grade-level differences in past-30-day substance use were for marijuana in the 12th grade (23.7% versus 20.6% for *Monitoring the Future*) and inhalants in the 8th and 10th grades (8.2% and 5.5% versus 3.8% and 2.2% for *Monitoring the Future*).

Gender Differences

Like many recent national and state-level youth health behavior surveys, the 2009 *PAYS* shows relatively little difference in ATOD prevalence rates between female and male students. The only substantial difference occurs for smokeless tobacco, with 10.1% of males reporting one or more uses in the past 30 days compared to 2.5% of females. Much smaller but noteworthy differences also appear for past-30-day alcohol use (26.1% among females versus 24.8% among males) and marijuana use (12.9% among males versus 9.9% among females).

This relative parity in past-30-day rates between the sexes represents a shift in the pattern of ATOD use. Fifteen years ago male students reported higher rates of use across a number of ATOD categories. It is important to note that the closing of the ATOD gender gap is primarily a reflection of declining rates of use among male students, compared to either stable or more slowly declining rates of use among female students.

Table 3. Lifetime Use of Alcohol, Tobacco and Other Drugs

	Pennsylvania 2009							*Monitoring the Future*[1]		
	Female %	Male %	6th %	8th %	10th %	12th %	Overall %	8th %	10th %	12th %
Alcohol	51.5	47.3	20.8	45.0	56.7	70.0	49.3	36.6	59.1	72.3
Cigarettes	27.0	25.5	4.6	20.6	32.0	44.3	26.3	20.1	32.7	43.6
Smokeless Tobacco	5.6	19.1	2.5	8.8	14.2	21.4	12.1	9.6	15.2	16.3
Marijuana	18.9	21.3	0.6	9.8	25.1	41.1	20.0	15.7	32.3	42.0
Inhalants	12.0	11.0	10.2	13.9	12.2	9.7	11.5	14.9	12.3	9.5
Cocaine	1.5	2.2	0.0	0.5	1.8	4.8	1.9	2.6	4.6	6.0
Crack Cocaine	0.6	0.9	0.2	0.4	1.2	1.1	0.8	1.7	2.1	2.4
Heroin	0.6	0.7	0.1	0.2	0.9	1.4	0.7	1.3	1.5	1.2
Hallucinogens	2.4	4.3	0.1	1.0	3.7	8.0	3.3	3.0	6.1	7.4
Methamphetamine	0.5	0.7	0.2	0.2	0.7	1.1	0.6	1.6	2.8	2.4
Ecstasy	1.9	2.3	0.2	0.7	2.2	4.8	2.1	2.2	5.5	6.5
Steroids	0.5	1.3	0.6	0.7	1.1	1.0	0.8	1.3	1.3	2.2
Any Illicit Drug (Other than Marijuana)	14.1	15.4	10.5	15.0	15.4	17.2	14.7	--	--	--

Note: The symbol "--" indicates that data are not available because students were not surveyed, the drug was not included in the survey, or a comparable aggregate calculation was not available. *Monitoring the Future* data are only available for 8th, 10th and 12th graders.

[1] Johnston et al. (2009b).

Table 4. Past-30-Day Use of Alcohol, Tobacco and Other Drugs

	Pennsylvania 2009							Monitoring the Future[1]		
	Female %	Male %	6th %	8th %	10th %	12th %	Overall %	8th %	10th %	12th %
Alcohol	26.1	24.8	5.1	17.2	30.5	46.0	25.5	14.9	30.4	43.5
Binge Drinking	13.6	13.8	1.2	7.5	15.7	27.6	13.6	7.8	17.5	25.2
Cigarettes	11.0	11.0	0.9	6.7	13.9	20.8	11.0	6.5	13.1	20.1
Smokeless Tobacco	2.5	10.1	0.6	4.7	7.6	10.9	6.2	3.7	6.5	8.4
Marijuana	9.9	12.9	0.3	5.4	14.2	23.7	11.4	6.5	15.9	20.6
Inhalants	6.0	5.8	6.8	8.2	5.5	3.3	5.9	3.8	2.2	1.2
Cocaine	0.4	0.7	0.1	0.2	0.6	1.2	0.6	0.8	0.9	1.3
Crack Cocaine	0.3	0.3	0.0	0.3	0.4	0.4	0.3	0.5	0.4	0.6
Heroin	0.2	0.3	0.0	0.2	0.2	0.5	0.2	0.4	0.4	0.4
Hallucinogens	1.2	2.4	0.1	0.8	2.3	3.5	1.8	0.9	1.4	1.6
Methamphetamine	0.2	0.3	0.0	0.1	0.5	0.4	0.3	0.5	0.6	0.5
Ecstasy	0.8	1.3	0.0	0.4	1.4	2.2	1.1	0.6	1.3	1.8
Steroids	0.2	1.0	0.5	0.3	0.7	0.8	0.6	0.4	0.5	1.0
Any Illicit Drug (Other than Marijuana)	7.3	9.0	7.3	9.3	8.1	7.6	8.1	--	--	--

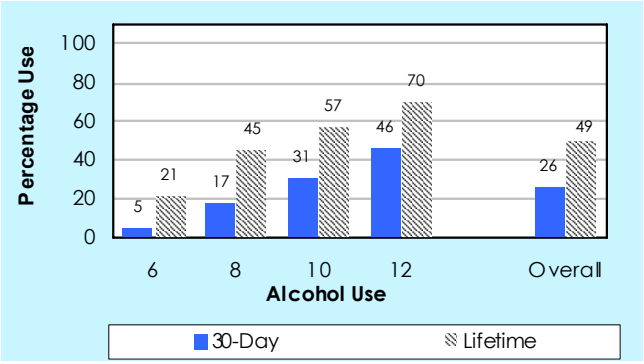
Note: The symbol "--" indicates that data are not available because students were not surveyed, the drug was not included in the survey, or a comparable aggregate calculation was not available. *Monitoring the Future* data are only available for 8th, 10th and 12th graders.

[1] Johnston et al. (2009b).

Item-Level Results

Alcohol

Alcohol, including beer, wine and hard liquor, is the drug used most often by adolescents today. Findings from the *Monitoring the Future* study highlight the pervasiveness of alcohol in middle and high schools today. In comparison, cigarette use (the second most pervasive category of ATOD use) is only about half as prevalent as alcohol use. Given the national pattern, it is not surprising that alcohol is the most used drug among students in Pennsylvania.



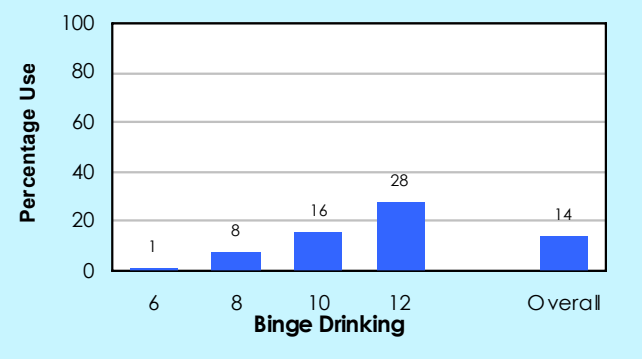
Lifetime Use:

- Lifetime prevalence of alcohol use ranges from a low of 20.8% for 6th graders to a high of 70.0% for 12th graders. Overall, 49.3% of Pennsylvania students have used alcohol at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th graders reported a higher rate of lifetime alcohol use and 10th and 12th graders reported slightly lower rates of use.
- Female students are more likely than male students (51.5% female versus 47.3% male) to have reported having had one or more drinks of alcohol in their lifetimes.

Past-30-Day Use:

- Past-30-day prevalence of alcohol use ranges from a low of 5.1% for 6th graders to a high of 46.0% for 12th graders. Overall, 25.5% of Pennsylvania students have used alcohol at least once in the last 30 days.
- Compared to national findings, Pennsylvania 8th and 12th graders reported slightly higher rates of past-30-day alcohol use and 10th graders reported a similar rate of use.
- Female students are slightly more likely than male students (26.1% female versus 24.8% male) to report having used alcohol in the past 30 days.

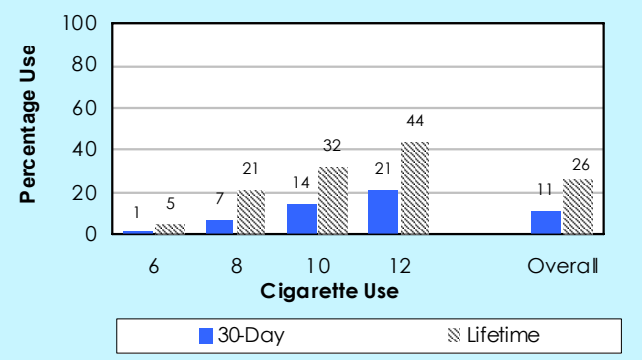
Binge drinking (defined as a report of five or more drinks in a row within the past two weeks) is extremely dangerous. Several studies have shown that binge drinking is related to higher probabilities of drinking and driving as well as injury due to intoxication. As with alcohol use in general, binge drinking tends to become more pervasive as students grow older.



- Across grades, the prevalence rate of binge drinking ranges from a low of 1.2% for 6th graders to a high of 27.6% for 12th graders. Overall, 13.6% of Pennsylvania students have reported at least one episode of binge drinking in the past two weeks.
- Compared to national findings, Pennsylvania 8th and 10th graders reported similar rates of binge drinking and 12th graders reported a slightly higher rate of use.
- Female and male students reported similar rates of binge drinking.

Tobacco

After alcohol, tobacco (including cigarettes and smokeless tobacco) is the most commonly used drug among adolescents. Nationally, tobacco use (including both cigarettes and smokeless tobacco) has declined substantially since the 1990s (Johnston et al., 2009b).



Lifetime Cigarette Use:

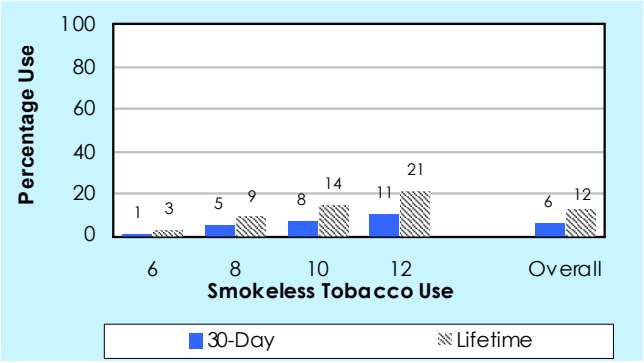
- Lifetime prevalence of cigarette use ranges from a low of 4.6% for 6th graders to a high of 44.3% for 12th graders. Overall, 26.3% of Pennsylvania students have used cigarettes at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th, 10th and 12th graders reported similar rates of lifetime cigarette use.
- Female students are slightly more likely than male students (27.0% female versus 25.5% male) to report having used cigarettes at least once in their lifetimes.

Past-30-Day Cigarette Use:

- Past-30-day prevalence of cigarette use ranges from a low of 0.9% for 6th graders to a high of 20.8% for 12th graders. Overall, 11.0% of Pennsylvania students have used cigarettes at least once in the last 30 days.
- Compared to national findings, Pennsylvania 8th, 10th and 12th graders reported similar rates of past-30-day cigarette use.
- Female and male students reported identical rates of past-30-day cigarette use.

Lifetime Smokeless Tobacco Use:

- Lifetime prevalence of smokeless tobacco use ranges from a low of 2.5% for 6th graders to a high of 21.4% for 12th graders. Overall, 12.1% of Pennsylvania students have used smokeless tobacco at least once in their lifetimes.



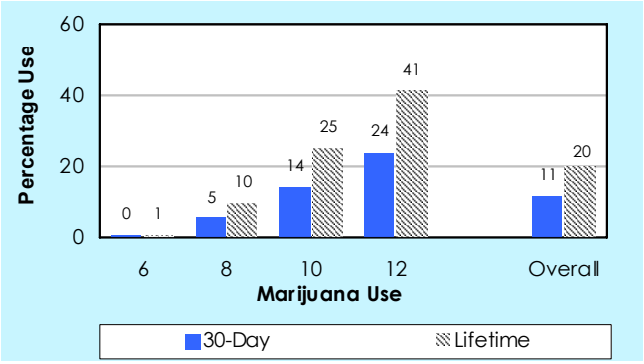
- Compared to national findings, Pennsylvania 8th and 10th graders reported similar rates of lifetime smokeless tobacco use and 12th graders reported a higher rate of use.
- Not surprisingly, lifetime smokeless tobacco use was substantially higher among male students (19.1%) compared to female students (5.6%).

Past-30-Day Smokeless Tobacco Use:

- Past-30-day prevalence of smokeless tobacco use ranges from a low of 0.6% for 6th graders to a high of 10.9% for 12th graders. Overall, 6.2% of Pennsylvania students have used smokeless tobacco at least once in the last 30 days.
- Compared to national findings, Pennsylvania 8th and 10th graders reported similar rates of past-30-day smokeless tobacco use and 12th graders reported a slightly higher rate of use.
- Not surprisingly, past-30-day smokeless tobacco use was substantially higher among male students (10.1%) compared to female students (2.5%).

Marijuana

During the 1990s, there were notable changes in trends of marijuana use throughout the United States. Results from the *Monitoring the Future* study show increases in both lifetime and past-30-day prevalence rates through the early and mid 1990s (Johnston et al., 2009b). For 8th and 10th graders, the past-30-day rates more than doubled during this period. Since 1996 and 1997, when past-30-day marijuana use peaked, rates have declined.



Lifetime Use:

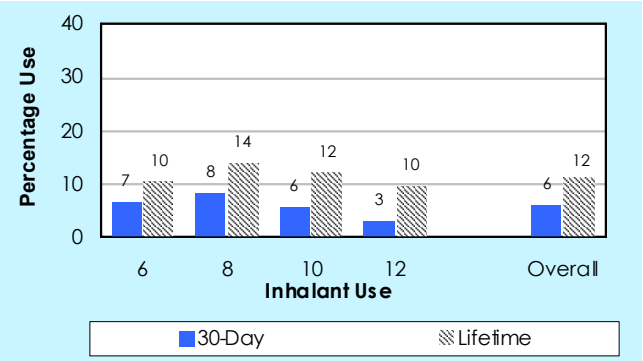
- Lifetime prevalence of marijuana use ranges from a low of 0.6% for 6th graders to a high of 41.1% for 12th graders. Overall, 20.0% of Pennsylvania students have used marijuana at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th and 10th graders reported lower rates of lifetime marijuana use and 12th graders reported a similar rate of use.
- Male students are more likely than female students (21.3% male versus 18.9% female) to have reported using marijuana at least once in their lifetimes.

Past-30-Day Use:

- Past-30-day prevalence of marijuana use ranges from a low of 0.3% for 6th graders to a high of 23.7% for 12th graders. Overall, 11.4% of Pennsylvania students have used marijuana at least once in the last 30 days.
- Compared to national findings, Pennsylvania 8th and 10th graders reported similar rates of past-30-day marijuana use and 12th graders reported a higher rate of use.
- Male students are more likely than female students (12.9% male versus 9.9% female) to have reported using marijuana at least once in the past 30 days.

Inhalants

Inhalant use is more prevalent with younger students, perhaps because inhalants are often the easiest drugs for them to obtain. The health consequences of inhalant use can be substantial, including brain damage and heart failure. Inhalant use was measured by the survey question "On how many occasions (if any) have you used inhalants (whippets, butane, paint thinner, or glue to sniff, etc.)?" Comparisons with the *Monitoring the Future* study (national results) should be made carefully because there are differences in survey questions for this class of drugs.



Lifetime Use:

- Lifetime prevalence of inhalant use ranges from a low of 9.7% for 12th graders to a high of 13.9% for 8th graders. Overall, 11.5% of Pennsylvania students have used inhalants at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th, 10th and 12th graders reported similar rates of lifetime inhalant use.
- Female and male students reported similar rates of lifetime inhalant use.

Past-30-Day Use:

- Past-30-day prevalence of inhalant use ranges from a low of 3.3% for 12th graders to a high of 8.2% for 8th graders. Overall, 5.9% of Pennsylvania students have used inhalants at least once in the last 30 days.

- Compared to national findings, Pennsylvania 8th, 10th and 12th graders reported higher rates of past-30-day inhalant use. In particular, 8.2% of Pennsylvania 8th graders reported past-30-day inhalant use compared to 3.8% of 8th graders from the national sample.
- Female and male students reported similar rates of past-30-day inhalant use.

Other Illicit Drugs

The *PAYS* also measures the prevalence of use for a variety of other drugs. This includes student use of the following: cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids. The rates for prevalence of use of these other drugs are generally lower than the rates for alcohol, tobacco, marijuana and inhalants. Additionally, use of these other drugs tends to be concentrated in the upper grade levels.

Cocaine

Cocaine is a powerfully addictive stimulant that directly affects the brain. Users may develop tolerance and need more and more of the drug to feel the same effects. Cocaine use can cause a variety of physical problems, including chest pain, strokes, seizures and abnormal heart rhythm.

Lifetime Use:

- Lifetime prevalence of cocaine use ranges from a low of 0.0% for 6th graders to a high of 4.8% for 12th graders. Overall, 1.9% of Pennsylvania students have used cocaine at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th and 10th graders reported lower rates of lifetime cocaine use and 12th graders reported a similar rate of use.
- Female and male students reported similar rates of lifetime cocaine use.

Past-30-Day Use:

- Past-30-day prevalence of cocaine use ranges from a low of 0.1% for 6th graders to a high of 1.2% for 12th graders. Overall, 0.6% of Pennsylvania students have used cocaine at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day cocaine use.
- Both female and male students reported very low rates of past-30-day cocaine use.

Crack Cocaine

"Crack" is the street name given to the freebase form of cocaine, which has been processed into a less expensive, smokeable drug. Because crack is smoked, the user experiences a very quick, intense, but short-term high. Smoking large quantities of crack can cause acute problems, including cough, shortness of breath, and severe chest pains.

Lifetime Use:

- Lifetime prevalence of crack cocaine use ranges from a low of 0.2% for 6th graders to a high of 1.2% for 10th graders. Overall, 0.8% of Pennsylvania students have used crack cocaine at least once in their lifetimes.
- Rates of crack cocaine use are very low, so differences between datasets tend to be small. With this caveat in place, it can be noted that the rates of lifetime crack cocaine use reported by Pennsylvania students are lower than those reported nationally.

- Both female and male students reported very low rates of lifetime crack cocaine use.

Past-30-Day Use:

- Past-30-day prevalence of crack cocaine use ranges from a low of 0.0% for 6th graders to a high of 0.4% for 10th and 12th graders. Overall, 0.3% of Pennsylvania students have used crack cocaine at least once in the last 30 days.
- Compared to national findings, 8th and 12th graders reported similar rates of past-30-day crack cocaine use and 10th graders reported the same rate of use.
- Both female and male students reported very low rates of past-30-day crack cocaine use.

Heroin

Heroin is a highly addictive drug with rapid effects. Processed from morphine, heroin is usually injected, snorted or smoked. Physical dependence on the drug often develops among users. Long-term health problems caused by heroin use include collapsed veins, kidney or liver disease and bacterial infections.

Lifetime Use:

- Lifetime prevalence of heroin use ranges from a low of 0.1% for 6th graders to a high of 1.4% for 12th graders. Overall, 0.7% of Pennsylvania students have used heroin at least once in their lifetimes.
- Rates of heroin use are very low, so differences between datasets tend to be small. Not surprisingly, Pennsylvania students reported rates of lifetime use that are similar to national results.
- Both female and male students reported very low rates of lifetime heroin use.

Past-30-Day Use:

- Past-30-day prevalence of heroin use ranges from a low of 0.0% for 6th graders to a high of 0.5% for 12th graders. Overall, 0.2% of Pennsylvania students have used heroin at least once in the last 30 days.
- As with lifetime rates, Pennsylvania students reported rates of past-30-day heroin use that are similar to national rates.
- Both female and male students reported very low rates of past-30-day heroin use.

Hallucinogens

Hallucinogenic drugs can have short- and long-term effects on perception and mood. For instance, users of LSD, the most potent mood- and perception-altering drug, may have unpredictable experiences (known as "trips") ranging from pleasant hallucinations to terrifying thoughts and feelings. LSD can also cause physical complications, including increased blood pressure and heart rate, dizziness, loss of appetite, nausea and numbness. For the purposes of the *PAYS*, hallucinogens were defined as "hallucinogens (acid, LSD, and 'shrooms)."

Lifetime Use:

- Lifetime prevalence of hallucinogen use ranges from a low of 0.1% for 6th graders to a high of 8.0% for 12th graders. Overall, 3.3% of Pennsylvania students have used hallucinogens at least once in their lifetimes.
- Compared to national findings, Pennsylvania 8th and 10th graders reported lower rates of lifetime hallucinogen use and 12th graders reported a similar rate of use.

- Male students are slightly more likely than female students (4.3% male versus 2.4% female) to have reported having used hallucinogens at least once in their lifetimes.

Past-30-Day Use:

- Past-30-day prevalence of hallucinogen use ranges from a low of 0.1% for 6th graders to a high of 3.5% for 12th graders. Overall, 1.8% of Pennsylvania students have used hallucinogens at least once in the last 30 days.
- Compared to national findings, Pennsylvania 8th and 10th graders reported similar rates of past-30-day hallucinogen use and 12th graders reported a higher rate of use.
- Male students are slightly more likely than female students (2.4% male versus 1.2% female) to have reported having used hallucinogens in the past 30 days.

Methamphetamine

Methamphetamine is a highly addictive stimulant with effects similar to cocaine. Use of methamphetamine can cause physical and psychological problems, such as rapid or irregular heart rate, increased blood pressure, anxiety and insomnia.

Lifetime Use:

- Lifetime prevalence of methamphetamine use ranges from a low of 0.2% for 6th and 8th graders to a high of 1.1% for 12th graders. Overall, 0.6% of Pennsylvania students have used methamphetamine at least once in their lifetimes.
- Rates of methamphetamine use are very low, so differences between datasets tend to be small. With this caveat in place, it can be noted that the rates of lifetime methamphetamine use reported by Pennsylvania students are lower than those reported nationally.
- Both female and male students reported very low rates of lifetime methamphetamine use.

Past-30-Day Use:

- Past-30-day prevalence of methamphetamine use ranges from a low of 0.0% for 6th graders to a high of 0.5% for 10th graders. Overall, 0.3% of Pennsylvania students have used methamphetamine at least once in the last 30 days.
- Rates of student past-30-day methamphetamine use are low nationally and in Pennsylvania.
- Both female and male students reported very low rates of past-30-day methamphetamine use.

Ecstasy

Ecstasy (also known as MDMA) has both stimulant and hallucinogenic effects. After showing an increase in use nationwide from 1998 to 2001, use of Ecstasy appears to have declined in recent years, while the proportion of young people perceiving it as dangerous has increased (Johnston et al., 2009b).

Lifetime Use:

- Lifetime prevalence of Ecstasy use ranges from a low of 0.2% for 6th graders to a high of 4.8% for 12th graders. Overall, 2.1% of Pennsylvania students have used Ecstasy at least once in their lifetimes.
- Compared to national findings, 8th and 10th graders reported lower rates of lifetime Ecstasy use and 12th graders reported a similar rate.
- Both female and male students reported low rates of lifetime Ecstasy use.

Past-30-Day Use:

- Past-30-day prevalence of Ecstasy use ranges from a low of 0.0% for 6th graders to a high of 2.2% for 12th graders. Overall, 1.1% of Pennsylvania students have used Ecstasy at least once in the last 30 days.
- Both nationally and in Pennsylvania, students report very low rates of past-30-day Ecstasy use.
- Both female and male students reported low rates of past-30-day Ecstasy use.

Steroids

The primary use for steroids in humans is to raise inadequate levels of testosterone. However, some athletes misuse the drug to "improve" their appearance or athletic performance. Improper use of steroids can prematurely stop the lengthening of bones as well as cause infertility and liver tumors.

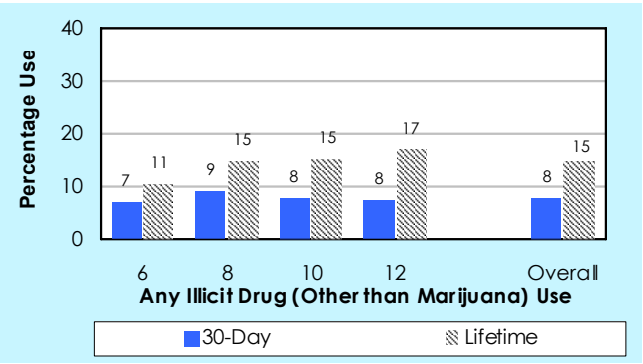
Lifetime Use:

- Lifetime prevalence of steroid use ranges from a low of 0.6% for 6th graders to a high of 1.1% for 10th graders. Overall, 0.8% of Pennsylvania students have used steroids at least once in their lifetimes.
- Rates of student lifetime steroid use are very low nationally and in Pennsylvania.
- Both female and male students reported very low rates of lifetime steroid use.

Past-30-Day Use:

- Past-30-day prevalence of steroid use ranges from a low of 0.3% for 8th graders to a high of 0.8% for 12th graders. Overall, 0.6% of Pennsylvania students have used steroids at least once in the last 30 days.
- Both nationally and in Pennsylvania, students report very low rates of past-30-day steroid use.
- Both female and male students reported very low rates of past-30-day steroid use.

Any Illicit Drug (Other than Marijuana)



The final ATOD indicator reports on the use of any illicit drug other than marijuana. This drug combination rate—which includes use of one or more of the following drugs: inhalants, cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids—provides prevention planners with an overall indicator of so-called "hard" drug use. Marijuana use is excluded from this index because the higher prevalence of marijuana use tends to obscure the presence or absence of the other drugs. In other words, an indicator of "Any Illicit Drug Use (*Including* Marijuana)" primarily measures marijuana use. Direct comparisons to *Monitoring the Future* results are not available for this measure.

Lifetime Use:

- Lifetime prevalence of any illicit drug (other than marijuana) use ranges from a low of 10.5% for 6th graders to a high of 17.2% for 12th graders. Overall, 14.7% of Pennsylvania students have used any illicit drug (other than marijuana) at least once in their lifetimes.

- Male students are slightly more likely than female students (15.4% male versus 14.1% female) to have reported having used any illicit drug (other than marijuana) at least once in their lifetimes.

Past-30-Day Use:

- Past-30-day prevalence of any illicit drug (other than marijuana) use ranges from a low of 7.3% for 6th graders to a high of 9.3% for 8th graders. Overall, 8.1% of Pennsylvania students have used any illicit drug (other than marijuana) at least once in the last 30 days.
- Male students are slightly more likely than female students (9.0% male versus 7.3% female) to have reported having used any illicit drug (other than marijuana) at least once in the past 30 days.

Prescription Drugs

In recent years the nonmedical use of prescription drugs has emerged as a major public health issue. Both the *National Survey on Drug Use and Health* (Substance Abuse and Mental Health Services Administration, 2003) and the *Monitoring the Future* study (Johnston et al., 2009a), two major sources of youth drug abuse prevalence data, have reported increases in the unauthorized use of prescription drugs. This trend is particularly troubling given the adverse health consequences related to prescription drug abuse, which include addiction, physical dependence and the possibility of overdose.

Despite these concerns, the research community is still in the early stages of developing survey methods that can accurately measure the prevalence of prescription drug abuse. If anonymity is ensured, most students will honestly and accurately report their use of alcohol, tobacco, marijuana and other easily recognized categories of illicit drugs. The measurement of prescription drug use, however, is more complex. There are many prescription medicines that are subject to abuse, making it impossible to present an exhaustive list. Also, respondents may have difficulty identifying the names of prescription drugs they have used, and they may have difficulty distinguishing between prescription and over-the-counter medications.

With these challenges in mind, the *PAYS* included six new questions designed to measure prevalence-of-use rates across the three prescription drug categories that, according to the National Institute on Drug Abuse, are among the most likely to be abused: pain relievers, stimulants and tranquilizers. Each question includes examples of some of the best known drugs within that category. Results for Pennsylvania are presented in Tables 5 and 6.

On how many occasions (if any) have you:

- Used prescription pain relievers, such as Vicodin®, OxyContin® or Tylox®, without a doctor's orders, in your lifetime?
- Used prescription pain relievers, such as Vicodin®, OxyContin® or Tylox®, without a doctor's orders, during the past 30 days?
- Used prescription tranquilizers, such as Xanax®, Valium® or Ambien®, without a doctor's orders, in your lifetime?
- Used prescription tranquilizers, such as Xanax®, Valium® or Ambien®, without a doctor's orders, during the past 30 days?
- Used prescription stimulants, such as Ritalin® or Adderall®, without a doctor's orders, in your lifetime?

- Used prescription stimulants, such as Ritalin® or Adderall®, without a doctor's orders, during the past 30 days?

Pain Relievers

Lifetime Use:

- Lifetime prevalence of prescription pain reliever use ranges from a low of 1.6% for 6th graders to a high of 14.8% for 12th graders. Overall, 7.4% of Pennsylvania students have used prescription pain relievers at least once in their lifetimes.
- Female and male students reported similar rates of lifetime prescription pain reliever use.

Past-30-Day Use:

- Past-30-day prevalence of prescription pain reliever use ranges from a low of 1.0% for 6th graders to a high of 8.7% for 12th graders. Overall, 5.0% of Pennsylvania students have used prescription pain relievers at least once in the last 30 days.
- Female and male students reported similar rates of past-30-day prescription pain reliever use.

Tranquilizers

Lifetime Use:

- Lifetime prevalence of tranquilizer use ranges from a low of 0.2% for 6th graders to a high of 8.4% for 12th graders. Overall, 3.2% of Pennsylvania students have used tranquilizers at least once in their lifetimes.
- Female and male students reported similar rates of lifetime tranquilizer use.

Past-30-Day Use:

- Past-30-day prevalence of tranquilizer use ranges from a low of 0.2% for 6th graders to a high of 4.2% for 12th graders. Overall, 1.9% of Pennsylvania students have used tranquilizers at least once in the last 30 days.
- Female and male students reported similar rates of past-30-day tranquilizer use.

Stimulants

Lifetime Use:

- Lifetime prevalence of stimulant use ranges from a low of 0.4% for 6th graders to a high of 10.1% for 12th graders. Overall, 4.2% of Pennsylvania students have used stimulants at least once in their lifetimes.
- Female and male students reported similar rates of lifetime stimulant use.

Past-30-Day Use:

- Past-30-day prevalence of stimulant use ranges from a low of 0.2% for 6th graders to a high of 6.0% for 12th graders. Overall, 2.8% of Pennsylvania students have used stimulants at least once in the last 30 days.
- Female and male students reported similar rates of past-30-day stimulant use.

Table 5. Lifetime Use of Prescription Drugs, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Pain Relievers	7.9	6.9	1.6	3.7	8.3	14.8	7.4
Tranquilizers	3.4	3.1	0.2	0.7	3.0	8.4	3.2
Stimulants	4.0	4.5	0.4	1.5	4.3	10.1	4.2

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Table 6. Past-30-Day Use of Prescription Drugs, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Pain Relievers	5.3	4.8	1.0	3.6	6.1	8.7	5.0
Tranquilizers	2.0	1.8	0.2	0.8	2.1	4.2	1.9
Stimulants	2.5	3.1	0.2	1.2	3.2	6.0	2.8

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Section 4
Other Antisocial Behaviors

Introduction

The *PAYS* also measures a series of seven other problem, or antisocial, behaviors—that is, behaviors that run counter to established norms of good behavior.

- Attacking Someone with Intent to Harm
- Attempting to Steal a Vehicle
- Being Arrested
- Being Drunk or High at School
- Getting Suspended
- Selling Drugs
- Bringing a Weapon (Such as a Gun, Knife or Club) to School

Measurement

As with alcohol, tobacco and other drug use, prevalence tables and graphs are employed to illustrate the percentages of students who reported other antisocial behaviors. For the first six other antisocial behaviors, prevalence rates are presented for the incidence of behavior over the past 12 months. For *Bringing a Weapon (Such as a Gun, Knife or Club) to School*, prevalence rates are reported for the past 30 days. In addition, frequency data for *Bringing a Weapon (Such as a Gun, Knife or Club) to School*, illustrating the number of occasions that students reported bringing a weapon to school within the past 30 days, are presented in Appendix A.

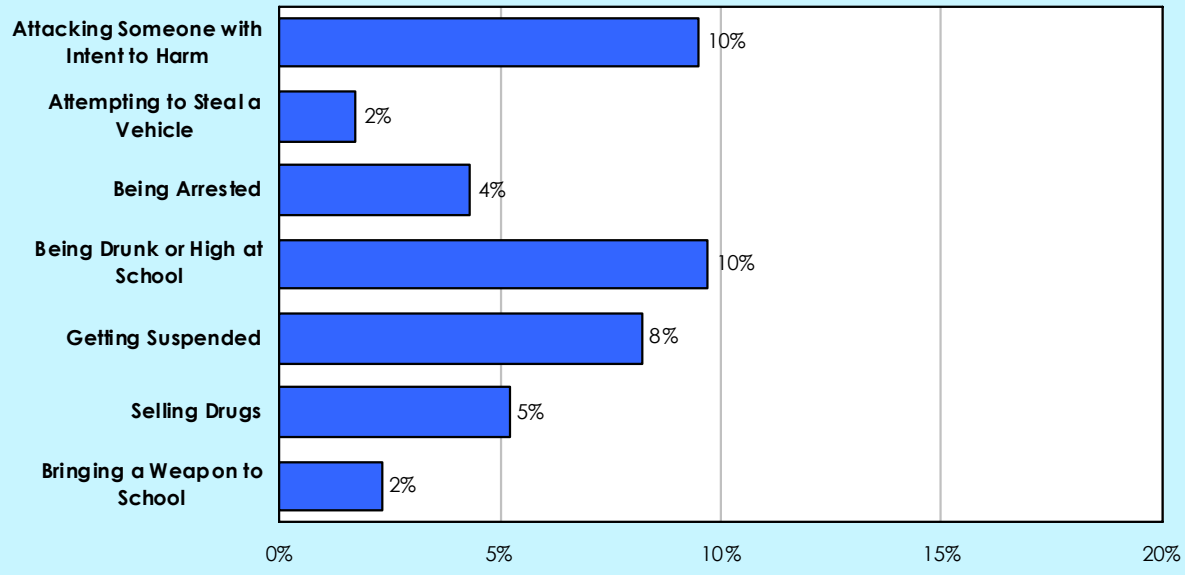
Results Summary

Overall Results

Other antisocial behavior prevalence rates for the combined sample of 6th, 8th, 10th and 12th graders are presented in Graph 3, and in the overall results column of Table 7. Across all grades, 9.7% of Pennsylvania students reported *Being Drunk or High at School* in the past year, making it the most prevalent of the seven behaviors in Pennsylvania. *Attacking Someone with Intent to Harm* is the second most prevalent antisocial behavior, with 9.5% of respondents reporting having attacked someone in the

past year. Students in Pennsylvania reported very low levels of participation in the following antisocial behaviors: *Being Arrested*, *Bringing a Weapon to School* and *Attempting to Steal a Vehicle*.

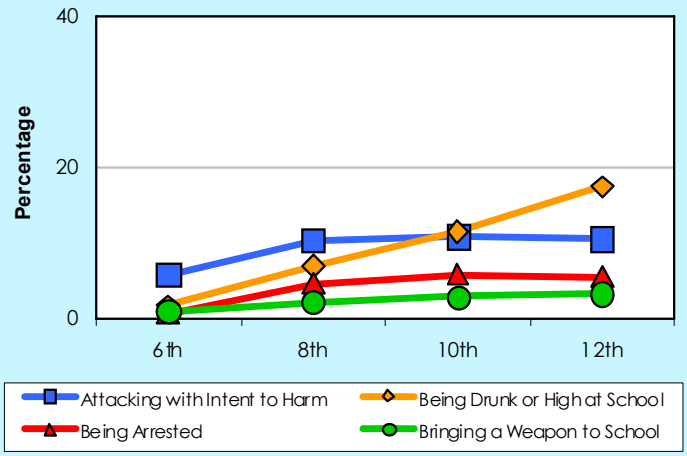
Graph 3. Overall Prevalence of Other Antisocial Behaviors



Grade-Level Results

Other antisocial behavior prevalence rates within individual grades are presented in Graph 4 and Table 7. In many communities, these behaviors reveal a complex pattern of changes across grades. Typically, reports of *Being Drunk or High at School* and *Selling Drugs* follow the ATOD model, with prevalence rates increasing through the upper grade levels. Pennsylvania students follow this pattern. In contrast, reports of *Attacking Someone with Intent to Harm*, *Getting Suspended* and *Being Arrested* often peak in the late middle school or early high school years. While this pattern holds among Pennsylvania students, the drop off in these behaviors among 12th grade students is only modest. Prevalence rates for *Attempting to Steal a Vehicle* and *Bringing a Weapon (Such as a Gun, Knife or Club) to School* are generally too low to allow meaningful comparisons across grade levels. Prevention planners in Pennsylvania should review the other antisocial behavior profiles within individual grades, with special attention toward behaviors that show a marked deviation from these patterns.

Graph 4. Prevalence of Selected Other Antisocial Behaviors, by Grade



Gender Differences

In contrast to ATOD use, female and male students reported notable differences in the prevalence of most of the other antisocial behaviors. For example, male students are more likely than female students to report *Attacking Someone with Intent to Harm* (11.8% versus 7.3%, respectively) and *Getting Suspended* (10.8% versus 5.7%, respectively).

Table 7. Prevalence of Other Antisocial Behaviors, Pennsylvania 2009

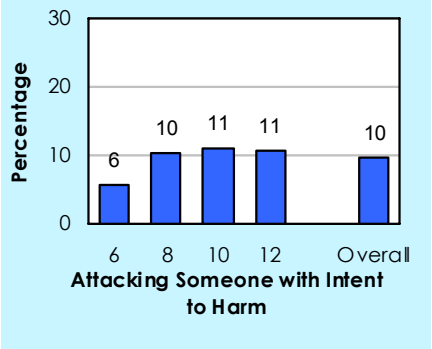
	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Attacking Someone with Intent to Harm	7.3	11.8	5.8	10.3	10.8	10.5	9.5
Attempting to Steal a Vehicle	1.1	2.5	0.5	1.8	2.5	1.8	1.7
Being Arrested	2.9	5.8	0.6	4.6	5.8	5.5	4.3
Being Drunk or High at School	8.7	10.8	1.6	6.9	11.5	17.4	9.7
Getting Suspended	5.7	10.8	3.0	9.1	10.8	9.0	8.2
Selling Drugs	3.3	7.2	0.1	2.3	6.7	10.7	5.2
Bringing a Weapon to School	1.4	3.3	0.9	2.1	2.8	3.2	2.3
Average	**4.3**	**7.4**	**1.8**	**5.3**	**7.3**	**8.3**	**5.8**

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Item-Level Results

Attacking Someone with Intent to Harm

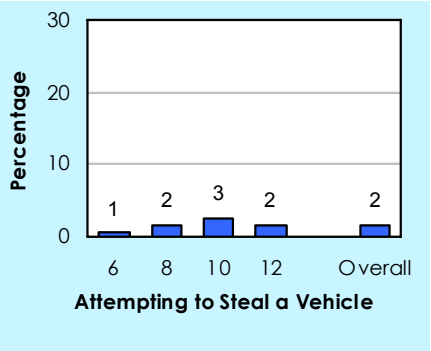
Attacking someone with intent to harm is measured by the question "How many times in the past year (12 months) have you attacked someone with the idea of seriously hurting them?" The question does not ask specifically about the use of a weapon; therefore, occurrences of physical fighting without weapons will be captured with this question.



- Prevalence rates for *Attacking Someone with Intent to Harm* range from a low of 5.8% among 6th graders to a high of 10.8% among 10th graders.
- Overall, 9.5% of Pennsylvania students reported having attacked someone with intent to harm in the past year.
- Male students are more likely than female students (11.8% male versus 7.3% female) to report *Attacking Someone with Intent to Harm* in the past year.

Attempting to Steal a Vehicle

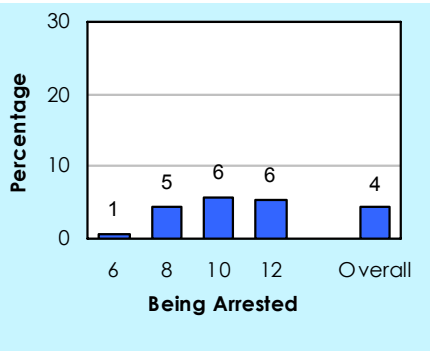
Vehicle theft is measured by the question "How many times in the past year (12 months) have you stolen or tried to steal a motor vehicle such as a car or motorcycle?"



- Prevalence rates for *Attempting to Steal a Vehicle* range from a low of 0.5% among 6th graders to a high of 2.5% among 10th graders.
- Overall, 1.7% of Pennsylvania students reported having attempted to steal a vehicle in the past year.
- Both female and male students report very low rates for *Attempting to Steal a Vehicle*.

Being Arrested

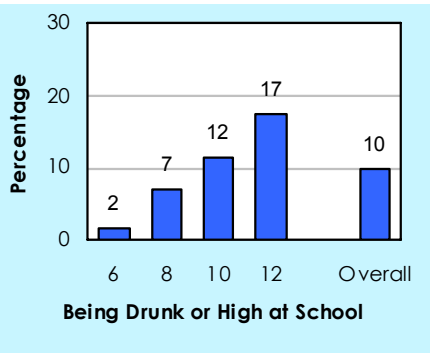
Any student experience with being arrested is measured by the question "How many times in the past year (12 months) have you been arrested?" Note that the question does not define "arrested." Rather, it is left to the individual respondent to define. Some youths may define any contact with police as an arrest, while others may consider that only an official arrest justifies a positive answer to this question.



- Prevalence rates for *Being Arrested* range from a low of 0.6% among 6th graders to a high of 5.8% among 10th graders.
- Overall, 4.3% of Pennsylvania students reported having been arrested in the past year.
- Male students are more likely than female students (5.8% male versus 2.9% female) to report *Being Arrested* in the past year.

Being Drunk or High at School

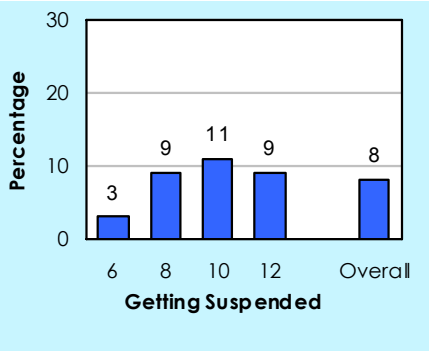
Having been drunk or high at school is measured by the question "How many times in the past year (12 months) have you been drunk or high at school?"



- Prevalence rates for *Being Drunk or High at School* range from a low of 1.6% among 6th graders to a high of 17.4% among 12th graders.
- Overall, 9.7% of Pennsylvania students reported having been drunk or high at school in the past year.
- Male students are more likely than female students (10.8% male versus 8.7% female) to report *Being Drunk or High at School* in the past year.

Getting Suspended

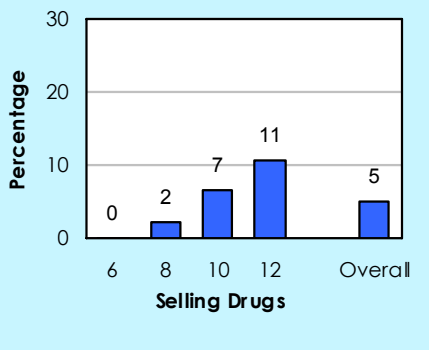
Suspension is measured by the question "How many times in the past year (12 months) have you been suspended from school?" Note that the question does not define "suspension." Rather, it is left to the individual respondent to make that definition. School suspension rates vary substantially from district to district. Therefore, these rates should be interpreted by someone knowledgeable about local school suspension policy.



- Prevalence rates for *Getting Suspended* range from a low of 3.0% among 6th graders to a high of 10.8% among 10th graders.
- Overall, 8.2% of Pennsylvania students reported having been suspended in the past year.
- Male students are more likely than female students (10.8% male versus 5.7% female) to report *Getting Suspended* in the past year.

Selling Drugs

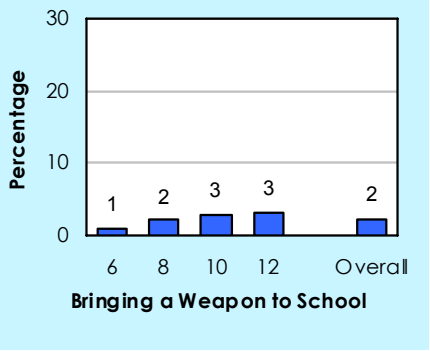
Selling drugs is measured by the question "How many times in the past year (12 months) have you sold illegal drugs?" Note that the question asks about, but does not define or specify, "illegal drugs."



- Prevalence rates for *Selling Drugs* range from a low of 0.1% among 6th graders to a high of 10.7% among 12th graders.
- Overall, 5.2% of Pennsylvania students reported having sold drugs in the past year.
- Male students are more likely than female students (7.2% male versus 3.3% female) to have report *Selling Drugs* in the past year.

Bringing a Weapon (Such as a Gun, Knife or Club) to School

Bringing a weapon (such as a gun, knife or club) to school is measured by the question "How many times in the past 30 days have you brought a weapon (such as a gun, knife or club) to school?"



- Prevalence rates for *Bringing a Weapon to School* range from a low of 0.9% among 6th graders to a high of 3.2% among 12th graders.
- Overall, 2.3% of Pennsylvania students reported having brought a weapon to school in the past 30 days.
- Male students are more likely than female students (3.3% male versus 1.4% female) to report *Bringing a Weapon to School* in the past year.

Section 5
Special Topics

Introduction

The *PAYS* included questions on the following special topics: age of onset of ATOD use and other antisocial behavior, driving under the influence of alcohol or marijuana, willingness to try or use ATODs, gambling, symptoms of depression, and the frequency of having been threatened or attacked at school.

Age of Onset of ATOD Use and Other Antisocial Behavior

Using age-of-initiation data to coordinate the timing of prevention efforts can be an important tool for maximizing program effectiveness. For example, programs delivered after the majority of potential drug users have already initiated the behavior may have limited impact. Alternatively, very early intervention might prove less effective because it is not close enough to the critical initiation period.

Pennsylvania students were asked nine questions about the age at which they first used ATODs and participated in other antisocial behaviors. The topics covered include: trying alcohol ("more than a sip or two"), drinking alcohol regularly ("at least once or twice a month"), smoking cigarettes, smoking marijuana, being suspended from school, being arrested, carrying a handgun, attacking someone with intent to harm, and belonging to a gang. Results for Pennsylvania students are presented in Table 8.

The average age of onset is lower in the earlier grades than it is in the later ones. For example, 6th graders who have tried alcohol report an average age of onset of 10.4 years, while 12th graders report an average age of onset of 14.3 years. This should not be interpreted as indicating that the younger cohort is initiating substance use at an earlier age than the older cohort. Rather, the average age for each cohort increases as its members progress through school and more of them initiate experimentation with ATODs and engage in other antisocial behaviors. For this reason, the question "When do students first start using alcohol?" is best answered by examining the responses of students in the highest grade level surveyed because they can best reflect on their high school and/or middle school experiences and accurately report the age they first started using drugs or engaging in other antisocial behaviors.

As Table 8 shows, 12th grade Pennsylvania students reported the earliest age of onset for ATOD use for smoking cigarettes (13.9 years), followed by trying alcohol (14.3 years), smoking marijuana (14.7 years) and drinking alcohol regularly (15.6 years). Average age of onset among 12th graders for the other antisocial behaviors ranges from 13.2 years for carrying a handgun and attacking someone with

intent to harm to 14.6 years for being arrested. Not surprisingly, given that age of onset scores only include students who reported drug use or other antisocial behaviors, there were no substantial difference between females and males.

Table 8. Average Age of Onset of ATOD Use and Other Antisocial Behaviors, Pennsylvania 2009

	Female	Male	6th	8th	10th	12th	Overall
Trying Alcohol	13.3	12.8	10.4	11.7	13.2	14.3	13.1
Drinking Alcohol Regularly	14.7	14.6	11.5	12.6	14.2	15.6	14.7
Smoking Cigarettes	13.1	12.9	10.6	11.7	12.9	13.9	13.0
Smoking Marijuana	14.3	13.9	11.8	12.4	13.7	14.7	14.1
Being Suspended from School	12.8	12.2	10.4	11.4	12.6	13.3	12.4
Being Arrested	13.8	13.3	10.4	11.9	13.4	14.6	13.5
Carrying a Handgun	12.0	12.1	10.6	11.5	12.5	13.2	12.1
Attacking Someone with Intent to Harm	12.4	11.9	10.5	11.4	12.3	13.2	12.1
Belonging to a Gang	12.4	12.3	10.6	11.7	13.0	13.4	12.3

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Driving After Alcohol or Marijuana Use

Driving a car requires clear thinking and good hand-eye coordination. Operating a vehicle after using alcohol or marijuana may impair driving skills, making the driver a hazard on any roadway. The impact of ATOD usage on automobile safety is assessed with two items: (1) "How often have you driven a car while or shortly after drinking?" and (2) "How often have you driven a car while or shortly after smoking pot?" Results for Pennsylvania students are presented in Table 9.

As expected, given the age requirement for obtaining a driver's license, these rates increase dramatically once students reach the 12th grade. While only 0.5% of 6th graders, 1.9% of 8th graders and 3.2% of 10th graders reported the operation of a vehicle while under the influence of alcohol, 16.5% of high school seniors reported at least one drinking and driving incident. Results for driving after marijuana use show a similar pattern. Less than 1% of 6th graders, 1.2% of 8th graders and 4.7% of 10th graders report driving under the influence of marijuana, compared to 18.5% of 12th graders. It is important to note that the 12th grade rate for driving under the influence of marijuana is higher than the rate for driving under the influence of alcohol. Male students reported a higher rate than female students for both driving after alcohol use (6.9% versus 4.8%, respectively) and driving after marijuana use (7.9% versus 5.1%, respectively).

Table 9. Percentage of Youth Reporting Any Occasion of Driving Under the Influence, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Driving after Alcohol Use	4.8	6.9	0.5	1.9	3.2	16.5	5.8
Driving after Marijuana Use	5.1	7.9	0.1	1.2	4.7	18.5	6.5

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Willingness to Try or Use ATODs

Along with perceptions of risk and level of disapproval (Bachman et al., 1988), willingness to try or use ATODs may be viewed as one of the attitudinal constructs that facilitates drug use. Pennsylvania students were questioned regarding their willingness to try or use alcohol, marijuana, cocaine, hallucinogens and inhalants. Results for Pennsylvania students are presented in Table 10.

Interest in alcohol use was by far the highest among the five substances. Overall, 49.6% of Pennsylvania students reported that they "would use it any chance I got," "would like to try or use it" or "not sure whether or not I would use it." Respondents reported the second highest willingness to try or use rate for marijuana (21.4%). Willingness to try hallucinogens (7.1%), inhalants (3.7%) and cocaine (3.3%) are substantially lower.

Overall, differences between male and female students' willingness to try or use ATODs are minimal. The largest difference occurs for alcohol use, where 51.7% of female students reported a willingness to use compared to 47.5% of male students.

Table 10. Percentage of Youth Reporting Willingness to Try Selected ATODs, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Alcohol	51.7	47.5	17.3	42.7	60.2	72.0	49.6
Marijuana	20.5	22.3	1.6	13.2	28.4	38.4	21.4
Cocaine	3.2	3.5	0.9	2.2	3.8	5.7	3.3
Hallucinogens	6.4	7.8	0.8	2.8	9.2	14.1	7.1
Inhalants	3.7	3.7	1.3	3.2	5.0	4.7	3.7

Note: The percentages reported in this table represent the percentage of students who indicated "would use it any chance I got," "would like to try it or use it" or "not sure whether or not I would use it." Students who indicated "probably wouldn't use it" or "would never use it" were considered to be unwilling to try the substance. The symbol "--" indicates that data are not available because students were not surveyed.

Gambling

The 2009 *PAYS* asks students a series of six questions about their experiences with gambling. These include past-12-month prevalence measures for: gambling for "money or anything of value," betting "money or anything of value on sporting events," buying "lottery tickets," betting "money using the internet," and betting "money or anything of value on table games like poker or other card games, dice, backgammon, or dominoes." A question about gambling for "money or anything of value" in the past 30 days is also asked. Results for Pennsylvania students are presented in Table 11.

Please note that two of the six gambling questions—the past-12-months and past-30-days gambling for "money or anything of value" items—are identical to questions used on the 2005 and 2007 surveys. The sports betting, lottery ticket, and table gaming questions are similar to questions that were included in the 2007 survey.

Across the overall sample, 17.5% of Pennsylvania students have "gambled for money or anything of value" in the past year, and 10.0% have done so in the past 30 days. Interestingly, a higher number, 22.5%, reported having "bet money or anything of value" on sporting events in the past year, suggesting that young people interpret the terms "gambled" and "bet" in different ways. Table gaming (poker, cards, dice, etc.) was reported by 16.0%, lottery tickets were purchased by 14.5% and internet betting was reported by only 3.8%.

Gender differences in gambling are substantial. For example, 15.7% of male students reported gambling in the past 30 days, compared to just 4.7% of female students. The category with the smallest gender

difference is the lottery, with 16.6% of male students purchasing tickets in the past year, compared to 12.6% of female students.

Table 11. Percentage of Youth Reporting Gambling, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Gambled for money in the past year	7.9	27.6	8.7	16.6	20.6	22.3	17.5
Gambled for money in the past 30 days	4.7	15.7	5.0	9.8	11.5	12.6	10.0
Bet on sporting events in the past year	11.7	34.0	14.8	23.2	25.0	25.7	22.5
Bought lottery tickets in the past year	12.6	16.6	11.5	12.1	14.5	19.2	14.5
Bet money using the internet in the past year	1.9	5.8	2.5	3.7	4.6	4.1	3.8
Bet money on table games in the past year	8.3	24.1	9.9	16.4	17.9	18.6	16.0

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Symptoms of Depression

A number of scientific studies have identified a link between mental health problems, such as depression, and the use of alcohol, tobacco and other drugs during adolescence. The *PAYS* includes four questions that asks students about feelings—sadness, hopelessness and worthlessness—that can be symptoms of depression. Results for Pennsylvania students are presented in Table 12.

Strikingly high percentages of Pennsylvania students reported having symptoms of depression. Nearly one third (31.6%) reported feeling "depressed or sad most days," 27.8% reported that "at times I think I am no good at all," 20.6% reported that "sometimes I think that life is not worth it" and 13.7% reported that "I am inclined to think that I am a failure." It should be noted that while these results are both noteworthy and troubling, rates of this magnitude for these items are not unusual in student health behavior surveys.

Following the pattern shown in a number of other large-scale youth health behavior surveys, female students in Pennsylvania are more likely to report symptoms of depression than male students. For example, 38.7% of female students reporting feeling sad or depressed most days, compared to 24.1% of male students.

Table 12. Percentage of Youth Reporting Symptoms of Depression, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
In the past year, felt depressed or sad most days	38.7	24.1	26.8	32.1	33.2	33.2	31.6
Sometimes I think that life is not worth it	25.4	15.7	14.7	23.0	22.9	21.0	20.6
At times I think I am no good at all	34.2	21.0	23.6	29.1	29.0	28.9	27.8
All in all, I am inclined to think that I am a failure	15.6	11.6	10.6	13.6	14.9	15.2	13.7

Note: The numbers reported in this table represent the percentage of students who answered either "yes" or "Yes!" to each question. The symbol "--" indicates that data are not available because students were not surveyed.

Violence and Drugs on School Property

Pennsylvania students were also surveyed regarding the frequency with which they have been threatened or attacked on school property within the past year, and whether they were offered, given, or sold illegal drugs on school property within the past year. Results for Pennsylvania students are presented in Table 13.

Of the four violence-related questions in this group, Pennsylvania students were most likely to report (18.3%) having "been threatened to be hit or beaten up" on school property. The rates for the other three violence items range from 7.2% for being attacked or beaten up to 1.1% for being attacked with a weapon. Slightly more than one in ten students, 12.3%, reported being offered, given, or sold drugs on school property in the past year.

Not surprisingly, differences between male and female students are pronounced on these measures. For example, male students are more likely than female students (22.2% versus 14.7%, respectively) to report having been threatened to be hit or beaten up, and more than twice as likely (9.9% versus 4.5%, respectively) to report having been attacked or beaten up.

Table 13. Percentage of Youth Reporting Violence or Drugs on School Property in the Past Year, Pennsylvania

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Threatened to be hit or beaten up	14.7	22.2	16.1	23.6	19.0	14.7	18.3
Attacked or beaten up	4.5	9.9	8.9	8.0	6.2	5.9	7.2
Threatened with a weapon	2.1	3.9	2.5	3.5	3.1	2.7	3.0
Attacked with a weapon	0.6	1.8	0.7	1.2	1.4	1.1	1.1
Been offered, given, or sold an illegal drug	10.7	13.9	1.5	8.2	17.2	20.1	12.3

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Bullying at School and Internet Safety

While bullying is not a new phenomenon, the growing awareness that bullying has serious consequences for both schools and students is new. Bullying behavior contributes to lower attendance rates, lower student achievement, low self-esteem and depression, as well as higher rates of both juvenile and adult crime (Banks, 1997). While the problem of bullying is receiving increased public attention, actual incidences of bullying often go undetected by both teachers and parents (Skiba and Fontanini, 2000). Adults often fail to both identify bullying incidences and understand the dynamics of the behavior. Without adequate training, adults may actually endorse the bullying behavior, either by sending children the message that bullying is "part of growing up" or by simply ignoring the behavior (U.S. Department of Education, 1998).

The most effective means of addressing bullying is through comprehensive, school-wide programs (Atlas and Pepler, 1998; Garrity et al., 1997; Skiba and Fontanini, 2000). A student survey is one of the most common methods for identifying a potential bullying problem in a school (Leff, Power, and Goldstein, 2004). Starting in 2009, the *PAYS* asked students a series of eight questions about bullying at school and internet safety. These include past-12-month prevalence measures for: (1) being "hit, kicked, pushed, shoved around, or locked indoors," (2) being "called names, made fun of, or teased in a hurtful way," (3) being "left out of things on purpose by other students," (4) other students telling lies or spreading false

rumors, (5) other students taking money or damaging your things, (6) other students threatening or forcing "you to do things you do not want to do," (7) other students using "the internet or a cell phone to threaten or embarrass you," and (8) someone on the internet trying "to get you to talk online about sex, look at sexual pictures, or do something else sexual when you did not want to." Results for Pennsylvania students are presented in Table 14.

As the survey results show, non-physical forms of bullying are the most prevalent. More than one half of Pennsylvania students (51.4%) reported that other students tell lies about them or spread false rumors, 43.0% have been called names or teased, and 32.5% have been left out of things on purpose. For physical bullying, 18.1% have been hit, kicked, pushed, or shoved in the past year and 20.7% have had other students take their money or damage their things. Cyber bullying is less common, with 12.4% reporting having been sexually harassed on the internet and 10.1% reporting that other students have used "the internet or a cell phone to threaten or embarrass them."

The pattern of gender differences for this items set is interesting. Male students are more likely than female students to report physical forms of bullying. For example, 22.0% of male students reported having been hit, kicked, pushed, or shoved, compared to 14.3% of female students. In contrast, female students are more likely to report non-physical forms of bullying. For example, 36.2% of female students reported having been left out of things on purpose, compared to 28.5% of male students.

Table 14. Percentage of Youth Reporting Bullying at School or Sexual Harassment on the Internet in the Past Year, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Been hit, kicked, pushed, or shoved around	14.3	22.0	23.2	24.5	16.5	9.5	18.1
Been called names, made fun of, or teased	44.7	41.5	45.5	49.5	43.0	34.9	43.0
Been left out of things on purpose	36.2	28.5	35.6	34.9	31.5	28.7	32.5
Other students telling lies or spreading false rumors	55.0	48.0	50.1	57.2	51.3	47.4	51.4
Other students taking money or damaging your things	19.0	22.4	20.4	23.0	21.2	18.1	20.7
Other students threatening or forcing you to do things	12.2	11.7	13.1	14.3	11.4	9.2	11.9
Other students using the internet or a cell phone to threaten or embarrass you	12.6	7.5	6.7	10.7	11.8	10.7	10.1
Sexual harassment on the internet	15.9	8.8	6.6	12.2	17.0	12.9	12.4

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Section 6
Risk and Protective Factors

Introduction

Just as eating a high-fat diet is a risk factor for heart disease and getting regular exercise is a protective factor for heart disease and other health problems, there are factors that can help protect youth from, or put them at risk for, drug use and other problem behaviors.

Protective factors, also known as "assets," are conditions that buffer children and youth from exposure to risk by either reducing the impact of the risks or changing the way that young people respond to risks. Protective factors identified through research include strong bonding to family, school, community and peers. These groups support the development of healthy behaviors for children by setting and communicating healthy beliefs and clear standards for children's behavior. Young people are more likely to follow the standards for behavior set by these groups if the bonds are strong. Strong bonds are encouraged by providing young people with opportunities to make meaningful contributions, by teaching them the skills they need to be successful in these new opportunities, and by recognizing their contributions.

Risk factors are conditions that increase the likelihood of a young person becoming involved in drug use, delinquency, school dropout and/or violence. For example, children living in families with poor parental monitoring are more likely to become involved in these problems.

Research during the past 30 years supports the view that delinquency; alcohol, tobacco and other drug use; school achievement; and other important outcomes in adolescence are associated with specific characteristics in the student's community, school and family environments, as well as with characteristics of the individual (Hawkins, Catalano & Miller, 1992). In fact, these characteristics have been shown to be more important in understanding these behaviors than ethnicity, income or family structure (Blum et al., 2000).

There is a substantial amount of research showing that adolescents' exposure to a greater number of risk factors is associated with more drug use and delinquency. There is also evidence that exposure to a number of protective factors is associated with lower prevalence of these problem behaviors (Bry, McKeon & Pandina, 1982; Newcomb, Maddahian & Skager, 1987; Newcomb & Felix-Ortiz, 1992; Newcomb, 1995; Pollard et al., 1999).

The analysis of risk and protective factors is the most powerful tool available for understanding what promotes both positive and negative adolescent behavior and for helping design successful prevention programs for young people. To promote positive development and prevent problem behavior, it is necessary to address the factors that predict these outcomes. By measuring these risk and protective factors, specific factors that are elevated should be prioritized in the community. This process also helps in selecting targeted tested-effective prevention programming shown to address those elevated factors and consequently provide the greatest likelihood for success.

This system of risk and protective factors is organized into a strategy that families can use to help children develop healthy behaviors—the Social Development Strategy (Hawkins, Catalano & Associates, 1992). The Social Development Strategy is a theoretical framework that organizes risk and protective factors for adolescent problem behavior prevention.

Measurement

The *Communities That Care Youth Survey*, the survey upon which the *PAYS* was based, provides the most comprehensive measurement of risk and protective factors currently available for 6th to 12th graders. Risk and protective factors are measured by sets of survey items called scales. All together, the *PAYS* assesses 22 risk factor and nine protective factor scales across four domains: Community Domain, Family Domain, School Domain, and Peer and Individual Domain.

Risk and protective factor scales are scored against the *Communities That Care* normative database. Like the scoring systems used by many national testing programs—such as the SAT® and ACT™—this method generates percentile scores ranging from 0 to 100. A score of 50, which matches the normative median, indicates that 50% of the respondents in the normative sample reported a score that is lower than the average for Pennsylvania and 50% reported a score that is higher. Similarly, a score of 75 indicates that 75% of the normative sample reported a lower score and 25% reported a higher score. Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better behavioral outcomes, it is better to have higher protective factor scale scores, not lower.

The *Communities That Care* normative database contains survey responses from over 280,000 students in grades 6 through 12. It compiled by combining the results of selected *Communities That Care Youth Survey* efforts conducted in 2000, 2001 and 2002. To enhance representativeness, statistical weights were applied to adjust the sample to exactly match the population of U.S. public school students on four key demographic variables: ethnicity, sex, socioeconomic status and urbanicity. Information on the U.S. public school student population was obtained from the Common Core of Data program at the U.S. Department of Education's National Center for Education Statistics.

The risk and protective factor measurement and scoring model employed in the 2009 *PAYS* is nearly identical to the 2007 model, with the only difference being that the risk factor scale *Laws and Norms Favorable to Handguns* is not included in this year's survey. Please note, however, that a number of changes to the model were introduced in 2007. Please see your 2007 report for a description of these changes. Also note that some school districts elected to administer a secondary version of the *PAYS* that excluded questions measuring risk and protective factors within the family. In these cases, scale scores for the Family Domain risk and protective factors are not available.

Questionnaire Changes and Risk and Protective Factor Scale Scores

As discussed in Section 2 of this report, changes to the *PAYS* questionnaire—particularly the reordering of the survey items, changes to question layout, and the reordering of some response options sets—has impacted the way students respond to the survey items. These effects are more pronounced for the items that constitute a number of the risk and protective factor scales. The largest effects are for the *Community*

Opportunities for Prosocial Involvement scale, which shows a substantial reduction compared to previous years, and the *Community Disorganization* scale, which shows a substantial increase. Analysis also indicates that other scales may have been impacted by the questionnaire changes, including *School Rewards for Prosocial Involvement*, *Parental Attitudes Favorable toward Antisocial Behavior*, and *Low Perceived Risks of Drug Use*. These questionnaire design effect should be taken into consideration when reviewing the risk and protective factor results for the 2009 *PAYS*.

Results Summary

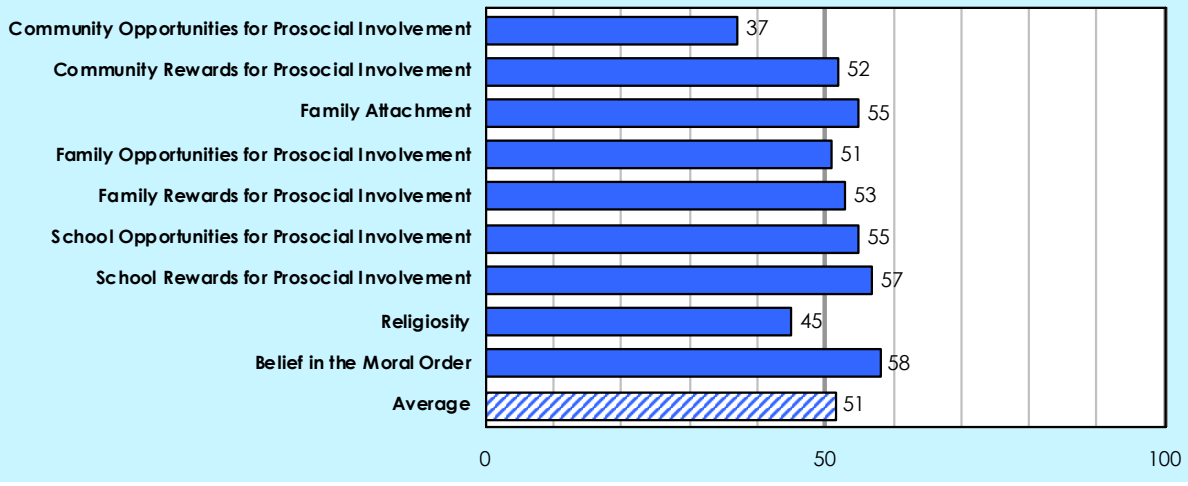
Overall Results

Overall risk and protective factor scale scores are presented in Graphs 5 and 6. These results provide a general description of the prevention needs of Pennsylvania 6th, 8th, 10th and 12th graders as a whole.

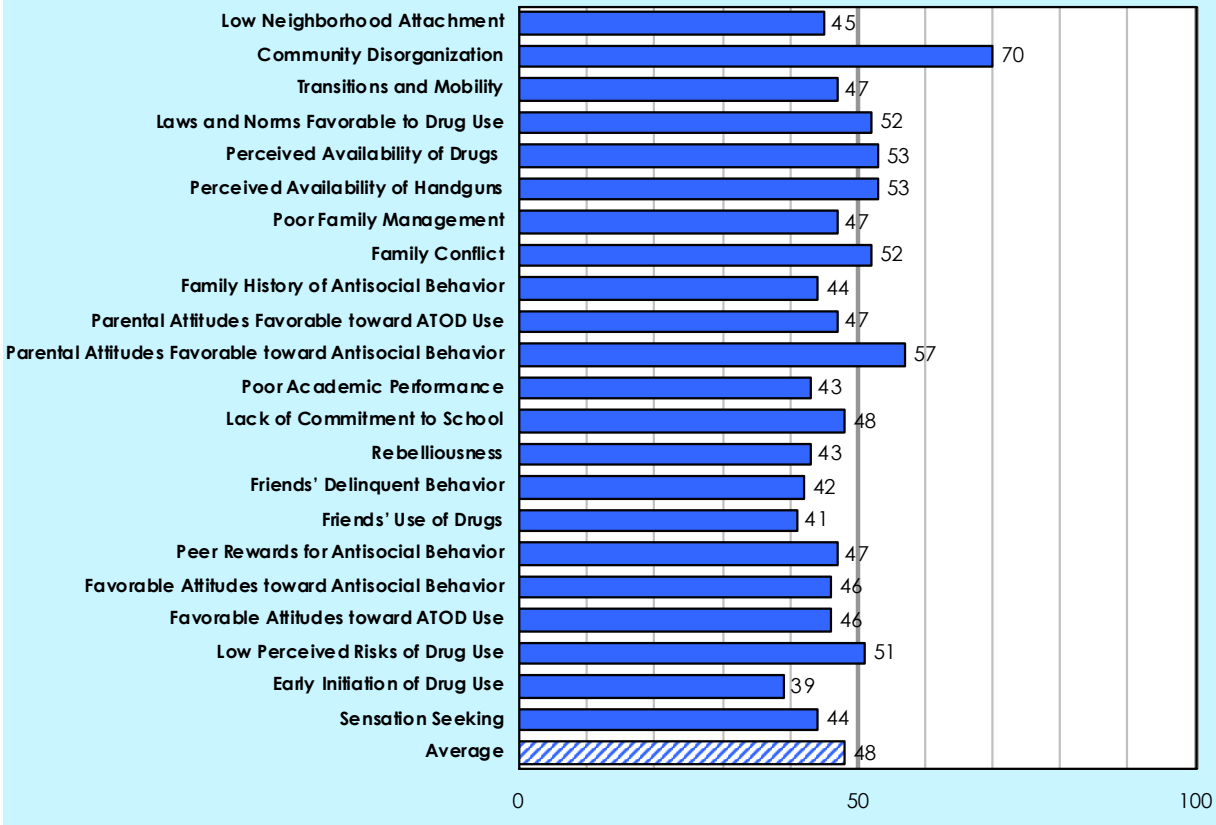
As Graph 5 shows, overall percentile scores across the nine protective factor scales range from a low of 37 to a high of 58, with an average score of 51, which is one point higher than the normative average of 50. The three lowest overall scores were for the following protective factor scales: *Community Opportunities for Prosocial Involvement* (37), *Religiosity* (45) and *Family Opportunities for Prosocial Involvement* (51). While policies that target any protective factor could potentially be an important resource for students in Pennsylvania, focusing prevention planning in these areas could be especially beneficial. Pennsylvania students reported the four highest overall scores for the following protective factor scales: *Belief in the Moral Order* (58), *School Rewards for Prosocial Involvement* (57), *Family Attachment* (55) and *School Opportunities for Prosocial Involvement* (55). The higher scores reported by students in these areas represent strengths that Pennsylvania can build on.

As Graph 6 shows, overall scores across the 22 risk factor scales range from a low of 39 to a high of 70, with an average score of 48, which is two points lower than the normative average of 50. The four highest risk factor scales are *Community Disorganization* (70), *Parental Attitudes Favorable toward Antisocial Behavior* (57), *Perceived Availability of Drugs* (53) and *Perceived Availability of Handguns* (53). Once again, while policies that target any risk factor could potentially be an important resource for students in Pennsylvania, directing prevention programming in these areas is likely to be especially beneficial. The three lowest risk factor scales are *Early Initiation of Drug Use* (39), *Friends' Use of Drugs* (41) and *Friends' Delinquent Behavior* (42). The lower scores reported by students in these areas represent strengths that Pennsylvania can build on.

Graph 5. Overall Protective Factor Scale Scores



Graph 6. Overall Risk Factor Scale Scores



Grade-Level Results

While overall scores provide a general picture of the risk and protective factor profile for Pennsylvania, they can mask problems within individual grades. Tables 15 and 16 present individual-grade data for risk and protective factor scale scores. This detailed information provides prevention planners with a snapshot revealing which risk and protective factor scales are of greatest concern by grade. It allows those prevention planners to focus on the most appropriate points in youth development for preventive intervention action—and to target their prevention efforts as precisely as possible.

For example, younger students tend to report different factors than older students as being the most elevated or suppressed. Pennsylvania 6th graders reported their four highest levels of risk for *Community Disorganization* (72), *Perceived Availability of Handguns* (59), *Parental Attitudes Favorable toward Antisocial Behavior* (56) and *Perceived Availability of Drugs* (54). Pennsylvania 12th graders reported their five highest levels of risk for *Community Disorganization* (69), *Parental Attitudes Favorable toward Antisocial Behavior* (61), *Low Perceived Risks of Drug Use* (57), *Laws and Norms Favorable to Drug Use* (55) and *Peer Rewards for Antisocial Behavior* (55).

Table 15. Protective Factor Scale Scores, Pennsylvania 2009

		6th	8th	10th	12th	Overall
Community Domain	Community Opportunities for Prosocial Involvement	33	38	38	40	37
	Community Rewards for Prosocial Involvement	50	51	53	52	52
Family Domain	Family Attachment	59	55	54	52	55
	Family Opportunities for Prosocial Involvement	54	52	50	50	51
	Family Rewards for Prosocial Involvement	56	52	53	51	53
School Domain	School Opportunities for Prosocial Involvement	58	59	51	53	55
	School Rewards for Prosocial Involvement	58	59	55	54	57
Peer and Individual Domain	Religiosity	45	45	45	43	45
	Belief in the Moral Order	62	59	57	55	58
Average		**53**	**52**	**51**	**50**	**51**

Table 16. Risk Factor Scale Scores, Pennsylvania 2009

		6th	8th	10th	12th	Overall
Community Domain	Low Neighborhood Attachment	42	45	47	45	45
	Community Disorganization	72	70	69	69	70
	Transitions and Mobility	41	49	51	47	47
	Laws and Norms Favorable to Drug Use	50	52	52	55	52
	Perceived Availability of Drugs	54	56	53	52	53
	Perceived Availability of Handguns	59	58	53	47	53
Family Domain	Poor Family Management	44	47	50	48	47
	Family Conflict	51	53	50	53	52
	Family History of Antisocial Behavior	41	44	43	46	44
	Parental Attitudes Favorable toward ATOD Use	45	46	47	49	47
	Parental Attitudes Favorable toward Antisocial Behavior	56	54	57	61	57
School Domain	Poor Academic Performance	42	44	43	44	43
	Lack of Commitment to School	49	46	48	49	48
Peer and Individual Domain	Rebelliousness	40	45	44	42	43
	Friends' Delinquent Behavior	40	42	43	44	42
	Friends' Use of Drugs	41	42	40	42	41
	Peer Rewards for Antisocial Behavior	43	43	47	55	47
	Favorable Attitudes toward Antisocial Behavior	46	45	46	48	46
	Favorable Attitudes toward ATOD Use	43	46	47	48	46
	Low Perceived Risks of Drug Use	45	49	55	57	51
	Early Initiation of Drug Use	39	40	38	39	39
	Sensation Seeking	47	43	43	42	44
Average		**47**	**48**	**48**	**49**	**48**

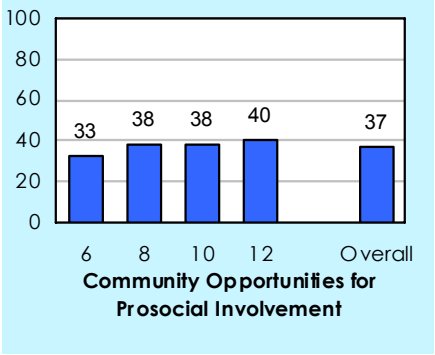
Protective Factors

Protective factors are characteristics that are known to decrease the likelihood that a student will engage in problem behaviors. For example, bonding to parents reduces the risk of an adolescent engaging in problem behaviors.

The Social Development Strategy organizes the research on protective factors. Protective factors can buffer young people from risks and promote positive youth development. To develop these healthy positive behaviors, young people must be immersed in environments that consistently communicate healthy beliefs and clear standards for behavior; that foster the development of strong bonds to members of their family, school and community; and that recognize the individual characteristics of each young person.

Community Opportunities for Prosocial Involvement

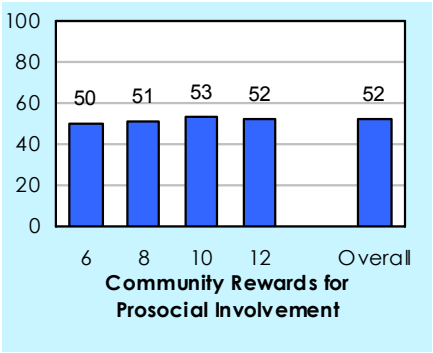
When young people become involved in their communities by participating in activities and organizations that foster healthy development, they are more likely to form connections with prosocial peers. Community involvement also provides the opportunity to bond with adult role models—such as neighbors, police, clergy and other community leaders—who can give moral guidance and emotional support. This protective factor is measured by survey items such as "Which of the following activities for people your age are available in your community: Sports teams, Scouting, Boys and girls clubs, 4-H clubs, Service Clubs?"



- Overall, Pennsylvania students received a percentile score of 37 on the *Community Opportunities for Prosocial Involvement* scale, 13 points lower than the normative average of 50.
- Across grade levels, percentile scores for *Community Opportunities for Prosocial Involvement* range from a low of 33 among 6th graders to a high of 40 among 12th graders.

Community Rewards for Prosocial Involvement

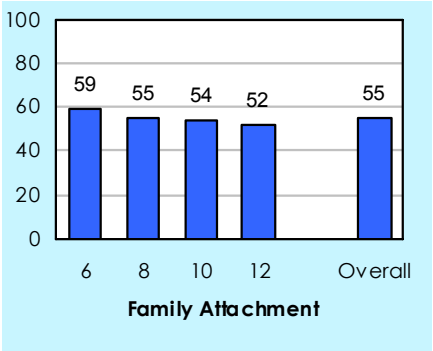
Young people experience bonding as feeling valued and being seen as an asset. Students who feel recognized and rewarded by their community are less likely to engage in negative behaviors, because that recognition helps increase a student's self-esteem and the feeling of bondedness to that community. *Community Rewards for Prosocial Involvement* is measured by such items as "There are people in my neighborhood who are proud of me when I do something well."



- Overall, Pennsylvania students received a percentile score of 52 on the *Community Rewards for Prosocial Involvement* scale, two points higher than the normative average of 50.
- Across grade levels, percentile scores for *Community Rewards for Prosocial Involvement* range from a low of 50 among 6th graders to a high of 53 among 10th graders.

Family Attachment

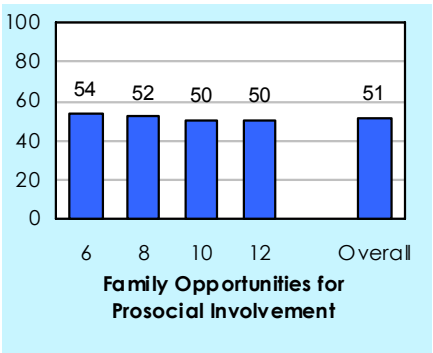
One of the most effective ways to buffer children against risk factors is to strengthen their bonds with family members who embody healthy beliefs and clear standards. If children are attached to their parents and want to please them, they will be less likely to threaten that connection by doing things that their parents strongly disapprove of. This protective factor is measured by such items on the survey as "Do you share your thoughts and feelings with your mother?"



- Overall, Pennsylvania students received a percentile score of 55 on the *Family Attachment* scale, five points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Attachment* range from a low of 52 among 12th graders to a high of 59 among 6th graders.

Family Opportunities for Prosocial Involvement

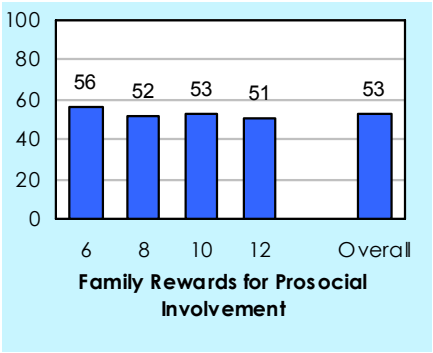
When students have the opportunity to make meaningful contributions to their families, they feel closer to their family members and are less likely to get involved in risky behaviors. These opportunities for involvement reinforce family bonds and cause students to more easily adopt the norms projected by their families. For instance, children whose parents have high expectations for their school success and achievement are less likely to drop out of school. This protective factor is surveyed by such items as "My parents ask me what I think before most family decisions affecting me are made."



- Overall, Pennsylvania students received a percentile score of 51 on the *Family Opportunities for Prosocial Involvement* scale, one point higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Opportunities for Prosocial Involvement* range from a low of 50 among 10th and 12th graders to a high of 54 among 6th graders.

Family Rewards for Prosocial Involvement

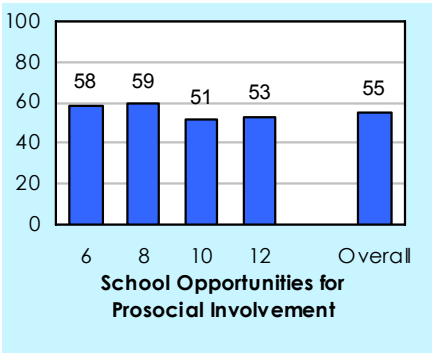
When family members reward their children for positive participation in activities, it further strengthens the bonds the children feel to their families, and helps promote clear standards for behavior. This protective factor is measured by such survey items as "How often do your parents tell you they're proud of you for something you've done?"



- Overall, Pennsylvania students received a percentile score of 53 on the *Family Rewards for Prosocial Involvement* scale, three points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Rewards for Prosocial Involvement* range from a low of 51 among 12th graders to a high of 56 among 6th graders.

School Opportunities for Prosocial Involvement

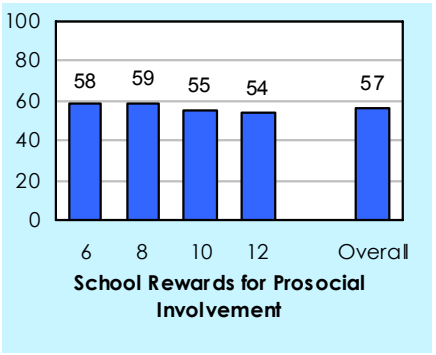
Giving students opportunities to participate in important activities at school helps to create a feeling of personal investment in their school. This results in greater bonding and adoption of the school's standards of behavior, reducing the likelihood that they will become involved in problem behaviors. This protective factor is measured by survey items such as "In my school, students have lots of chances to help decide things like class activities and rules."



- Overall, Pennsylvania students received a percentile score of 55 on the *School Opportunities for Prosocial Involvement* scale, five points higher than the normative average of 50.
- Across grade levels, percentile scores for *School Opportunities for Prosocial Involvement* range from a low of 51 among 10th graders to a high of 59 among 8th graders.

School Rewards for Prosocial Involvement

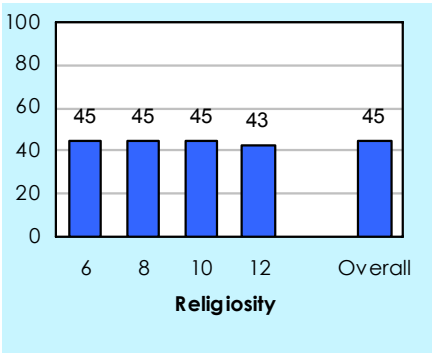
Making students feel appreciated and rewarded for their involvement at school further strengthens school bonding, and helps to reduce the likelihood of their involvement in drug use and other problem behaviors. This protective factor is measured by such statements as "The school lets my parents know when I have done something well."



- Overall, Pennsylvania students received a percentile score of 57 on the *School Rewards for Prosocial Involvement* scale, seven points higher than the normative average of 50.
- Across grade levels, percentile scores for *School Rewards for Prosocial Involvement* range from a low of 54 among 12th graders to a high of 59 among 8th graders.

Religiosity

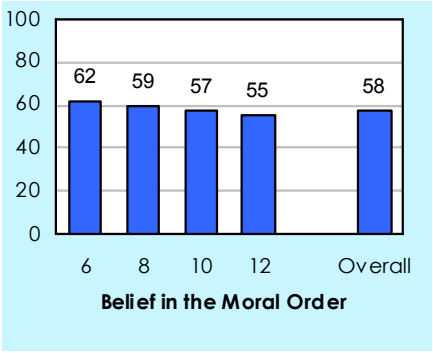
Religious institutions can help students develop firm prosocial beliefs. Students who have preconceived ideas about certain activities are less vulnerable to becoming involved with antisocial behaviors because they have already adopted a social norm against those activities. *Religiosity* is measured by the question "How often do you attend religious services or activities?"



- Overall, Pennsylvania students received a percentile score of 45 on the *Religiosity* scale, five points lower than the normative average of 50.
- Across grade levels, percentile scores for *Religiosity* range from a low of 43 among 12th graders to a high of 45 among 6th, 8th and 10th graders.

Belief in the Moral Order

When people feel bonded to society, they are more motivated to follow society's standards and expectations. Therefore, it is important for families, schools and communities to have clearly stated policies on ATOD use. Young people who have developed a positive belief system, and a clear sense of right and wrong, are less likely to become involved in problem behaviors. For example, young people who believe that drug use is wrong might be protected against peer influences to use drugs. *Belief in the Moral Order* is measured by items on the survey such as "It is all right to beat up people if they start the fight."



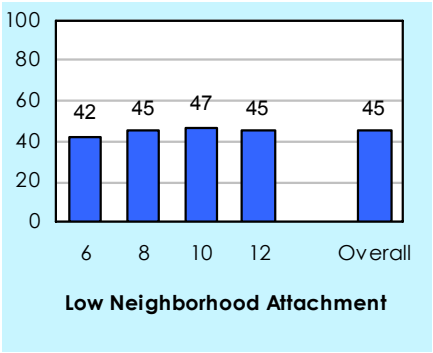
- Overall, Pennsylvania students received a percentile score of 58 on the *Belief in the Moral Order* scale, eight points higher than the normative average of 50.
- Across grade levels, percentile scores for *Belief in the Moral Order* range from a low of 55 among 12th graders to a high of 62 among 6th graders.

Risk Factors

Risk factors are characteristics in the community, family, school and individual's environments that are known to increase the likelihood that a student will engage in one or more problem behaviors. For example, a risk factor in the community environment is the existence of laws and norms favorable to drug use, which can affect the likelihood that a young person will try alcohol, tobacco or other drugs. In those communities where there is acceptance or tolerance of drug use, students are more likely to engage in alcohol, tobacco and other drug use.

Low Neighborhood Attachment

Higher rates of drug problems, delinquency and violence occur in communities or neighborhoods where people feel little attachment to the community. Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in their own lives. If the key players in the neighborhood—such as merchants, teachers, clergy, police and social services personnel—live outside the neighborhood, residents' sense of commitment will be lower. This low sense of commitment may be reflected in lower rates of voter participation and parental involvement in schools.

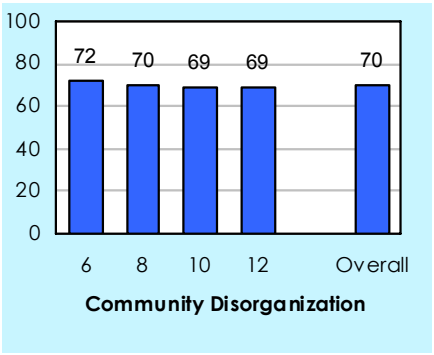


The *Low Neighborhood Attachment* scale on the survey uses three items to measure the level of attachment that students feel to their neighborhoods. This risk factor is measured by items such as "I'd like to get out of my neighborhood" and "If I had to move, I would miss the neighborhood I now live in."

- Overall, Pennsylvania students received a percentile score of 45 on the *Low Neighborhood Attachment* scale, five points lower than the normative average of 50.
- Across grade levels, percentile scores for *Low Neighborhood Attachment* range from a low of 42 among 6th graders to a high of 47 among 10th graders.

Community Disorganization

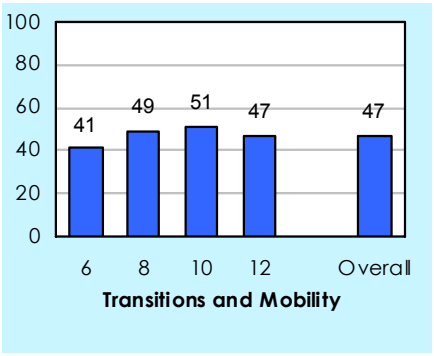
The *Community Disorganization* scale pertains to students' feelings and perceptions regarding their communities and other external attributes. It is based on students' responses to five items, four of which indicate a neighborhood in disarray (e.g., the existence of graffiti, abandoned buildings, fighting and drug selling). The fifth item is "I feel safe in my neighborhood."



- Overall, Pennsylvania students received a percentile score of 70 on the *Community Disorganization* scale, 20 points higher than the normative average of 50.
- Across grade levels, percentile scores for *Community Disorganization* range from a low of 69 among 10th and 12th graders to a high of 72 among 6th graders.

Transitions and Mobility

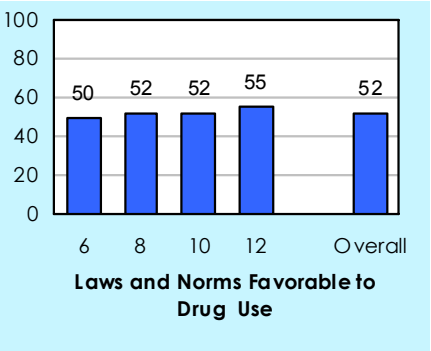
Even normal school transitions are associated with an increase in problem behaviors. When children move from elementary school to middle school or from middle school to high school, significant increases in the rates of drug use, school dropout and antisocial behavior may occur. This is thought to occur because by making a transition to a new environment, students no longer have the bonds they had in their old environment. Consequently, students may be less likely to become attached to their schools and neighborhoods, and do not develop the bonds that protect them from involvement in problem behaviors.



The *Transitions and Mobility* scale on the survey measures how often the student has changed homes or schools in the past year and since kindergarten. This risk factor is measured with items such as "How many times have you changed schools (including changing from elementary to middle and middle to high school) since kindergarten?" and "How many times have you changed homes since kindergarten?"

- Overall, Pennsylvania students received a percentile score of 47 on the *Transitions and Mobility* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Transitions and Mobility* range from a low of 41 among 6th graders to a high of 51 among 10th graders.

Laws and Norms Favorable to Drug Use



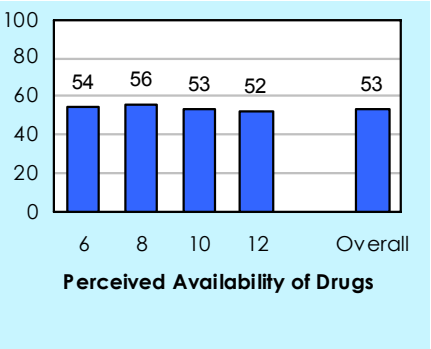
Students' perceptions of the rules and regulations concerning alcohol, tobacco and other drug use that exist in their neighborhoods are also associated with problem behaviors in adolescence. Community norms—the attitudes and policies a community holds in relation to drug use and other antisocial behaviors—are communicated in a variety of ways: through laws and written policies, through informal social practices and through the expectations parents and other members of the community have of young people. When laws and community standards are favorable toward drug use, violence and/or other crime, or even when they are just unclear, young people are more likely to engage in negative behaviors (Bracht and Kingsbury, 1990).

An example of conflicting messages about drug use can be found in the acceptance of alcohol use as a social activity within the community. The beer gardens popular at street fairs and community festivals are in contrast to the "Just Say No" messages that schools and parents may be promoting. These conflicting and ambiguous messages are problematic in that they do not have the positive impact on preventing alcohol and other drug use that a clear, consistent, community-level, anti-drug message can have.

This risk factor is measured by six items on the survey, such as "How wrong would most adults in your neighborhood think it was for kids your age to drink alcohol?" and "If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?"

- Overall, Pennsylvania students received a percentile score of 52 on the *Laws and Norms Favorable to Drug Use* scale, two points higher than the normative average of 50.
- Across grade levels, percentile scores for *Laws and Norms Favorable to Drug Use* range from a low of 50 among 6th graders to a high of 55 among 12th graders.

Perceived Availability of Drugs



The perceived availability of drugs, alcohol and handguns in a community is directly related to the prevalence of delinquent behaviors. In schools where children believe that drugs are more available, a higher rate of drug use occurs.

The *Perceived Availability of Drugs* scale on the survey is designed to assess students' feelings about how easily they can get alcohol, tobacco and other drugs. Elevation of this risk factor scale may indicate the need to make alcohol, tobacco and other drugs more difficult for students to acquire. For instance, a number of policy changes have been shown to reduce the availability of alcohol and cigarettes. Minimum-age requirements, taxation and responsible beverage service have all been shown to affect the perception of availability of alcohol.

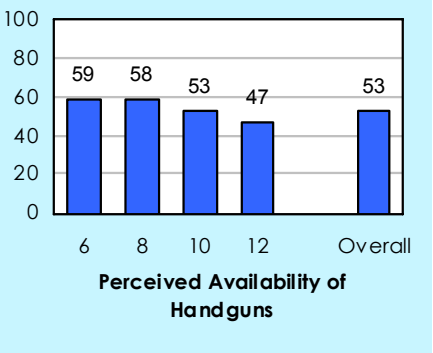
This risk factor is measured by four items on the survey, such as "If you wanted to get some marijuana, how easy would it be for you to get some?"

- Overall, Pennsylvania students received a percentile score of 53 on the *Perceived Availability of Drugs* scale, three points higher than the normative average of 50.

- Across grade levels, percentile scores for *Perceived Availability of Drugs* range from a low of 52 among 12th graders to a high of 56 among 8th graders.

Perceived Availability of Handguns

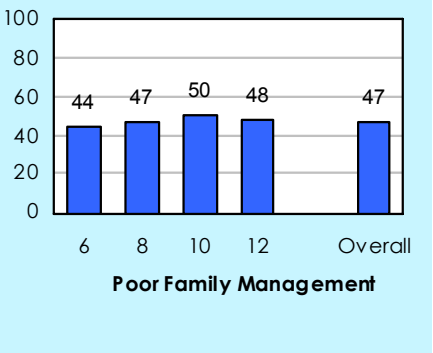
If students believe that it would be difficult to get a handgun, they are less likely to become involved with the unauthorized and unsupervised use of firearms. *Perceived Availability of Handguns* is measured by the question "If you wanted to get a handgun, how easy would it be for you to get one?"



- Overall, Pennsylvania students received a percentile score of 53 on the *Perceived Availability of Handguns* scale, three points higher than the normative average of 50.
- Across grade levels, percentile scores for *Perceived Availability of Handguns* range from a low of 47 among 12th graders to a high of 59 among 6th graders.

Poor Family Management

The risk factor scale *Poor Family Management* measures two components of family life: "poor family supervision," which is defined as parents failing to supervise and monitor their children, and "poor family discipline," which is defined as parents failing to communicate clear expectations for behavior and giving excessively severe, harsh or inconsistent punishment. Children who experience poor family supervision and poor family discipline are at higher risk of developing problems with drug use, delinquency, violence and school dropout.

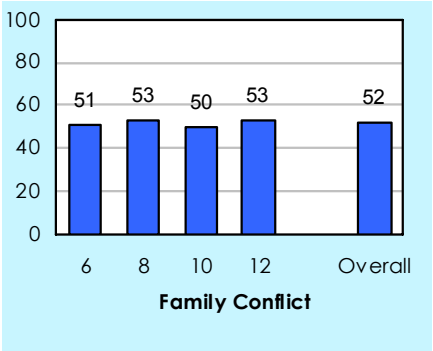


Sample items used to survey *Poor Family Management* include "Would your parents know if you did not come home on time?" and "My family has clear rules about alcohol and drug use."

- Overall, Pennsylvania students received a percentile score of 47 on the *Poor Family Management* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Poor Family Management* range from a low of 44 among 6th graders to a high of 50 among 10th graders.

Family Conflict

Bonding between family members, especially between children and their parents or guardians, is a key component in the development of positive social norms. High levels of family conflict interfere with the development of these bonds, and increase the likelihood that young people will engage in illegal drug use and other forms of delinquent behavior.

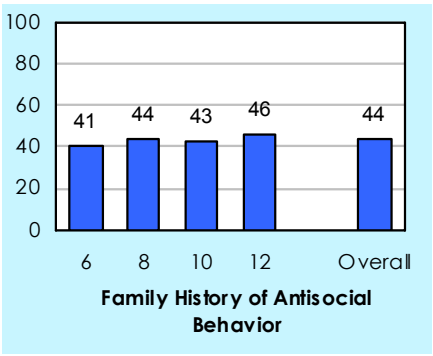


Family Conflict is measured by four items on the survey, such as "People in my family often insult or yell at each other."

- Overall, Pennsylvania students received a percentile score of 52 on the *Family Conflict* scale, two points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Conflict* range from a low of 50 among 10th graders to a high of 53 among 8th and 12th graders.

Family History of Antisocial Behavior

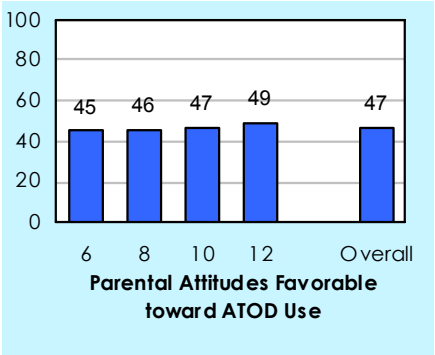
If children are raised in a family where a history of addiction to alcohol or other drugs exists, the risk of their having alcohol or other drug problems themselves increases. If children are born or raised in a family where criminal activity or behavior is normal, their risk for delinquency increases. Similarly, children who are born to a teenage mother are more likely to become teen parents, and children of dropouts are more likely to drop out of school themselves. Children whose parents engage in violent behavior inside or outside the home are at greater risk for exhibiting violent behavior themselves. Students' perceptions of their families' behavior and standards regarding drug use and other antisocial behaviors are measured by the survey. *Family History of Antisocial Behavior* is assessed by items such as "Has anyone in your family ever had a severe alcohol or drug problem?"



- Overall, Pennsylvania students received a percentile score of 44 on the *Family History of Antisocial Behavior* scale, six points lower than the normative average of 50.
- Across grade levels, percentile scores for *Family History of Antisocial Behavior* range from a low of 41 among 6th graders to a high of 46 among 12th graders.

Parental Attitudes Favorable toward ATOD Use

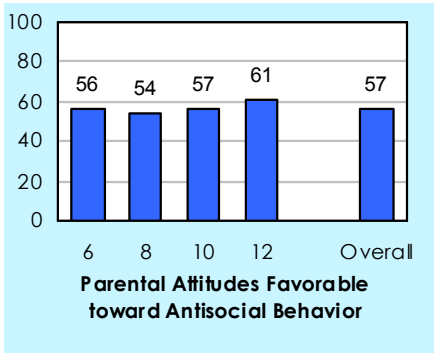
Students' perceptions of their parents' opinions about alcohol, tobacco and other drug use are an important risk factor. In families where parents use illegal drugs, are heavy users of alcohol or are tolerant of use by their children, children are more likely to become drug users in adolescence. *Parental Attitudes Favorable toward ATOD Use* is measured by survey items such as "How wrong do your parents feel it would be for you to smoke marijuana?"



- Overall, Pennsylvania students received a percentile score of 47 on the *Parental Attitudes Favorable toward ATOD Use* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Parental Attitudes Favorable toward ATOD Use* range from a low of 45 among 6th graders to a high of 49 among 12th graders.

Parental Attitudes Favorable toward Antisocial Behavior

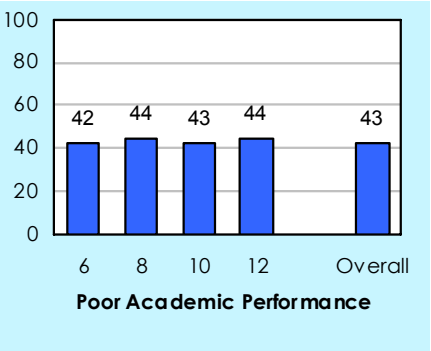
Students' perceptions of their parents' opinions about antisocial behavior are also an important risk factor. Parental attitudes and behavior regarding crime and violence influence the attitudes and behavior of children. If parents approve of or excuse their children for breaking the law, then the children are more likely to develop problems with juvenile delinquency. *Parental Attitudes Favorable toward Antisocial Behavior* is measured by survey items such as "How wrong do your parents feel it would be for you to pick a fight with someone?"



- Overall, Pennsylvania students received a percentile score of 57 on the *Parental Attitudes Favorable toward Antisocial Behavior* scale, seven points higher than the normative average of 50.
- Across grade levels, percentile scores for *Parental Attitudes Favorable toward Antisocial Behavior* range from a low of 54 among 8th graders to a high of 61 among 12th graders.

Poor Academic Performance

Beginning in the late elementary grades, poor academic performance increases the risk of drug use, delinquency, violence and school dropout. Children fail for many reasons, but it appears that the experience of failure increases the risk of these problem behaviors.

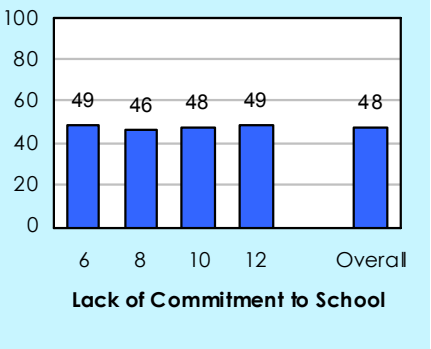


Poor Academic Performance—students' feelings about their performance at school—is measured with two questions on the survey: "Putting them all together, what were your grades like last year?" and "Are your school grades better than the grades of most students in your class?" Elevated findings for this risk factor scale suggest that students believe that they have lower grades than would be expected, and they perceive they have below-average grades, compared to their peers.

- Overall, Pennsylvania students received a percentile score of 43 on the *Poor Academic Performance* scale, seven points lower than the normative average of 50.
- Across grade levels, percentile scores for *Poor Academic Performance* range from a low of 42 among 6th graders to a high of 44 among 8th and 12th graders.

Lack of Commitment to School

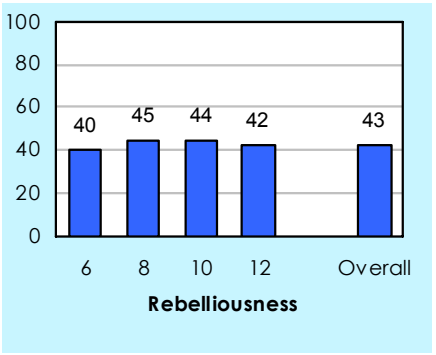
Nine items on the survey assess *Lack of Commitment to School*—a student's general feelings about his or her schooling. Survey items include "How important do you think the things you are learning in school are going to be for your later life?" and "Now, thinking back over the past year in school, how often did you enjoy being in school?" Elevated findings for this risk factor scale suggest that students feel less attached to, or connected with, their classes and school environments. Lack of commitment to school means the child has ceased to see the role of student as a positive one. Young people who have lost this commitment to school are at higher risk for a variety of problem behaviors.



- Overall, Pennsylvania students received a percentile score of 48 on the *Lack of Commitment to School* scale, two points lower than the normative average of 50.
- Across grade levels, percentile scores for *Lack of Commitment to School* range from a low of 46 among 8th graders to a high of 49 among 6th and 12th graders.

Rebelliousness

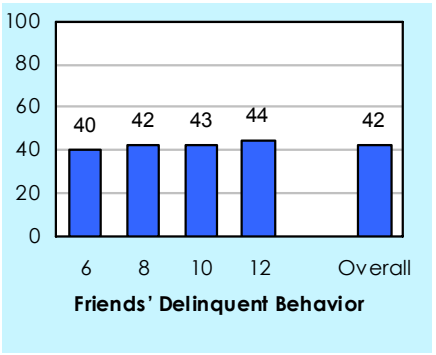
The survey also assesses the number of young people who feel they are not part of society, who feel they are not bound by rules, and who don't believe in trying to be successful or responsible. These students are at higher risk of drug use, delinquency and school dropout. *Rebelliousness* is measured by three items, such as "I ignore the rules that get in my way."



- Overall, Pennsylvania students received a percentile score of 43 on the *Rebelliousness* scale, seven points lower than the normative average of 50.
- Across grade levels, percentile scores for *Rebelliousness* range from a low of 40 among 6th graders to a high of 45 among 8th graders.

Friends' Delinquent Behavior

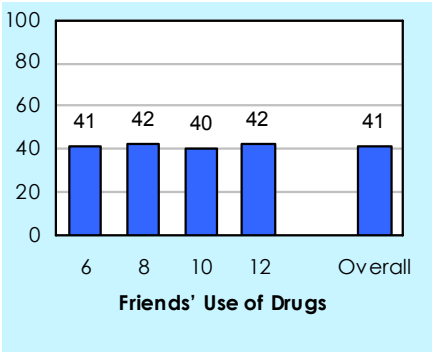
Young people who associate with peers who engage in delinquent behavior are much more likely to engage in delinquent behavior themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who engage in delinquent behavior greatly increases the risk of their becoming involved in delinquent behavior. *Friends' Delinquent Behavior* is measured by survey items such as "In the past year, how many of your four best friends have been suspended from school?"



- Overall, Pennsylvania students received a percentile score of 42 on the *Friends' Delinquent Behavior* scale, eight points lower than the normative average of 50.
- Across grade levels, percentile scores for *Friends' Delinquent Behavior* range from a low of 40 among 6th graders to a high of 44 among 12th graders.

Friends' Use of Drugs

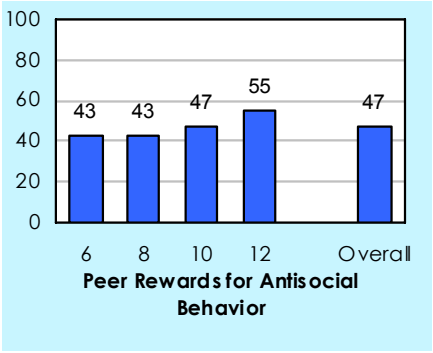
Young people who associate with peers who engage in substance use are much more likely to engage in it themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who use drugs greatly increases a youth's risk of becoming involved in such behavior. *Friends' Use of Drugs* is measured by survey items such as "In the past year, how many of your best friends have used marijuana?"



- Overall, Pennsylvania students received a percentile score of 41 on the *Friends' Use of Drugs* scale, nine points lower than the normative average of 50.
- Across grade levels, percentile scores for *Friends' Use of Drugs* range from a low of 40 among 10th graders to a high of 42 among 8th and 12th graders.

Peer Rewards for Antisocial Behavior

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behavior. Any indication that students feel that they get positive feedback from their peers if they use alcohol, tobacco or other drugs, or if they get involved in delinquent behaviors, is important to note and understand. When young people believe that their peer groups are involved in antisocial behaviors, they are more likely to become involved in antisocial behaviors themselves. This risk factor is measured by items such as "What are the chances you would be seen as cool if you smoked marijuana?"

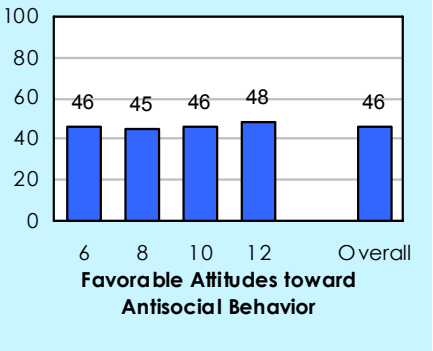


- Overall, Pennsylvania students received a percentile score of 47 on the *Peer Rewards for Antisocial Behavior* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Peer Rewards for Antisocial Behavior* range from a low of 43 among 6th and 8th graders to a high of 55 among 12th graders.

Favorable Attitudes toward Antisocial Behavior

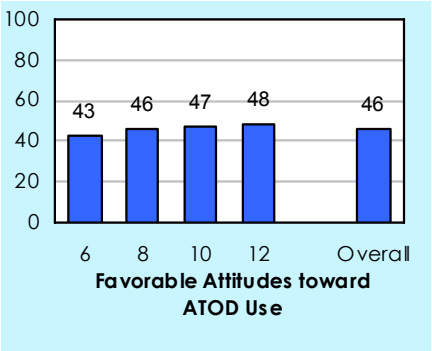
During the elementary school years, children usually express anticrime and prosocial attitudes and have difficulty imagining why people commit crimes or drop out of school. However, in middle school, as others they know participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This acceptance places them at higher risk for these antisocial behaviors.

These attitudes are measured on the survey by items like "How wrong do you think it is for someone your age to pick a fight with someone?"



- Overall, Pennsylvania students received a percentile score of 46 on the *Favorable Attitudes toward Antisocial Behavior* scale, four points lower than the normative average of 50.
- Across grade levels, percentile scores for *Favorable Attitudes toward Antisocial Behavior* range from a low of 45 among 8th graders to a high of 48 among 12th graders.

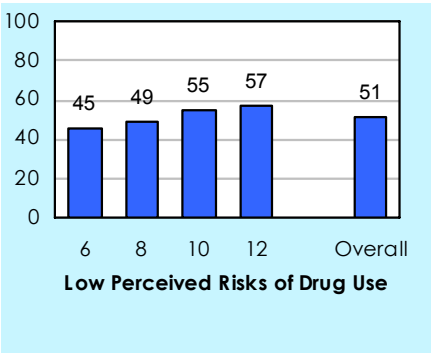
Favorable Attitudes toward ATOD Use



During the elementary school years, children usually express anti-drug attitudes and have difficulty imagining why people use drugs. However, in middle school, as others they know participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This acceptance places them at higher risk. This risk factor scale, *Favorable Attitudes toward ATOD Use,* assesses risk by asking young people how wrong they think it is for someone their age to use drugs. Survey items used to measure this risk factor include "How wrong do you think it is for someone your age to drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?" An elevated score for this risk factor scale can indicate that students see little wrong with using drugs.

- Overall, Pennsylvania students received a percentile score of 46 on the *Favorable Attitudes toward ATOD Use* scale, four points lower than the normative average of 50.
- Across grade levels, percentile scores for *Favorable Attitudes toward ATOD Use* range from a low of 43 among 6th graders to a high of 48 among 12th graders.

Low Perceived Risks of Drug Use

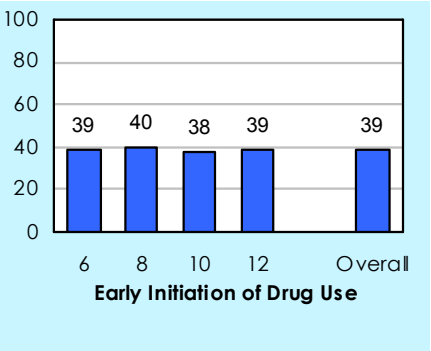


The perception of harm from drug use is related to both experimentation and regular use. The less harm that an adolescent perceives as the result of drug use, the more likely it is that he or she will use drugs. *Low Perceived Risks of Drug Use* is measured with four survey items, such as "How much do you think people risk harming themselves if they try marijuana once or twice?" An elevated score can indicate that students are not aware of, or do not comprehend, the possible harm resulting from drug use.

- Overall, Pennsylvania students received a percentile score of 51 on the *Low Perceived Risks of Drug Use* scale, one point higher than the normative average of 50.
- Across grade levels, percentile scores for *Low Perceived Risks of Drug Use* range from a low of 45 among 6th graders to a high of 57 among 12th graders.

Early Initiation of Drug Use

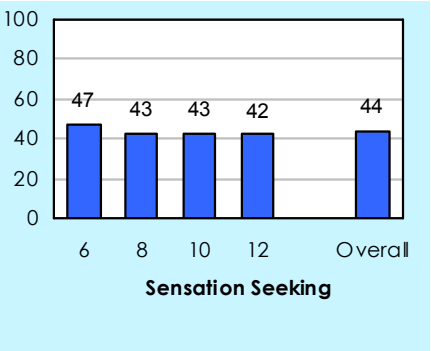
The initiation of alcohol, tobacco or other drug use at an early age is linked to a number of negative outcomes. The earlier that experimentation with drugs begins, the more likely it is that experimentation will become consistent, regular use. Early initiation may lead to the use of a greater range of drugs, as well as other problem behaviors. This scale is measured by survey items that ask when drug use began.



- Overall, Pennsylvania students received a percentile score of 39 on the *Early Initiation of Drug Use* scale, 11 points lower than the normative average of 50.
- Across grade levels, percentile scores for *Early Initiation of Drug Use* range from a low of 38 among 10th graders to a high of 40 among 8th graders.

Sensation Seeking

Constitutional factors are individual characteristics that may have a biological or physiological basis. Constitutional factors that increase risk are often seen as sensation seeking, low harm avoidance and lack of impulse control. They appear to increase the risk of young people using drugs, engaging in delinquent behavior and/or committing violent acts. *Sensation Seeking* is measured by survey items such as "How many times have you done crazy things even if they are a little dangerous?"



- Overall, Pennsylvania students received a percentile score of 44 on the *Sensation Seeking* scale, six points lower than the normative average of 50.
- Across grade levels, percentile scores for *Sensation Seeking* range from a low of 42 among 12th graders to a high of 47 among 6th graders.

Appendix A
Additional Prevention Planning Data

Introduction

The following section presents detailed response data for survey items that may be of particular interest to prevention planners. Some of this information has already been presented earlier in this report in the form of several of the risk factor scale scores (see Section 5). These detailed response data have been provided to help communities form a more complete picture of the attitudes and behaviors held by the youth who were surveyed. It is helpful, however, to view this information within the context of the risk and protective factor framework covered earlier in this report.

Risk of Harm

Perception of risk is an important determinant in the decision-making process young people go through when deciding whether or not to use alcohol, tobacco or other drugs (Bachman, Johnston, O'Malley & Humphrey, 1988). Data analysis across a range of *Communities That Care Youth Survey* communities shows a consistent negative correlation between perception of risk and the level of reported ATOD use. That is, generally when the perceived risk of harm is high, reported frequency of use is low. Evidence also suggests that perceptions of the risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns in a community (Bachman, Johnston, O'Malley & Humphrey, 1986). Table 16 presents prevalence rates for surveyed youth assigning "great risk" of harm to four drug use behaviors: regular use of alcohol (one or two drinks nearly every day), regular use of cigarettes (a pack or more daily), trying marijuana once or twice, and regular use of marijuana. These four survey items form the risk factor scale *Low Perceived Risks of Drug Use*.

The percentage of Pennsylvania students who assigned "great risk" of harm to smoking one or more packs of cigarettes per day was 66.5%, followed by regular use of marijuana (63.0%), near daily use of alcohol (30.1%) and trying marijuana once or twice (29.0%). Perceptions of harm associated with cigarette use are fairly consistent across grade levels. In contrast, perceptions of harm associated with marijuana use decline as students get older. For example, 83.2% of 6th graders reported a great risk of harm associated with regular marijuana use, compared to 43.2% of 12th graders. Perceptions of harm associated with near daily use of alcohol also declined with grade level, but not as rapidly. Female students are more likely than male students to describe ATOD use as harmful. For example, 70.1% of female students assigned "great risk" of harm to smoking one or more packs of cigarettes per day, compared to 62.6% of male students.

Table 16. Percentage of Youth Who Reported Perception of "Great Risk" of Harm, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Drinking Alcohol Regularly	33.0	27.0	40.3	30.2	25.2	26.2	30.1
Smoking Cigarettes Regularly	70.1	62.6	71.7	67.5	63.0	64.6	66.5
Trying Marijuana Once or Twice	29.7	28.5	46.0	36.1	21.5	15.4	29.0
Smoking Marijuana Regularly	67.7	58.3	83.2	74.5	54.9	43.2	63.0

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Disapproval of Drug Use

Personal approval or disapproval is another key attitudinal construct that influences drug use behavior (Bachman et al., 1988). Like risk of harm, disapproval is negatively correlated with the level of reported ATOD use across a range of *Communities That Care Youth Survey* communities. Personal disapproval was measured by asking surveyed youth how wrong it would be for someone their age to drink alcohol regularly, smoke cigarettes, smoke marijuana, or use other illicit drugs ("LSD, cocaine, amphetamines or another illegal drug"). The rates presented in Table 17 represent the percentages of surveyed youth who thought it would be "wrong" or "very wrong" to use each drug. These four survey items form the risk factor scale *Favorable Attitudes toward ATOD Use*.

The percentage of Pennsylvania students who disapprove of other illicit drug use was 94.3%, followed by smoking marijuana (79.8%), smoking cigarettes (77.3%) and drinking alcohol regularly (71.6%). While disapproval of other illicit drug use remains above the 90% level for all grades, the other three categories show substantial reductions as students get older. In particular, the percentage of students who disapprove of regular alcohol use declines from a high of 97.2% among 6th graders to a low of 49.2% among 12th graders. Female and male students reported similar rates of disapproval for cigarette, marijuana and other illicit drug use. For marijuana, female students reported a slightly higher rate of disapproval (81.9%) than male students (77.7%).

Table 17. Percentage of Youth Who Indicated Personal Disapproval of Drug Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Drinking Alcohol Regularly	72.4	70.9	97.2	82.5	62.5	49.2	71.6
Smoking Cigarettes	77.9	76.7	97.3	86.7	72.1	56.8	77.3
Smoking Marijuana	81.9	77.7	98.4	89.0	73.1	62.3	79.8
Using Other Illicit Drugs	95.6	92.9	98.7	96.3	92.8	90.3	94.3

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Social Norms

In addition to students' own attitudes, social norms—the written and unwritten rules and expectations about what constitutes desirable behavior—shape drug use choices. Since drug-related attitudes and behaviors are often acquired through peer group interactions, expectations of how one's peer group might

react have an especially strong impact on whether or not young people choose to use drugs. The data presented in Table 18 show the percentage of surveyed youth who said that there is a "pretty good" or "very good" chance that they would be seen as cool if they smoked cigarettes, drank alcohol regularly (once or twice a month) or smoked marijuana. These three survey items form part of the risk factor scale *Peer Rewards for Antisocial Behavior*.

Relatively few of the Pennsylvania students reported that drug use would be seen as cool. Only 11.4% of students felt that drinking alcohol would be seen as cool, 10.3% felt that smoking marijuana would be seen as cool and 5.1% felt that smoking cigarettes would be seen as cool. Peer approval of all three categories of ATOD use increases as students get older; however, this increase is much more rapid for alcohol and marijuana. For example, peer approval of alcohol use increases steadily from 1.4% among 6th graders to 22.2% among 12th graders. Female and male students reported similar rates of peer approval for alcohol and cigarette use. For marijuana use, approval is higher among male students than among female students (11.8% versus 8.8%, respectively).

Table 18. Percentage of Youth Who Indicated Peer Approval of Drug Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Drinking Alcohol Regularly	11.0	11.8	1.4	6.7	13.5	22.2	11.4
Smoking Cigarettes	5.0	5.3	1.3	4.7	6.8	7.1	5.1
Smoking Marijuana	8.8	11.8	1.1	6.0	13.5	18.6	10.3

Note: The symbol "--" indicates that data are not available because students were not surveyed.

In addition to peer attitudes, social norms toward drug use were measured by asking how most neighborhood adults would view student alcohol, cigarette and marijuana use. Table 19 presents the percentage of surveyed youth who thought other adults would feel it was "wrong" or "very wrong" to use each drug. These three survey items form part of the risk factor scale *Laws and Norms Favorable to Drug Use*.

Across the overall sample, 86.0% of Pennsylvania students reported that neighborhood adults disapproved of smoking marijuana use, 76.5% reported that neighborhood adults disapprove of smoking cigarettes, and 74.8% reported that neighborhood adults disapprove of drinking alcohol. Younger students are more likely to believe that neighborhood adults disapprove of ATOD use. For example, neighborhood adult disapproval of alcohol use drops from 90.6% among 6th graders to 60.6% among 12th graders. In all three categories female students reported slightly higher rates of neighborhood adult disapproval, but the difference is always less than 3.0 percentage points.

Table 19. Percentage of Youth Who Indicated "Other Adults" Disapprove of Drug Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Drinking Alcohol	76.0	73.5	90.6	80.5	70.1	60.6	74.8
Smoking Cigarettes	77.2	75.6	92.2	83.2	73.7	59.5	76.5
Smoking Marijuana	87.5	84.5	96.2	90.3	83.3	75.9	86.0

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Parental Disapproval of Drug Use

Parental disapproval was measured by asking surveyed youth "how wrong do your parents feel it would be for you to" drink alcohol regularly, smoke cigarettes, and smoke marijuana. The rates presented in Table 20 represent the percentages of surveyed youth who reported that their parents feel it would be "very wrong" to use each drug. These three survey items form the risk factor scale *Parental Attitudes Favorable toward ATOD Use*.

Not surprisingly, most Pennsylvania students report that their parents disapprove of ATOD use. Across the overall sample, 85.6% reported that their parents believe smoking marijuana is "very wrong," followed by 80.6% for smoking cigarettes and 73.5% for drinking alcohol regularly. As with other adult disapproval, the rates drop as students get older. For example, 93.1% of 6th graders reported parental disapproval of regular alcohol use, compared to 54.1%% of 12th graders. In all three categories females reported higher rates of parental disapproval, with the largest difference being 4.6 percentage points for smoking marijuana.

Table 20. Percentage of Youth Who Indicated Parental Disapproval of Drug Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Drink Alcohol Regularly	75.6	71.3	93.1	81.9	68.3	54.1	73.5
Smoke Cigarettes	81.8	79.5	95.1	87.3	77.4	65.4	80.6
Smoke Marijuana	87.9	83.3	97.2	91.2	82.7	73.3	85.6

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Frequency of Drug Use

While the prevalence rates presented in Section 2 are useful for determining how many kids are currently using or have experimented with a drug, they give no indication of the frequency or intensity of use. A respondent who reports 1 or 2 occasions of use in the past 30 days is counted the same as one who reports 40 or more occasions of use, even though the level of use is drastically different. Tables 21 to 24 present the past-30-day frequency of use reported by surveyed youth for the following drugs: alcohol, cigarettes, marijuana, and inhalants.

Table 21. Past-30-Day Frequency of Alcohol Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
0 occasions	73.9	75.2	94.9	82.8	69.5	54.0	74.5
1 or 2 occasions	17.1	15.2	4.4	11.9	19.8	26.6	16.1
3 to 5 occasions	5.2	5.0	0.5	2.9	5.5	10.8	5.1
6 to 9 occasions	2.1	2.3	0.1	1.0	2.7	4.8	2.2
10 to 19 occasions	1.1	1.3	0.1	0.6	1.7	2.4	1.2
20 to 39 occasions	0.3	0.4	0.0	0.3	0.3	0.6	0.3
40 or more occasions	0.3	0.6	0.0	0.5	0.4	0.8	0.5

Note: Rounding on the above table can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because students were not surveyed.

Table 22. Past-30-Day Frequency of Cigarette Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Not at all	89.0	89.0	99.1	93.3	86.1	79.2	89.0
Less than one cigarette per day	4.4	5.0	0.6	3.9	6.1	7.7	4.7
One to five cigarettes per day	3.8	2.9	0.2	2.0	4.8	6.2	3.4
About one-half pack per day	1.7	1.6	0.1	0.3	1.8	4.2	1.7
About one pack per day	0.6	0.9	0.0	0.2	0.6	2.1	0.8
About one and one-half packs per day	0.2	0.2	0.0	0.0	0.4	0.4	0.2
Two packs or more per day	0.1	0.3	0.0	0.2	0.3	0.3	0.2

Note: Rounding on the above table can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because students were not surveyed.

Table 23. Past-30-Day Frequency of Marijuana Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
0 occasions	90.1	87.1	99.7	94.6	85.8	76.3	88.6
1 or 2 occasions	4.6	4.3	0.1	2.5	5.7	8.7	4.4
3 to 5 occasions	1.9	1.9	0.0	1.0	2.6	3.6	1.9
6 to 9 occasions	1.0	1.1	0.0	0.6	1.6	1.7	1.0
10 to 19 occasions	0.8	1.6	0.0	0.4	1.6	2.6	1.2
20 to 39 occasions	0.5	1.2	0.0	0.2	0.9	2.3	0.9
40 or more occasions	1.0	2.8	0.0	0.8	1.7	4.8	1.9

Note: Rounding on the above table can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because students were not surveyed.

Table 24. Past-30-Day Frequency of Inhalant Use, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
0 occasions	94.0	94.2	93.2	91.8	94.5	96.7	94.1
1 or 2 occasions	4.5	4.3	5.6	6.0	3.7	2.4	4.3
3 to 5 occasions	0.7	0.6	0.6	0.7	0.8	0.6	0.7
6 to 9 occasions	0.4	0.3	0.3	0.6	0.4	0.2	0.4
10 to 19 occasions	0.2	0.2	0.2	0.4	0.2	0.1	0.2
20 to 39 occasions	0.0	0.1	0.0	0.1	0.1	0.1	0.1
40 or more occasions	0.2	0.2	0.1	0.4	0.3	0.1	0.2

Note: Rounding on the above table can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because students were not surveyed.

Frequency of Bringing a Weapon to School

Table 25 presents the past-30-day frequency of bringing a weapon (such as a gun, knife or club) to school, reported by surveyed youth.

Table 25. Past-30-Day Frequency of Bringing a Weapon to School, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Never	98.6	96.7	99.1	97.9	97.2	96.8	97.7
1 or 2 times	0.9	2.1	0.8	1.6	1.5	1.8	1.5
3 to 5 times	0.2	0.5	0.0	0.2	0.4	0.6	0.3
6 to 9 times	0.1	0.1	0.0	0.1	0.2	0.1	0.1
10 to 19 times	0.0	0.1	0.0	0.0	0.1	0.2	0.1
20 to 29 times	0.0	0.1	0.0	0.1	0.0	0.1	0.1
30 to 39 times	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40+ times	0.2	0.4	0.0	0.1	0.6	0.4	0.3

Note: Rounding on the above table can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because students were not surveyed.

Gang Involvement

Gangs have long been associated with crime, violence and other antisocial behaviors. Evidence suggests that gangs contribute to antisocial behavior beyond simple association with delinquent peers. Table 26 presents the percentage of surveyed youth indicating gang involvement.

Only 5.7% of Pennsylvania students reported ever belonging to a gang, and 4.8% say they belonged to a gang with a name. The rate of gang involvement is much higher among male students, with 8.1% reporting having belonged to a gang, compared to 3.4% of female students, and 7.1% saying they belonged to a gang with a name, compared to 2.6% for female students.

Table 26. Percentage of Youth Who Indicated Gang Involvement, Pennsylvania 2009

	Female %	Male %	6th %	8th %	10th %	12th %	Overall %
Ever Belonged to a Gang	3.4	8.1	4.5	6.2	6.7	5.4	5.7
Belonged to a Gang with a Name	2.6	7.1	3.1	5.4	6.2	4.5	4.8

Note: The symbol "--" indicates that data are not available because students were not surveyed.

Appendix B
The 2009 *PAYS* Questionnaire

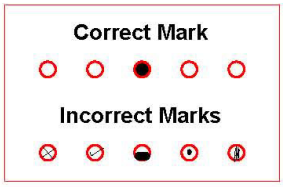
Pennsylvania Youth Survey

Thank you for agreeing to participate in this survey. The survey asks your opinion about a number of things in your life, including your friends, your family, your neighborhood and your community. Your answers to these questions will be confidential and anonymous. This means your answers will stay secret. Your name will never be asked. Please do not write your name on this survey form.

This survey is completely voluntary. You may skip any question.

Instructions

1. This is not a test, so there are no right or wrong answers.
2. Each question should be answered by marking only one of the answer spaces. If you don't find an answer that fits exactly, use one that comes closest. If any question does not apply to you, or you are not sure of what it means, just leave it blank.
3. Your answers will be read by a computer. Please follow these instructions carefully.
   - Use a #2 pencil only.
   - Make heavy marks inside the circles.
   - Completely erase any answer you want to change.
   - Make no other markings or comments on the answer pages.



4. Some of the questions have the following format:

   Please fill in the circle for the word that best describes how you feel. NO! no yes YES!

   EXAMPLE: Pepperoni pizza is one of my favorite foods.

   Mark (the Big) NO! if you think the statement is definitely not true for you.
   Mark (the little) no if you think the statement is mostly not true for you.
   Mark (the little) yes if you think the statement is mostly true for you.
   Mark (the Big) YES! if you think the statement is definitely true for you.

THE SURVEY BEGINS WITH ITEM ONE, BELOW

1. **How old are you?**
   ○ 10 ○ 11 ○ 12 ○ 13 ○ 14 ○ 15 ○ 16 ○ 17 ○ 18 ○ 19 or older

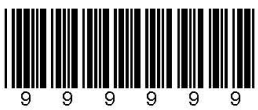
2. **What grade are you in?**
   ○ 6th ○ 7th ○ 8th ○ 9th ○ 10th ○ 11th ○ 12th

3. **Are you?** ○ Female ○ Male

4. **What do you consider yourself to be? (Choose all that apply)**
   ○ White
   ○ Black or African American
   ○ American Indian/Native American, Eskimo or Aleut
   ○ Spanish/Hispanic/Latino
   ○ Asian or Pacific Islander
   ○ Other

5. **What is the language you use most often at home?**
   ○ English
   ○ Spanish
   ○ Another language

6. **Think of where you live most of the time. Which of the following people live there with you? (Choose all that apply)**
   ○ Mother ○ Stepmother ○ Foster mother
   ○ Grandmother ○ Aunt ○ Father
   ○ Stepfather ○ Foster father ○ Grandfather
   ○ Uncle ○ Other adults ○ Brother(s)
   ○ Stepbrother(s) ○ Sister(s) ○ Stepsister(s)
   ○ Other children



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7. **What are the chances you would be seen as cool if you:**

a. **Smoked cigarettes?**
- O No or very little chance
- O Little chance
- O Some chance
- O Pretty good chance
- O Very good chance

b. **Began drinking alcoholic beverages regularly, that is, at least once or twice a month?**
- O No or very little chance
- O Little chance
- O Some chance
- O Pretty good chance
- O Very good chance

c. **Smoked marijuana?**
- O No or very little chance
- O Little chance
- O Some chance
- O Pretty good chance
- O Very good chance

d. **Carried a handgun?**
- O No or very little chance
- O Little chance
- O Some chance
- O Pretty good chance
- O Very good chance

8. **How interesting are most of your courses to you?**
- O Very dull
- O Slightly dull
- O Fairly interesting
- O Quite interesting
- O Very interesting and stimulating

9. **How important do you think the things you are learning in school are going to be for your later life?**
- O Not at all important
- O Slightly important
- O Fairly important
- O Quite important
- O Very important

10. **During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or "cut"?**
- O None
- O 1
- O 2
- O 3
- O 4-5
- O 6-10
- O 11 or more

11. **How often do you feel that the schoolwork you are assigned is meaningful and important?**
- O Never
- O Seldom
- O Sometimes
- O Often
- O Almost always

12. **Putting them all together, what were your grades like last year?**
- O Mostly F's
- O Mostly D's
- O Mostly C's
- O Mostly B's
- O Mostly A's

13. **Are your school grades better than the grades of most students in your class?**
- O NO!
- O no
- O yes
- O YES!

14. **Which of the following activities for people your age are available in your community? (Choose all that apply.)**
- O Sports teams
- O Scouting
- O Boys and girls clubs
- O 4-H clubs
- O Service clubs

		NO!	no	yes	YES!
15.	There are lots of adults in my neighborhood I could talk to about something important.	O	O	O	O
16.	Teachers ask me to work on special classroom projects.	O	O	O	O
17.	There are lots of chances for students in my school to talk with a teacher one-on-one.	O	O	O	O
18.	I have lots of chances to be part of class discussions or activities.	O	O	O	O
19.	My teacher(s) notices when I am doing a good job and lets me know about it.	O	O	O	O
20.	I feel safe at my school.	O	O	O	O
21.	The school lets my parents know when I have done something well.	O	O	O	O
22.	My teachers praise me when I work hard in school.	O	O	O	O
23.	In my school, students have lots of chances to help decide things like class activities and rules.	O	O	O	O
24.	There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.	O	O	O	O

25.	**How wrong do you think it is for someone your age to:**	Not at all wrong	A little bit wrong	Wrong	Very wrong
	a. Stay away from school all day when their parents think they are at school?	O	O	O	O
	b. Take a handgun to school?	O	O	O	O
	c. Steal anything worth more than $5?	O	O	O	O
	d. Pick a fight with someone?	O	O	O	O
	e. Attack someone with the idea of seriously hurting them?	O	O	O	O

26.	**Now, thinking back over the past year in school, how often did you:**	Never	Seldom	Sometimes	Often	Almost always
	a. Enjoy being in school?	O	O	O	O	O
	b. Hate being in school?	O	O	O	O	O
	c. Try to do your best work in school?	O	O	O	O	O

27.	**How wrong do you think it is for someone your age to:**	Not at all wrong	A little bit wrong	Wrong	Very wrong
	a. Drink beer, wine or hard liquor (for example, vodka, whiskey, or gin) regularly?	O	O	O	O
	b. Smoke cigarettes?	O	O	O	O
	c. Smoke marijuana?	O	O	O	O
	d. Use LSD, cocaine, amphetamines or another illegal drug?	O	O	O	O

28.	**How wrong do your parents feel it would be for <u>you</u> to:**	Not at all wrong	A little bit wrong	Wrong	Very wrong
	a. Drink beer, wine or hard liquor (for example, vodka, whiskey, or gin) regularly?	O	O	O	O
	b. Pick a fight with someone?	O	O	O	O
	c. Smoke cigarettes?	O	O	O	O
	d. Smoke marijuana?	O	O	O	O
	e. Steal anything worth more than $5?	O	O	O	O
	f. Draw graffiti, or write things or draw pictures on buildings or other property (without the owner's permission)?	O	O	O	O

29. How old were you when you first:

a. Smoked marijuana?
- ○ Never have
- ○ 10 or younger
- ○ 11
- ○ 12
- ○ 13
- ○ 14
- ○ 15
- ○ 16
- ○ 17 or older

b. Smoked a cigarette, even just a puff?
- ○ Never have
- ○ 10 or younger
- ○ 11
- ○ 12
- ○ 13
- ○ 14
- ○ 15
- ○ 16
- ○ 17 or older

c. Had more than a sip or two of beer, wine or hard liquor (for example, vodka, whiskey, or gin)?
- ○ Never have
- ○ 10 or younger
- ○ 11
- ○ 12
- ○ 13
- ○ 14
- ○ 15
- ○ 16
- ○ 17 or older

d. Began drinking alcoholic beverages regularly, that is, at least once or twice a month?
- ○ Never have
- ○ 10 or younger
- ○ 11
- ○ 12
- ○ 13
- ○ 14
- ○ 15
- ○ 16
- ○ 17 or older

30. How frequently have you smoked cigarettes during the past 30 days?
- ○ Not at all
- ○ Less than one cigarette per day
- ○ One to five cigarettes per day
- ○ About one-half pack per day
- ○ About one pack per day
- ○ About one and one-half packs per day
- ○ Two packs or more per day

31. On how many occasions (if any) have you had beer, wine, or hard liquor during the past 30 days?
- ○ 0 occasions
- ○ 1-2 occasions
- ○ 3-5 occasions
- ○ 6-9 occasions
- ○ 10-19 occasions
- ○ 20-39 occasions
- ○ 40 or more occasions

32. On how many occasions (if any) have you used marijuana during the past 30 days?
- ○ 0 occasions
- ○ 1-2 occasions
- ○ 3-5 occasions
- ○ 6-9 occasions
- ○ 10-19 occasions
- ○ 20-39 occasions
- ○ 40 or more occasions

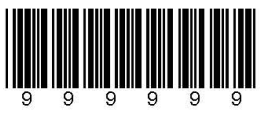
33. How much do you think people risk harming themselves (physically or in other ways) if they:

a. Take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?
- ○ No risk
- ○ Slight risk
- ○ Moderate risk
- ○ Great risk

b. Smoke one or more packs of cigarettes per day?
- ○ No risk
- ○ Slight risk
- ○ Moderate risk
- ○ Great risk

c. Try marijuana once or twice?
- ○ No risk
- ○ Slight risk
- ○ Moderate risk
- ○ Great risk

d. Smoke marijuana regularly?
- ○ No risk
- ○ Slight risk
- ○ Moderate risk
- ○ Great risk



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34.	How much do each of the following statements describe your neighborhood?	NO!	no	yes	YES!
	a. If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?	O	O	O	O
	b. Crime and/or drug selling	O	O	O	O
	c. Fights	O	O	O	O
	d. Lots of empty or abandoned buildings	O	O	O	O
	e. Lots of graffiti	O	O	O	O
	f. I feel safe in my neighborhood.	O	O	O	O
	g. If a kid drank some beer, wine, or hard liquor (for example, vodka, whiskey, or gin) in your neighborhood, would he or she be caught by the police?	O	O	O	O

35.	Think of your <u>four best friends</u> (the friends you feel closest to). In the past year (12 months), how many of your best friends have:	None	1	2	3	4
	a. Smoked cigarettes?	O	O	O	O	O
	b. Used marijuana?	O	O	O	O	O
	c. Used LSD, cocaine, amphetamines, or other illegal drugs?	O	O	O	O	O
	d. Been suspended from school?	O	O	O	O	O
	e. Carried a handgun?	O	O	O	O	O
	f. Sold illegal drugs?	O	O	O	O	O
	g. Been arrested?	O	O	O	O	O
	h. Dropped out of school?	O	O	O	O	O
	i. Been a member of a gang?	O	O	O	O	O
	j. Stolen or tried to steal a motor vehicle such as a car or motorcycle?	O	O	O	O	O
	k. Tried beer, wine, or hard liquor (for example, vodka, whiskey, or gin) when their parents didn't know about it?	O	O	O	O	O

36.	How wrong would most adults (over 21) in your neighborhood think it was for kids your age:	Not at all wrong	A little bit wrong	Wrong	Very wrong
	a. To use marijuana?	O	O	O	O
	b. To drink alcohol?	O	O	O	O
	c. To smoke cigarettes?	O	O	O	O

		Very hard	Sort of hard	Sort of easy	Very easy
37.	If you wanted to get some marijuana, how easy would it be for you to get some?	O	O	O	O
38.	If you wanted to get a handgun, how easy would it be for you to get one?	O	O	O	O
39.	If you wanted to get some beer, wine, or hard liquor (for example, vodka, whiskey,or gin), how easy would it be for you to get some?	O	O	O	O
40.	If you wanted to get some cigarettes, how easy would it be for you to get some?	O	O	O	O
41.	If you wanted to get a drug like cocaine, LSD, or amphetamines, how easy would it be for you to get some?	O	O	O	O

		Very false	Somewhat false	Somewhat true	Very true
42.	I like to see how much I can get away with.	O	O	O	O
43.	I ignore rules that get in my way.	O	O	O	O
44.	I do the opposite of what people tell me, just to get them mad.	O	O	O	O

45. How many times have you done the following things?

a. Done what feels good no matter what.
- Never
- I've done it, but not in the past year
- Less than once a month
- About once a month
- 2 or 3 times a month
- Once a week or more

b. Done something dangerous because someone dared you to do it.
- Never
- I've done it, but not in the past year
- Less than once a month
- About once a month
- 2 or 3 times a month
- Once a week or more

c. Done crazy things even if they are a little dangerous.
- Never
- I've done it, but not in the past year
- Less than once a month
- About once a month
- 2 or 3 times a month
- Once a week or more

46. Have you ever belonged to a gang?
- Yes
- No

47. If you have ever belonged to a gang, did that gang have a name?
- Yes
- No
- I have never belonged to a gang.

48. How old were you when you first belonged to a gang?
- Never have
- 10 or younger
- 11
- 12
- 13
- 14
- 15
- 16
- 17 or older

49. This year at school, how often have other students:

a. Told lies or spread false rumors about you?
- Not at all
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

b. Taken money or other things from you or damaged your things?
- Not at all
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

c. Threatened or forced you to do things you did not want to do?
- Not at all
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

d. Used the Internet or a cell phone to threaten or embarrass you by posting or sending mean or hurtful messages or photos of you?
- Not at all
- Only once or twice
- 2 or 3 times a month
- About once a week
- Several times a week

50. In the past 12 months, did anyone on the Internet ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual when you did not want to?
- Yes
- No

51. **This year at school, how often have you been:**

a. **Called mean names, made fun of, or teased in a hurtful way?**
- O Not at all
- O Only once or twice
- O 2 or 3 times a month
- O About once a week
- O Several times a week

b. **Left out of things on purpose by other students, excluded from their group of friends, or completely ignored?**
- O Not at all
- O Only once or twice
- O 2 or 3 times a month
- O About once a week
- O Several times a week

c. **Hit, kicked, pushed, shoved around, or locked indoors?**
- O Not at all
- O Only once or twice
- O 2 or 3 times a month
- O About once a week
- O Several times a week

52. **I think it is okay to take something without asking if you can get away with it.**
- O NO!
- O no
- O yes
- O YES!

53. **It is all right to beat up people if they start the fight.**
- O NO!
- O no
- O yes
- O YES!

54. **I think sometimes it's okay to cheat at school.**
- O NO!
- O no
- O yes
- O YES!

55. **It is important to be honest with your parents, even if they become upset or you get punished.**
- O NO!
- O no
- O yes
- O YES!

56. **Have you <u>ever</u> smoked cigarettes?**
- O Never
- O Once or twice
- O Once in a while but not regularly
- O Regularly in the past
- O Regularly now

57. **Have you <u>ever</u> used smokeless tobacco (chew, snuff, plug, dipping tobacco, chewing tobacco)?**
- O Never
- O Once or twice
- O Once in a while but not regularly
- O Regularly in the past
- O Regularly now

58. **How frequently have you used smokeless tobacco during the <u>past 30 days</u>?**
- O Never
- O Once or twice
- O Once or twice per week
- O About once a day
- O More than once a day

59. **Think back over the last two weeks. How many times have you had five or more alcoholic drinks in a row?**
- O None
- O Once
- O Twice
- O 3-5 times
- O 6-9 times
- O 10 or more times

60. **How many times in the past year (12 months) have you been drunk or high at school?**
- O Never
- O 1 or 2 times
- O 3 to 5 times
- O 6 to 9 times
- O 10 to 19 times
- O 20 to 29 times
- O 30 to 39 times
- O 40+ times

61. On how many occasions (if any) have you:	0	1 or 2	3 to 5	6 to 9	10 to 19	20 to 39	40 or more
a. Sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high during the past 30 days?	O	O	O	O	O	O	O
b. Used cocaine during the past 30 days?	O	O	O	O	O	O	O
c. Used crack during the past 30 days?	O	O	O	O	O	O	O
d. Used heroin during the past 30 days?	O	O	O	O	O	O	O
e. Used derbisol during the past 30 days?	O	O	O	O	O	O	O
f. Used Ecstasy during the past 30 days?	O	O	O	O	O	O	O
g. Used hallucinogens (acid, LSD, shrooms) during the past 30 days?	O	O	O	O	O	O	O
h. Taken steroids without a doctor's orders during the past 30 days?	O	O	O	O	O	O	O
i. Used methamphetamine (meth, crystal meth, crank) during the past 30 days?	O	O	O	O	O	O	O
j. Used prescription pain relievers, such as Vicodin, OxyContin or Tylox, without a doctor's orders, during the past 30 days?	O	O	O	O	O	O	O
k. Used prescription tranquilizers, such as Xanax, Valium or Ambien, without a doctor's orders, during the past 30 days?	O	O	O	O	O	O	O
l. Used prescription stimulants, such as Ritalin or Adderall, without a doctor's orders, during the past 30 days?	O	O	O	O	O	O	O

62. On how many occasions (if any) have you:	0	1 or 2	3 to 5	6 to 9	10 to 19	20 to 39	40 or more
a. Sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high in your lifetime?	O	O	O	O	O	O	O
b. Had beer, wine, or hard liquor in your lifetime?	O	O	O	O	O	O	O
c. Used marijuana in your lifetime?	O	O	O	O	O	O	O
d. Used cocaine in your lifetime?	O	O	O	O	O	O	O
e. Used crack in your lifetime?	O	O	O	O	O	O	O
f. Used heroin in your lifetime?	O	O	O	O	O	O	O
g. Used derbisol in your lifetime?	O	O	O	O	O	O	O
h. Used Ecstasy in your lifetime?	O	O	O	O	O	O	O
i. Used hallucinogens (acid, LSD, shrooms) in your lifetime?	O	O	O	O	O	O	O
j. Taken steroids without a doctor's orders in your lifetime?	O	O	O	O	O	O	O
k. Used methamphetamine (meth, crystal meth, crank) in your lifetime?	O	O	O	O	O	O	O
l. Used prescription pain relievers, such as Vicodin, OxyContin or Tylox, without a doctor's orders, in your lifetime?	O	O	O	O	O	O	O
m. Used prescription tranquilizers, such as Xanax, Valium or Ambien, without a doctor's orders, in your lifetime?	O	O	O	O	O	O	O
n. Used prescription stimulants, such as Ritalin or Adderall, without a doctor's orders, in your lifetime?	O	O	O	O	O	O	O

63. **How willing are you to try or use the drugs listed below. These are not questions about current or past use of these drugs.**

a. **ALCOHOL (beer, wine, coolers, hard liquor)**
- O I would never use it
- O I probably wouldn't use it
- O I'm not sure whether or not I would use it
- O I would like to try it or use it
- O I would use it any chance I got

b. **MARIJUANA (pot, hash, hemp, weed)**
- O I would never use it
- O I probably wouldn't use it
- O I'm not sure whether or not I would use it
- O I would like to try it or use it
- O I would use it any chance I got

c. **COCAINE (coke, snow, blow, dust)**
- O I would never use it
- O I probably wouldn't use it
- O I'm not sure whether or not I would use it
- O I would like to try it or use it
- O I would use it any chance I got

d. **HALLUCINOGENS (acid, trip, LSD, shrooms)**
- O I would never use it
- O I probably wouldn't use it
- O I'm not sure whether or not I would use it
- O I would like to try it or use it
- O I would use it any chance I got

e. **INHALANTS (whippets, butane, paint thinner)**
- O I would never use it
- O I probably wouldn't use it
- O I'm not sure whether or not I would use it
- O I would like to try it or use it
- O I would use it any chance I got

64. **How many times in the past year (12 months) have you been arrested?**
- O Never
- O 1 or 2 times
- O 3 to 5 times
- O 6 to 9 times
- O 10 to 19 times
- O 20 to 29 times
- O 30 to 39 times
- O 40+ times

65. **How old were you when you first got arrested?**
- O Never have
- O 10 or younger
- O 11
- O 12
- O 13
- O 14
- O 15
- O 16
- O 17 or older

66. **How many times in the past year (12 months) have you:**

a. **Been offered, given, or sold an illegal drug on school property?**
- O Never
- O Once
- O 2 or 3 times
- O 4 or 5 times
- O 6 to 9 times
- O 10 times or more

b. **Sold illegal drugs?**
- O Never
- O 1 or 2 times
- O 3 to 5 times
- O 6 to 9 times
- O 10 to 19 times
- O 20 to 29 times
- O 30 to 39 times
- O 40+ times

c. **Stolen or tried to steal a motor vehicle such as a car or motorcycle?**
- O Never
- O 1 or 2 times
- O 3 to 5 times
- O 6 to 9 times
- O 10 to 19 times
- O 20 to 29 times
- O 30 to 39 times
- O 40+ times

67. **Have you changed homes in the past year?**
- O Yes
- O No

68. **How many times have you changed homes since kindergarten?**
- O Never
- O 1 or 2 times
- O 3 or 4 times
- O 5 or 6 times
- O 7 or more times

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69. **Have you changed schools (including changing from elementary to middle and middle to high school) in the past year?**
- Yes
- No

70. **How many times have you changed schools (including changing from elementary to middle and middle to high school) since kindergarten?**
- Never
- 1 or 2 times
- 3 or 4 times
- 5 or 6 times
- 7 or more times

71. **How often do you attend religious services or activities?**
- Never
- Rarely
- 1-2 times a month
- About once a week or more

72. **How often have you:**

a. **Driven a car while or shortly after drinking?**
- I don't drive
- Never
- Before, but not in the past year
- About once or twice a year
- About once or twice a month
- About once or twice a week
- Almost every day

b. **Driven a car while or shortly after smoking pot?**
- I don't drive
- Never
- Before, but not in the past year
- About once or twice a year
- About once or twice a month
- About once or twice a week
- Almost every day

73. **How many times in the <u>past 30 days</u> have you brought a weapon (such as a gun, knife, or club) to school?**
- Never
- 1 or 2 times
- 3 to 5 times
- 6 to 9 times
- 10 to 19 times
- 20 to 29 times
- 30 to 39 times
- 40+ times

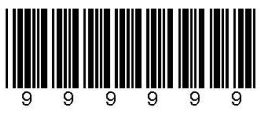
74. **How old were you when you first carried a handgun?**
- Never have
- 10 or younger
- 11
- 12
- 13
- 14
- 15
- 16
- 17 or older

75. **How many times in the past year (12 months) have you attacked someone with the idea of seriously hurting them?**
- Never
- 1 or 2 times
- 3 to 5 times
- 6 to 9 times
- 10 to 19 times
- 20 to 29 times
- 30 to 39 times
- 40+ times

76. **How old were you when you first attacked someone with the idea of seriously hurting them?**
- Never have
- 10 or younger
- 11
- 12
- 13
- 14
- 15
- 16
- 17 or older

77. **How many times in the past year (12 months) have you been suspended from school?**
- Never
- 1 or 2 times
- 3 to 5 times
- 6 to 9 times
- 10 to 19 times
- 20 to 29 times
- 30 to 39 times
- 40+ times

78. **How old were you when you first got suspended from school?**
- Never have
- 10 or younger
- 11
- 12
- 13
- 14
- 15
- 16
- 17 or older



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79. In the past 12 months, how often have you:	Never	Once	2 or 3	4 or 5	6 to 9	10 times or more
a. Been threatened to be hit or beaten up on school property?	O	O	O	O	O	O
b. Been attacked and hit by someone or beaten up on school property?	O	O	O	O	O	O
c. Been threatened by someone with a weapon on school property?	O	O	O	O	O	O
d. Been attacked by someone with a weapon on school property?	O	O	O	O	O	O

	NO!	no	yes	YES!
80. In the past year have you felt depressed or sad MOST days, even if you feel OK sometimes?	O	O	O	O
81. Sometimes I think that life is not worth it.	O	O	O	O
82. At times I think I am no good at all.	O	O	O	O
83. All in all, I am inclined to think that I am a failure.	O	O	O	O

84. In the past year, have you...	Yes	No
a. Bet money or anything of value on sporting events (includes participating in sports pools)?	O	O
b. Gambled for money or anything of value?	O	O
c. Bought lottery tickets?	O	O
d. Bet money using the Internet?	O	O
e. Bet money or anything of value on table games like poker or other card games, dice, backgammon, or dominoes?	O	O
85. In the last 30 days have you gambled for money or anything of value?	O	O

	NO!	no	yes	YES!
86. I like my neighborhood.	O	O	O	O
87. If I had to move, I would miss the neighborhood I now live in.	O	O	O	O
88. I'd like to get out of my neighborhood.	O	O	O	O
89. My neighbors notice when I am doing a good job and let me know.	O	O	O	O
90. There are people in my neighborhood who are proud of me when I do something well.	O	O	O	O
91. There are people in my neighborhood who encourage me to do my best.	O	O	O	O

92. My parents notice when I am doing a good job and let me know about it. O Never or almost never O Sometimes O Often O All the time

93. How often do your parents tell you they're proud of you for something you've done? O Never or almost never O Sometimes O Often O All the time

94. Has anyone in your family ever had a severe alcohol or drug problem? O Yes O No

95. About how many adults (over 21) have you known personally who in the past year have:	None	1	2	3 or 4	5 or more
a. Used marijuana, crack, cocaine, or other drugs?	O	O	O	O	O
b. Sold or dealt drugs?	O	O	O	O	O
c. Gotten drunk or high?	O	O	O	O	O
d. Done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?	O	O	O	O	O

96. Have any of your brothers or sisters ever:	Yes	No	I don't have any brothers or sisters
a. Drunk beer, wine or hard liquor (for example, vodka, whiskey or gin)?	O	O	O
b. Smoked marijuana?	O	O	O
c. Smoked cigarettes?	O	O	O
d. Taken a handgun to school?	O	O	O
e. Been suspended or expelled from school?	O	O	O

	NO!	no	yes	YES!
97. If you drank some beer or wine or liquor (for example, vodka, whiskey, or gin) without your parents' permission, would you be caught by your parents?	O	O	O	O
98. The rules in my family are clear.	O	O	O	O
99. When I am not at home, one of my parents knows where I am and who I am with.	O	O	O	O
100. My family has clear rules about alcohol and drug use.	O	O	O	O
101. My parents ask if I've gotten my homework done.	O	O	O	O
102. Would your parents know if you did not come home on time?	O	O	O	O
103. People in my family often insult or yell at each other.	O	O	O	O
104. We argue about the same things in my family over and over.	O	O	O	O
105. People in my family have serious arguments.	O	O	O	O
106. Do you enjoy spending time with your:				
a. Mother?	O	O	O	O
b. Father?	O	O	O	O
107. Do you feel very close to your:				
a. Mother?	O	O	O	O
b. Father?	O	O	O	O
108. Do you share your thoughts and feelings with your:				
a. Mother?	O	O	O	O
b. Father?	O	O	O	O
109. My parents ask me what I think before most family decisions affecting me are made.	O	O	O	O
110. If I had a personal problem, I could ask my mom or dad for help.	O	O	O	O
111. If you skipped school, would you be caught by your parents?	O	O	O	O
112. If you carried a handgun without your parents' permission, would you be caught by your parents?	O	O	O	O
113. My parents give me lots of chances to do fun things with them.	O	O	O	O

Appendix C
Risk and Protective Factor Scale Construction Summary

Community Domain Scales

Risk Factors

Community Domain	**Low Neighborhood Attachment**	
	Q109	I'd like to get out of my neighborhood.
	Q102	I like my neighborhood.
	Q100	If I had to move, I would miss the neighborhood I now live in.
	Community Disorganization	
	Q103a	How much do each of the following statements describe your neighborhood: crime and/or drug selling.
	Q103b	How much do each of the following statements describe your neighborhood: fights.
	Q103c	How much do each of the following statements describe your neighborhood: lots of empty or abandoned buildings.
	Q103d	How much do each of the following statements describe your neighborhood: lots of graffiti.
	Q107	I feel safe in my neighborhood.
	Transitions and Mobility	
	Q110	Have you changed homes in the past year?
	Q104	How many times have you changed homes since kindergarten?
	Q106	Have you changed schools (including changing from elementary to middle and middle to high school) in the past year?
	Q108	How many times have you changed schools since kindergarten?

Risk Factors, Continued

Community Domain	**Laws and Norms Favorable to Drug Use**	
	Q33a	How wrong would most adults (over 21) in your neighborhood think it was for kids your age: to use marijuana?
	Q33b	How wrong would most adults (over 21) in your neighborhood think it was for kids your age: to drink alcohol?
	Q33c	How wrong would most adults (over 21) in your neighborhood think it was for kids your age: to smoke cigarettes?
	Q29	If a kid drank some beer, wine or hard liquor (for example, vodka, whiskey, or gin) in your neighborhood, would he or she be caught by the police?
	Q27	If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?
	Perceived Availability of Drugs	
	Q25	If you wanted to get some beer, wine or hard liquor (for example, vodka, whiskey, or gin), how easy would it be for you to get some?
	Q26	If you wanted to get some cigarettes, how easy would it be for you to get some?
	Q32	If you wanted to get some marijuana, how easy would it be for you to get some?
	Q28	If you wanted to get a drug like cocaine, LSD, or amphetamines, how easy would it be for you to get some?
	Perceived Availability of Handguns	
	Q30	If you wanted to get a handgun, how easy would it be for you to get one?

PROTECTIVE FACTORS

COMMUNITY DOMAIN	**Community Rewards for Prosocial Involvement**	
	Q101	My neighbors notice when I am doing a good job and let me know.
	Q111	There are people in my neighborhood who encourage me to do my best.
	Q105	There are people in my neighborhood who are proud of me when I do something well.
	Community Opportunities for Prosocial Involvement	
	Q2912	Which of the following activities for people your age are available in your community: sports teams?
	Q2913	Which of the following activities for people your age are available in your community: scouting?
	Q2914	Which of the following activities for people your age are available in your community: boys and girls clubs?
	Q2915	Which of the following activities for people your age are available in your community: 4-H clubs?
	Q2916	Which of the following activities for people your age are available in your community: service clubs?
	Q555	There are lots of adults in my neighborhood I could talk to about something important.

Family Domain Scales

Risk Factors

Family Domain	**Poor Family Management**	
	Q78	My parents ask if I've gotten my homework done.
	Q80	Would your parents know if you did not come home on time?
	Q79	When I am not at home, one of my parents knows where I am and whom I am with.
	Q76	The rules in my family are clear.
	Q83	My family has clear rules about alcohol and drug use.
	Q82	If you drank some beer or wine or liquor (for example, vodka, whiskey, or gin) without your parents' permission, would you be caught by your parents?
	Q85	If you skipped school, would you be caught by your parents?
	Q84	If you carried a handgun without your parents' permission, would you be caught by your parents?
	Family Conflict	
	Q2909	People in my family often insult or yell at each other.
	Q2911	People in my family have serious arguments.
	Q2910	We argue about the same things in my family over and over.
	Parental Attitudes Favorable toward Antisocial Behavior	
	Q74d	How wrong do your parents feel it would be for you to: steal anything worth more than $5?
	Q74e	How wrong do your parents feel it would be for you to: draw graffiti, or write things or draw pictures on buildings or other property (without the owner's permission)?
	Q74f	How wrong do your parents feel it would be for you to: pick a fight with someone?

RISK FACTORS, CONTINUED

FAMILY DOMAIN	**Parental Attitudes Favorable toward ATOD Use**	
	Q74a	How wrong do your parents feel it would be for you to: drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?
	Q74b	How wrong do your parents feel it would be for you to: smoke cigarettes?
	Q74c	How wrong do your parents feel it would be for you to: smoke marijuana?
	Family History of Antisocial Behavior	
	Q77	Has anyone in your family ever had a severe alcohol or drug problem?
	Q75a	Have any of your brothers or sisters ever: drunk beer, wine or hard liquor (for example, vodka, whiskey or gin)?
	Q75b	Have any of your brothers or sisters ever: smoked marijuana?
	Q75c	Have any of your brothers or sisters ever: smoked cigarettes?
	Q75d	Have any of your brothers or sisters ever: taken a handgun to school?
	Q75e	Have any of your brothers or sisters ever: been suspended or expelled from school?
	Q34a	About how many adults (over 21) have you known personally who in the past year have: used marijuana, crack, cocaine, or other drugs?
	Q34b	About how many adults (over 21) have you known personally who in the past year have: sold or dealt drugs?
	Q34c	About how many adults (over 21) have you known personally who in the past year have: done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc?
	Q34d	About how many adults (over 21) have you known personally who in the past year have: gotten drunk or high?

PROTECTIVE FACTORS

FAMILY DOMAIN	**Family Attachment**	
	Q87	Do you feel very close to your mother?
	Q88	Do you share your thoughts and feelings with your mother?
	Q97	Do you feel very close to your father?
	Q92	Do you share your thoughts and feelings with your father?
	Family Opportunities for Prosocial Involvement	
	Q99	My parents give me lots of chances to do fun things with them.
	Q89	My parents ask me what I think before most family decisions affecting me are made.
	Q96	If I had a personal problem, I could ask my mom or dad for help.
	Family Rewards for Prosocial Involvement	
	Q86	My parents notice when I am doing a good job and let me know about it.
	Q91	How often do your parents tell you they're proud of you for something you've done?
	Q93	Do you enjoy spending time with your mother?
	Q94	Do you enjoy spending time with your father?

School Domain Scales

Risk Factors

School Domain	**Poor Academic Performance**	
	Q13	Putting them all together, what were your grades like last year?
	Q23	Are your school grades better than the grades of most students in your class?
	Lack of Commitment to School	
	Q3681	How often do you feel that the schoolwork you are assigned is meaningful and important?
	Q3682	How interesting are most of your courses to you?
	Q3683	How important do you think the things you are learning in school are going to be for your later life?
	Q3684	Now, thinking back over the past year in school, how often did you: Enjoy being in school?
	Q3685	Now, thinking back over the past year in school, how often did you: Hate being in school?
	Q3686	Now, thinking back over the past year in school, how often did you: Try to do your best work in school?
	Q738	During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or "cut"?

PROTECTIVE FACTORS

SCHOOL DOMAIN	**School Opportunities for Prosocial Involvement**	
	Q14	In my school, students have lots of chances to help decide things like class activities and rules.
	Q17	There are lots of chances for students in my school to talk with a teacher one-on-one.
	Q2891	Teachers ask me to work on special classroom projects.
	Q2057	There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
	Q3668	I have lots of chances to be part of class discussions or activities.
	School Rewards for Prosocial Involvement	
	Q15	My teacher(s) notices when I am doing a good job and lets me know about it.
	Q21	The school lets my parents know when I have done something well.
	Q18	I feel safe at my school.
	Q731	My teachers praise me when I work hard in school.

Peer and Individual Domain Scales

Risk Factors

Peer and Individual Domain	**Low Perceived Risks of Drug Use**	
	Q3687	How much do you think people risk harming themselves (physically or in other ways) if they: smoke one or more packs of cigarettes per day?
	Q3679	How much do you think people risk harming themselves (physically or in other ways) if they: try marijuana once or twice?
	Q3688	How much do you think people risk harming themselves (physically or in other ways) if they: smoke marijuana regularly?
	Q3680	How much do you think people risk harming themselves (physically or in other ways) if they: take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?
	Early Initiation of Drug Use	
	Q60a	How old were you when you first: smoked marijuana?
	Q60b	How old were you when you first: smoked a cigarette, even just a puff?
	Q60c	How old were you when you first: had more than a sip or two of beer, wine or hard liquor (for example, vodka, whiskey, or gin)?
	Q60d	How old were you when you first: began drinking alcoholic beverages regularly, that is, at least once or twice a month?
	Sensation Seeking	
	Q57a	How many times have you done the following things? Done what feels good no matter what.
	Q57b	How many times have you done the following things? Done something dangerous because someone dared you to do it.
	Q57c	How many times have you done the following things? Done crazy things even if they are a little dangerous.

RISK FACTORS, CONTINUED

PEER AND INDIVIDUAL DOMAIN	**Rebelliousness**	
	Q55	I do the opposite of what people tell me, just to get them mad.
	Q62	I ignore rules that get in my way.
	Q73	I like to see how much I can get away with.
	Friends' Delinquent Behavior	
	Q65a	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have been suspended from school?
	Q65b	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have carried a handgun?
	Q65c	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have sold illegal drugs?
	Q65d	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have stolen or tried to steal a motor vehicle such as a car or motorcycle?
	Q65e	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have been arrested?
	Q65f	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have dropped out of school?

RISK FACTORS, CONTINUED

PEER AND INDIVIDUAL DOMAIN	**Friends' Use of Drugs**	
	Q58a	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have smoked cigarettes?
	Q58b	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have tried beer, wine or hard liquor (for example, vodka, whiskey or gin) when their parents didn't know about it?
	Q58c	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have used marijuana?
	Q58d	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have used LSD, cocaine, amphetamines, or other illegal drugs?
	Peer Rewards for Antisocial Behavior	
	Q59a	What are the chances you would be seen as cool if you smoked cigarettes?
	Q59b	What are the chances you would be seen as cool if you began drinking alcoholic beverages regularly, that is, at least once or twice a month?
	Q59c	What are the chances you would be seen as cool if you smoked marijuana?
	Q59d	What are the chances you would be seen as cool if you carried a handgun?

PEER AND INDIVIDUAL DOMAIN	**Favorable Attitudes toward Antisocial Behavior**	
	Q61a	How wrong do you think it is for someone your age to take a handgun to school?
	Q61b	How wrong do you think it is for someone your age to steal anything worth more than $5?
	Q61c	How wrong do you think it is for someone your age to pick a fight with someone?
	Q61d	How wrong do you think it is for someone your age to attack someone with the idea of seriously hurting him or her?
	Q61e	How wrong do you think it is for someone your age to stay away from school all day when their parents think they are at school?
	Favorable Attitudes toward ATOD Use	
	Q67a	How wrong do you think it is for someone your age to drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?
	Q67b	How wrong do you think it is for someone your age to smoke cigarettes?
	Q67c	How wrong do you think it is for someone your age to smoke marijuana?
	Q67d	How wrong do you think it is for someone your age to use LSD, cocaine, amphetamines or another illegal drug?

PROTECTIVE FACTORS

PEER AND INDIVIDUAL DOMAIN	**Religiosity**	
	Q54	How often do you attend religious services or activities?
	Belief in the Moral Order	
	Q56	I think it is okay to take something without asking, if you can get away with it.
	Q72	I think sometimes it's okay to cheat at school.
	Q63	It is all right to beat up people if they start the fight.
	Q64	It is important to be honest with your parents, even if they become upset or you get punished.

Appendix D
Other Resources

Web Sites

Office of National Drug Control Policy www.whitehousedrugpolicy.gov

National Clearinghouse for Alcohol and Drug Information www.ncadi.samhsa.gov

Substance Abuse and Mental Health Services Administration (SAMHSA) www.samhsa.gov

Monitoring the Future www.monitoringthefuture.org

National Institute on Drug Abuse (NIDA) www.nida.nih.gov and www.drugabuse.gov

National Institute on Alcohol Abuse and Alcoholism (NIAAA) www.niaaa.nih.gov

Social Development Research Group www.uwsrd.org/sdrg

Prevention Program Guides

Center for Substance Abuse Prevention, Western Center for the Application of Prevention Technologies. (2004). *Building a successful prevention program: list of all practices.* [Data file]. Available at the University of Nevada Reno's Web site, www.casat.unr.edu/bestpractices/alpha-list.php.

Center for the Study and Prevention of Violence, Institute of Behavioral Science. (2004). *Blueprints for Violence Prevention.* [Data file]. Available from the University of Colorado Boulder's Web site, www.colorado.edu/cspv/blueprints.

Hawkins, J. D., & Catalano, R. F. (2004). *Communities That Care Prevention Strategies Guide.* [Data file]. Available from the SAMHSA Web site, www.preventionplatform.samhsa.gov.

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