

2003 Pennsylvania Youth Survey Report

**Sponsored by
Pennsylvania Commission on Crime and Delinquency**

Prepared by Channing Bete Company, Inc.

2003 Pennsylvania Youth Survey Report

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Background

Since 1989, the Commonwealth of Pennsylvania has conducted a survey of secondary school students on their behavior, attitudes and knowledge concerning alcohol, tobacco, other drugs, and violence. The *Pennsylvania Youth Survey (PAYS)* of 6th, 8th, 10th and 12th grade public school students is conducted every two years. The findings from the 2003 *PAYS* build upon the data gathered during the first survey which was administered in 2001, as well as the *Generation at Risk* survey, a biennial study of drug use prevalence rates that was conducted from 1989 through 1997. The effort was sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD), in cooperation with the Pennsylvania Department of Education. PCCD contracted with Channing Bete Company, Inc., to conduct the survey, which was administered in October and November of 2003.

The data gathered in the 2003 *PAYS* serve two primary needs. First, the results provide school administrators, state agency directors, legislators and others with critical information concerning the changes in patterns of the use and abuse of these harmful substances and behaviors. Although data on the prevalence of drug use constitute the core of this report, it is important to recognize that the majority of school-age youth do not use these substances. 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 to direct prevention resources to areas where they are likely to have the greatest impact.

Of course, the survey would not have been possible without the support and cooperation of school superintendents, parents and students throughout the Commonwealth. The PCCD and the Department of Education would like to take this opportunity to thank these individuals for supporting this valuable and worthwhile endeavor.

Section 1

Summary of Results

Strengths to Build on

- The remarkable reduction in cigarette use that was reported in the 2001 *PAYS* continues. In 2003, 25.8% of Pennsylvania 12th graders reported past-30-day cigarette use, a rate that is 6.1 percentage points lower than in 2001 and 14.6 percentage points lower than in 1997.
- Lifetime use of cigarettes among 10th and 12th graders dropped 3.4 and 4.6 percentage points, respectively, between 2001 and 2003.
- Between 2001 and 2003, the prevalence of lifetime marijuana use among 10th and 12th graders declined from 30.9% and 47.1%, respectively, to 27.5% and 42.8%, respectively. Similarly, use of marijuana within the past 30 days among 10th and 12th graders declined from 17.0% and 25.6%, respectively, to 14.5% and 21.4%, respectively.
- Compared to White students, African American students reported notably lower rates of alcohol, cigarette and smokeless tobacco use.
- There has been an impressive reduction in the prevalence of drinking and driving among Pennsylvania students, with rates dropping from 14.5% in 1989 to 6.7% in 2001. In 2003, this positive trend continued, with a slight reduction to 6.2%.
- Reversing a 10-year trend, the prevalence of driving under the influence of marijuana among Pennsylvania 12th graders declined from 24.1% in 2001 to 20.3% in 2003.
- Less than 10% of the respondents in any grade level reported a willingness to try or use cocaine or inhalants.
- Among 12th graders, reports of willingness to try or use marijuana declined from 40.5% in 2001 to 34.6% in 2003.
- Prevalence rates for weapons-related antisocial behaviors—*Carrying a Handgun, Taking a Handgun to School, and Bringing a Weapon (Such as a Gun, Knife or Club) to School*—are very low across all surveyed grades.

- Less than 3.0% of students in any of the surveyed grades reported having “been attacked by someone with a weapon on school property.”
- Across the nine protective factor scales, scores for *Belief in the Moral Order* are among the highest across grade levels.
- Across the 22 risk factor scales, scores for two scales that measure attitudes supporting drug use—*Favorable Attitudes toward ATOD Use* and *Low Perceived Risks of Drug Use*—are among the lowest for all grade levels.
- Between 2001 and 2003, Pennsylvania students reported notable improvements on three risk and protective factor scales: (1) scores on the *Belief in the Moral Order* scale increased seven and eight points among 10th and 12th graders, respectively, (2) scores on the *Favorable Attitudes toward Antisocial Behavior* scale decreased between four and eight points within each grade level, and (3) scores on the *Sensation Seeking* scale decreased six points among 10th and 12th graders.

Opportunities for Improvement

- Alcohol was the most frequently used substance among Pennsylvania’s 6th, 8th, 10th and 12th grade students. The lifetime prevalence of alcohol use ranges from slightly more than one quarter of 6th graders (28.7%) to more than three quarters of 12th graders (83.6%). Use of alcohol within the past 30 days is uncommon among 6th graders (4.1%), but increases to 49.2% among 12th grade respondents.
- Pennsylvania students experiment with alcohol at a higher rate than do students across the country as a whole. Compared to their national counterparts from the *Monitoring the Future* study, Pennsylvania 8th, 10th and 12th graders reported rates of lifetime alcohol use that are 11.1, 10.4 and 7.0 percentage points higher, respectively.
- Among 10th and 12th graders, binge drinking (defined as the consumption of five or more drinks in a row in the last two weeks) is more prevalent than past-30-day tobacco, marijuana or other illicit drug (other than marijuana) use.
- 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 (64.4% and 73.3%, respectively) reported a willingness to try or use alcohol.
- Despite reductions in prevalence between 2001 and 2003, one out of four 12th graders (25.8%) reported cigarette use within the past 30 days, and one out of five 12th graders (21.4%) reported marijuana use within the past 30 days.
- Excluding students who indicated that “I don’t drive,” 12.7% of 12th graders reported that they drove under the influence of marijuana “about once or twice a month,” “about once or twice a week” or “almost every day.”
- Among 12th graders, nearly one out of five (17.8%) reported *Being Drunk or High at School* and about one out of ten (9.6%) reported *Selling Drugs*.
- Across the nine other antisocial behaviors, Pennsylvania students reported the highest rates for *Attacking Someone with Intent to Harm*, with slightly more than one out of ten 8th, 10th and 12th graders (12.7%, 13.2% and 12.2%) having reported attacking “someone with the idea of seriously hurting them.”
- Among 8th and 10th graders, 30.5% and 27.2%, respectively, reported having “been threatened to be hit or beaten up on school property.”

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- Among the nine protective factor scales, scores for both *Community Rewards for Prosocial Involvement* and *School Rewards for Prosocial Involvement* are among the lowest across all four surveyed grades.
 - Among the 22 risk factor scales, scores for *Community Disorganization* are among the highest reported by 6th, 8th and 10th graders.
 - Between 2001 and 2003, Pennsylvania students reported notably higher levels of risk on the *Personal Transitions and Mobility* scale (between an eight and 10 point increase within each grade level) and the *Community Disorganization* scale (a seven point increase among 8th and 12th graders and a nine point increase among 10th graders).

Section 2

Methodology

In 1999, 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, identified the need for a new statewide survey. In addition to measuring the prevalence of alcohol, tobacco and other drug (ATOD) use, the survey was tasked with assessing the risk and protective factors that help shape youth behavior. The data could then be used to guide prevention efforts, to help address existing problems, and to promote healthy and positive youth development.

With these goals in mind, the 2001 *Pennsylvania Youth Survey (PAYS)* was administered to 88,920 public school students in grades 6 through 12. From this data pool, community-level reports were issued to 150 schools, school districts, and counties. Results presented in the statewide report represent a smaller probability sample of 43,889 students in grades 6, 8, 10 and 12. The 2003 *PAYS*, the second wave of the study, was administered to 79,383 public school students in grades 6 through 12. Upon completion of the project, community-level reports will be issued to 147 schools, school districts, and counties. The statewide probability sample, which is the subject of this report, consists of 42,623 students in grades 6, 8, 10 and 12.

The Survey Form

The *Communities That Care*[®] *Youth Survey* was adopted as the basis for the *PAYS*. Based on the work of Dr. J. David Hawkins and Dr. Richard F. Catalano, the *Communities That Care*[®] *Youth Survey* 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 *Communities That Care*[®] *Youth Survey* also measures the actual prevalence of drug use, violence and other antisocial behaviors among surveyed students. The survey, its uses and its ongoing development have been described in two recent articles (Pollard, Hawkins and Arthur, 1999; Arthur, Hawkins, Pollard, Catalano and Baglioni, 2002).

With the adoption of the *Communities That Care*[®] *Youth Survey* format, the 2003 *PAYS* provides policy makers and community leaders with three important resources:

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- Most of the ATOD questions in the 2003 *PAYS* are comparable to those used in the *Monitoring the Future* study, a national survey of drug use among middle and high school students. This allows results from Pennsylvania to be accurately compared to national findings.
 - The 2003 *PAYS* questionnaire includes items that measure risk and protective factors, which are characteristics of the community, family, school, and peer and individual environments, as well as individual characteristics of the students themselves, that are known to predict drug use and other antisocial behaviors (Hawkins, Catalano and Miller, 1992).
 - Results from the 2001 and 2003 *PAYS* build upon data gathered by the *Generation at Risk* study, a biennial statewide survey of Pennsylvania youth that was conducted from 1989 through 1997. When combined, data from the two survey efforts allow policy makers in Pennsylvania to track changes in drug use prevalence rates across a 14-year period.

Sampling and Recruitment

The Sample Frame

Complete listings of all public schools with enrollment in the 6th, 8th, 10th or 12th grade, the four grade levels included in the statewide sample, were provided to Channing Bete Company, Inc., by the Pennsylvania Department of Education. Schools with enrollments of fewer than 50 students per grade, as well as schools that were assigned type codes indicating that the schools were “part day” or “out of district” (codes 2, 3 and 5), were removed from consideration.

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.

Next, schools were assigned to one of six geographic regions in the state (see Appendix B for a map of the counties within each region), resulting in 24 unique grade-by-region cells. Enrollment totals for the final sample frame are presented in Table 1.

Sample Selection and Recruitment

The goal of the 2003 *PAYS* sampling and recruitment plan was to draw a group of survey respondents that would yield maximum confidence intervals of ± 3.0 percentage points for drug use prevalence estimates within each grade-by-region subsample. This level of statistical precision called for a sample of approximately 1,000 respondents from each surveyed grade within each region, for a total sample size of 24,066.

At the onset of the sample design and recruitment process, it was decided that the final statewide dataset would include two sets of respondents: (1) students from “sampled grades,” which consist of the specific grade levels within sampled schools that were invited to participate in the survey, and (2) students from “piggyback grades,” which consist of additional grade levels within sampled schools that were not specified as part of the basic sample. The costs of survey administration were to be paid by the state government for sampled grades and one piggyback grade within each sampled school.

After analyzing participation rates from the 2001 *PAYS*, it was projected that the combined pool of participants from both sampled grades and piggyback grades would equal roughly 45% of the total number of students that were recruited to participate in the survey. Based on this model, grade-by-school combinations with enrollments totaling 53,220 would need to be invited to participate in the survey in order to reach the target of approximately 1,000 survey respondents in each grade-by-region subsample.

In order to generate the 24 lists of schools (one for each grade-by-school combination) that would be invited to participate in the survey, schools were selected with a probability proportional to enrollment. That is, schools with higher enrollment were more likely to be selected than smaller schools. The selection process was implemented by assigning a probability value to each school calculated as the percentage of regionwide enrollment that was located at the school. Schools were then randomly selected within each grade-by-region cell until the enrollment total for the list equaled or exceeded the recruitment target. This method yielded a recruitment list containing 242 unique grade-by-school combinations with enrollments totaling 57,910.

At the midpoint of the recruitment process it was determined that school participation rates in southwest Pennsylvania (Region 4) were unacceptably low, and that additional schools would have to be contacted in order to reach the sample target. To supplement this shortfall, a secondary sample with a total enrollment of 11,236 students in 6th, 8th, 10th and 12th grade was added to the recruitment lists for southwest Pennsylvania (Region 4). With this addition, the final recruitment list included 318 unique grade-by-school combinations with enrollments totaling 69,146 (see Table 2).

Participation

As Table 3 shows, this recruitment effort yielded participation agreements for 21,331 students in sampled grades, which represents 31% of the enrollment total from the recruitment list. In addition, participation agreements for 30,080 students in piggyback grades, which represents 44% of the recruitment enrollment total, were secured from sampled schools.

The second set of data columns in Table 3 shows the number of survey forms that were actually returned to Channing Bete Company for scanning. As expected, the number of returned forms was less than the counts specified in the survey agreements. In a few cases, schools that agreed to participate were unable to administer the survey or return completed survey forms before the scanning deadline. More often, however, schools failed to secure participation from as many students as anticipated. For sampled grades, 15,107 out of the 21,331 forms (71%) were returned for scanning, while 25,243 out of 30,080 forms (84%) were returned for piggyback grades.

The last set of data columns in Table 3 shows record counts after invalid responses were removed. The final dataset includes 14,472 respondents from sampled grades and 24,373 respondents from piggyback grades. Compared back to the initial recruitment effort, this represents a statewide participation rate of 21% for students in sampled grades, with regional rates ranging from a high of 51% for north central Pennsylvania (Region 2) to a low of just 3% for southwest Pennsylvania (Region 4). Piggyback participation was higher, equaling 35% of the enrollment total in the recruitment list.

Modifications to the Sample

The planned sample, consisting of respondents from both sample and piggyback grades, yielded 38,845 respondents from Pennsylvania public schools in 6th, 8th, 10th and 12th grades. While this total exceeded the overall sampling target of 24,066 by 61%, it includes substantial shortfalls in northeast and southwest Pennsylvania (Regions 3 and 4).

To supplement these shortfalls, 3,778 respondents from schools that volunteered to administer the survey were included in the statewide sample for these two regions, raising the total statewide dataset to 42,623 valid records. With the addition of these respondents, all but two of the grade-by-region cells reached 80% of their sample targets. Twelfth graders in northeast Pennsylvania (Region 3) and 6th graders in southwest Pennsylvania (Region 4) reached just under 70% of their sample targets.

As Table 4 shows, the resulting dataset includes valid questionnaires from 10,678 6th graders, 12,230 8th graders, 11,727 10th graders, and 7,988 12th graders. This represents 178% of the 6th graders, 203% of the 8th graders, 194% of the 10th graders, and 133% of the 12th graders targeted for sampling.

One concern that needed to be addressed was the different selection criteria associated with sample, piggyback and volunteer respondents. Piggyback records pose only minimal concern since these surveys were all conducted in sampled schools. Records from volunteer schools, however, are more likely to introduce participation bias into the final sample. To rule out any such biases, records from these three sources were subjected to detailed analyses. For each group of records, data profiles were generated by calculating summary statistics for ATOD prevalences, RPF levels and demographic characteristics. Comparison of the profiles indicated that even though there are differences, the direction of the differences is mixed. In other words, data profile analysis indicates that the inclusion of piggyback or volunteer surveys does not appear to systematically bias the sample in any particular direction.

Weighting

The weighting strategy for the 2003 *PAYS* has two objectives. First, for results presented for grade-level subsamples, the distribution of survey respondents across regions should match statewide enrollment figures. Second, for results presented for regional subsamples, the distribution of respondents across grade levels must also match statewide enrollment figures. The statewide dataset includes one set of poststratification weights that adjusts both the region and grade-level distributions simultaneously.

$$\text{Weight} = \frac{\frac{N(h,i)}{N}}{\frac{n(h,i)}{n}}$$

$N(h,i)$ = Total number of students enrolled in region h and grade i

N = Total number of students enrolled in grades 6, 8, 10, and 12 across all regions

$n(h,i)$ = Number of students sampled from region h and grade i

n = Number of students sampled in grades 6, 8, 10, and 12 across all regions

Eighth graders in northeast Pennsylvania (Region 3) provide an example of how the formula works. As the equation below shows, the ratio of 8th graders in northeast Pennsylvania (Region 3) to the statewide total is larger in the population than in the sample, indicating an undersampling for that grade-by-region cell. To compensate, the 1,137 8th grade students in northeast Pennsylvania (Region 3) receive a weight of 1.2521, giving their responses additional emphasis during data analysis.

$$\text{Weight} = \frac{\frac{18,204}{545,017}}{\frac{1,137}{42,623}} = 1.2521$$

Survey Administration

Survey administration procedures 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 forms were distributed to individual classrooms that were eligible for participation. Each teacher received an appropriate number of surveys and survey collection envelopes. Students had one classroom period in which to complete 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.

Survey Validation

Four strategies were used to assess the validity of completed survey forms. The first two strategies eliminated the surveys of 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.

- In the first strategy, surveys from students who reported an average of four or more daily uses of the following drugs—inhalants, cocaine, crack cocaine, hallucinogens, Ecstasy, methamphetamine, heroin and steroids—were eliminated from the survey data set. This strategy removes the survey of any student who did not take it seriously.
- The second strategy supplements the drug use exaggeration test by examining the frequency of five other antisocial behaviors: *Attacking Someone with Intent to Harm*, *Attempting to Steal a Vehicle*, *Being Arrested*, *Getting Suspended* and *Taking a Handgun to School*. Respondents who reported an unrealistically high frequency of these behaviors—more than 120 instances within the past year—were removed from the analysis.
- In the third strategy, students were asked if they had used a fictitious drug in the past 30 days or in their lifetimes. If students reported any use of the fictitious drug, 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 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.

Pennsylvania students were cooperative—all but 1,516 students (3.4%) completed valid surveys. Of the 1,516 surveys identified and eliminated by one or more of the four strategies described above, 663 exaggerated drug use (strategy 1), 400 exaggerated other antisocial behavior (strategy 2), 1,136 reported the use of the fictitious drug (strategy 3) and 606 responded in a logically inconsistent way (strategy 4). The elimination total produced by these four strategies equals more than 1,516 because some surveys were identified by more than one strategy.

Precision of the Statistical Estimates

Confidence intervals provide a range of values within which the true population value can be found. The level of certainty, in this case 95%, means that 95 out of 100 times, the true population value will fall within the range of scores specified by the confidence interval. Because these scores assume a 50% prevalence rate, confidence intervals for both more and less prevalent behaviors will be narrower. However, it should be noted that because the variance estimates used in these calculations do not account for the complex design of the Pennsylvania sample, actual confidence intervals are broader than reported here.

Statewide confidence intervals range from a low of ± 0.8 percentage points for the 8th grade subsample to a high of ± 1.1 percentage points for the 12th grade subsample. Estimates for regional subsamples have confidence intervals ranging from a low of ± 0.7 percentage points for north central Pennsylvania (Region 2) to a high of ± 1.6 percentage points for northeast Pennsylvania (Region 3). For individual grade-by-region combinations, confidence intervals range from a low of ± 1.4 percentage points for 6th, 8th and 10th graders in north central Pennsylvania (Region 2) to a high of ± 3.7 percentage points for 6th graders in southwest Pennsylvania (Region 4).

Demographic Profile of Surveyed Youth

The 2003 *PAYS* measured a variety of demographic characteristics. Table 5 shows selected characteristics of surveyed youth: gender, 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.

A higher percentage of surveyed Pennsylvania students were female (50.3% female versus 49.0% male). A majority of students identified themselves as White (86.3%). The largest minority group is African American (3.6%), followed by Latino (1.9%), Asian (1.5%) and American Indian (0.8%). One out of 20 respondents (5.0%) self-identified as Other/Multiple. Note that while the Other/Multiple category 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 included in the Other/Multiple category for the purposes of this report. Nearly all of the surveyed students (96.6%) reported English as the language they most often speak at home.

Please note that while respondents from all ethnic categories are included in the statewide dataset, separate analyses will only be presented for African American and White students. This is because subsample sizes for American Indian, Asian and Latino respondents are not large enough to generate accurate statistical estimates.

Section 3

Alcohol, Tobacco and Other Drug Use

Measurement

Alcohol, tobacco and other drug (ATOD) use is measured in the 2003 *PAYS* by a set of 24 questions from the *Communities That Care*[®] *Youth Survey*. 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 2003 *PAYS*.

Prevalence-of-use tables and graphs are used to illustrate 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 (defined as a report of five or more drinks in a row within the past two weeks) is also measured.

A final indicator—“any illicit drug (other than marijuana)” —measures the use of one or more of the following drugs: inhalants, cocaine, crack cocaine, heroin, hallucinogens, methamphetamines, 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 and Bachman, 2003).

The first component of this section of the report reviews overall patterns and key findings—including prevalence rates, demographic and regional differences in patterns of use, national trends, and changes over time—associated with ATOD use among Pennsylvania students. The second component presents more detailed information for each major substance category. For substances with prevalence rates lower than 2.0%, demographic and regional differences and changes across time are generally statistically insignificant and will not be included in the discussion.

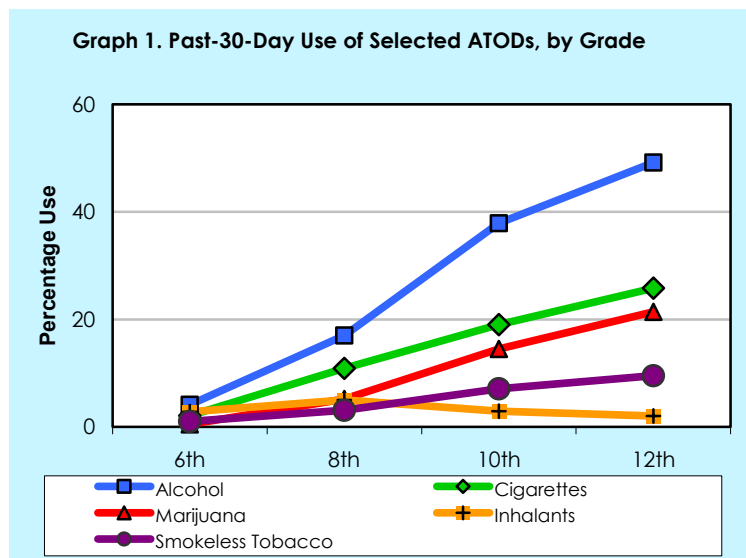
Overall Results

Lifetime and past-30-day ATOD prevalence rates for 6th, 8th, 10th and 12th graders are presented in Tables 6 and 7. Comparing across ATOD categories, alcohol is the drug for which Pennsylvania students in all four surveyed grade levels reported the highest rates of both lifetime and past-30-day use. The lifetime prevalence of alcohol use ranges from slightly more than one quarter among 6th graders (28.7%) to more

than three quarters among 12th graders (83.6%). Use of alcohol within the past 30 days is low among 6th graders (4.1%), but increases to 49.2% among 12th grade respondents.

Prevalence rates drop substantially for the second and third most commonly used drugs (cigarettes and marijuana). Lifetime use of cigarettes ranges from 8.9% among 6th graders to 52.4% among 12th graders; past-30-day use ranges from 2.1% among 6th graders to 25.8% among 12th graders. Marijuana use is rare among younger students—1.3% for lifetime and 0.5% for past-30-day among 6th graders—but increases to 42.8% for lifetime and 21.4% for past-30-day among 12th graders.

Smokeless tobacco and inhalants, the fourth and fifth most commonly used drugs, show very different patterns across grades. Lifetime use of smokeless tobacco ranges from 2.7% among 6th graders to 21.0% among 12th graders; past-30-day use ranges from 1.0% among 6th graders to 9.5% among 12th graders. Past 30-day use of inhalants, in contrast, peaks at 5.0% among 8th graders before declining to 2.0% among 12th graders. In many communities, inhalant use is more prevalent among younger students, perhaps because inhalants are one of the easier drugs for them to obtain. Past-30-day prevalence rates for these top five substances, and their pattern of change across grade levels, are presented in Graph 1.



Use of the remaining drugs—cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids—is notably lower. Across these substances, lifetime prevalence rates are below 1.5% for 6th graders and below 3.0% for 8th graders. The most pronounced lifetime rates appear for hallucinogens (10.9%), Ecstasy (8.7%) and cocaine (7.4%) among 12th graders. The highest past-30-day rate is 3.4% for hallucinogen use among 12th graders. These comparatively low rates are summarized by the indicator “any illicit drug (other than marijuana).” The proportion of Pennsylvania students reporting use of any of the illicit drugs (excluding marijuana) in their lifetimes ranges from 8.0% among 6th graders to 20.9% among 12th graders. Past-30-day use ranges from 3.1% among 6th graders to 7.9% among 12th graders.

Comparisons to National Results

National data provide an important normative reference point for evaluating the drug use prevalence rates and trends reported by Pennsylvania students. For the purposes of this report, comparisons for alcohol, tobacco and other drug involvement will be made to the 2003 *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. For a review of the methodology of this study, please see Johnston, O’Malley and Bachman (2003).

Comparisons between the 2003 *PAYS* and the 2003 *Monitoring the Future* study are presented in Tables 6 and 7. While the rates of drug use measured by the two surveys are generally similar, there are several noteworthy differences. For lifetime prevalence, the largest differences occur for alcohol and marijuana use. Compared to their national counterparts, Pennsylvania 8th, 10th and 12th graders reported rates of lifetime alcohol use that are 11.1, 10.4 and 7.0 percentage points higher, respectively. In contrast to this

pattern, Pennsylvania students reported lifetime rates of marijuana use that are 6.7, 8.9 and 3.3 percentage points lower than their national counterparts. Lifetime prevalence rates among Pennsylvania students are also lower for inhalant and methamphetamine use.

Differences in past-30-day prevalence are less pronounced, but they do reveal areas of strength and weakness. For several key substance use categories, Pennsylvania 8th graders report lower rates of use than their national counterparts, while Pennsylvania 12th graders report more use. Binge drinking among Pennsylvania 8th graders, for example, is 3.1 percentage points below the national average, while Pennsylvania 12th graders are 3.5 percentage points above the national average. Similarly, smokeless tobacco use among Pennsylvania 8th graders is 1.0 percentage point below the national average, while Pennsylvania 12th graders reported a rate that is 2.8 points above the national average. Past-30-day marijuana use is 2.3 and 2.5 percentage points below the national average for 8th and 10th graders, but almost equal to the national average for 12th graders.

ATOD Trends in Pennsylvania

Trend analyses comparing current ATOD prevalence rates with historical data are presented in two formats. First, in Table 8, past-30-day ATOD prevalence rates from the 2001 and 2003 *PAYS* are combined with Pennsylvania statewide results from the 1989 through 1997 *Primary Prevention Awareness, Attitude, and Use Survey (PPAAUS)*. Second, Graphs 2 through 6 compare Pennsylvania statewide and national prevalence trends for selected ATOD categories. Each graph contains three trend lines: (1) past-30-day prevalence rates for Pennsylvania 6th graders, (2) past-30-day prevalence rates for Pennsylvania 12th graders and (3) past-30-day prevalence rates for a national sample of 12th graders, as measured by the 1989 through 2003 *Monitoring the Future* study.

The trend data presented in both table and graph formats should be reviewed with consideration given to the refinements in question wording that have occurred over time. Appendix B in the 2001 *PAYS* report discusses the differences between and comparability of ATOD questions in the *PPAAUS* and *PAYS* questionnaires. In general, the *PPAAUS* and *PAYS* questions produce comparable prevalence rates. The only notable exception is for alcohol, where the newer *PAYS* format yields prevalence rates that are higher—perhaps up to four or five percentage points—than the older *PPAAUS* format. Differences in ATOD question wording between the 2001 and 2003 *PAYS* are presented in Chart 1. Key changes include: (1) replacing the “designer drugs” questions used in the 2001 questionnaire with Ecstasy questions, (2) replacing the “training drugs” questions with steroids questions and (3) replacing the basic inhalants questions with questions that more clearly define inhalant abuse.

As data presented in Table 8 show, by 2001, past-30-day prevalence rates for most ATOD categories had declined from their peaks in the mid 1990s. Overall, results from the 2003 *PAYS* show a continuation of this positive pattern. Within most ATOD categories, prevalence rates have either held steady at these lower levels or continued to decline.

- The remarkable drop in cigarette use that was reported in the 2001 *PAYS* continues. In 2003, 25.8% of Pennsylvania 12th graders reported past-30-day cigarette use, a rate that is 6.1 percentage points lower than in 2001 and 14.6 percentage points lower than in 1997. Lifetime use of cigarettes among 10th and 12th graders also dropped 3.4 and 4.6 percentage points, respectively, between 2001 and 2003.
- Reversing a trend in increased prevalence dating to the early 1990s, past-30-day use of marijuana among 12th graders fell from 25.6% in 2001 to 21.4% in 2003. Lifetime use of marijuana among 10th and 12th graders also dropped 3.4 and 4.3 percentage points, respectively, between 2001 and 2003.

Chart 1. Differences in Wording Between 2001 and 2003 PAYS Survey Instruments

On how many occasions (if any) have you:		
	2001	2003
Inhalants	Used inhalants...	Sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high...
Heroin	Used heroin (smack, horse, skag, H, etc.)...	Used heroin...
Methamphetamine	Used crystal meth (ice, crank, speed, etc.)...	Used methamphetamine (meth, crystal meth, crank)...
Designer Drugs	Used designer drugs (Ecstasy, XTC, MDMA, etc.)...	-
Ecstasy	-	Used Ecstasy...
Steroids/Training Drugs	Used training drugs (steroids, roids, etc.)...	Taken steroids without a doctor's prescription...

- Pennsylvania 8th, 10th and 12th graders reported little to no change in lifetime and past-30-day alcohol use and binge drinking. Use among 6th graders, however, is down slightly in all three categories. For example, the prevalence of lifetime alcohol use among 6th graders dropped from 32.3% in 2001 to 28.7% in 2003.
- While past-30-day inhalant use among 12th graders continues to decline from its peak in 1995, use among 6th, 8th and 10th graders increased between 2001 and 2003. Past-30-day use of inhalants among 8th graders increased from 1.9% in 2001 to 5.0% in 2003. Lifetime use among 8th graders increased from 5.8% to 12.3%.

Gender and Ethnic Differences

Overall, the differences in ATOD use reported between male and female Pennsylvania students are modest. Cigarette use is slightly higher among females (32.6% lifetime and 14.9% past-30-day) than among males (30.5% lifetime and 13.1% past-30-day). In contrast, marijuana use is slightly higher among males (21.0% lifetime and 10.9% past-30-day) than among females (18.7% lifetime and 9.1% past-30-day). Rates for both lifetime and past-30-day alcohol use are nearly identical between the genders, though binge drinking is slightly higher for males (16.1%) than for females (14.6%). Not surprisingly, the largest gender difference occurs for smokeless tobacco use; 8.5% of male students reported past-30-day use compared to just 1.7% of females.

Differences between ethnic groups are more pronounced for some ATOD categories. As shown in national data (Johnston, O'Malley and Bachman 2003), African American students in Pennsylvania reported notably lower rates than White students for past-30-day alcohol (16.9% versus 26.9%, respectively) and cigarette (9.1% versus 14.1%, respectively) use. In contrast, differences between African American and White students for past-30-day marijuana use (10.2% versus 9.8%, respectively) and past-30-day use of "any illicit drug other than marijuana" (5.6% versus 5.8%, respectively) are minimal.

Regional Differences

Data presented in Tables 9 through 15 reveal a number of differences in ATOD rates across Pennsylvania's six geographic regions. For example, past-30-day alcohol use ranges from a low of 22.7% among students from south central Pennsylvania (Region 5) to a high of 29.7% among students from

southwest Pennsylvania (Region 4), and past-30-day cigarette use ranges from a low of 11.2% among students from southeast Pennsylvania (Region 6) to a high of 17.3% among students from northeast Pennsylvania (Region 3).

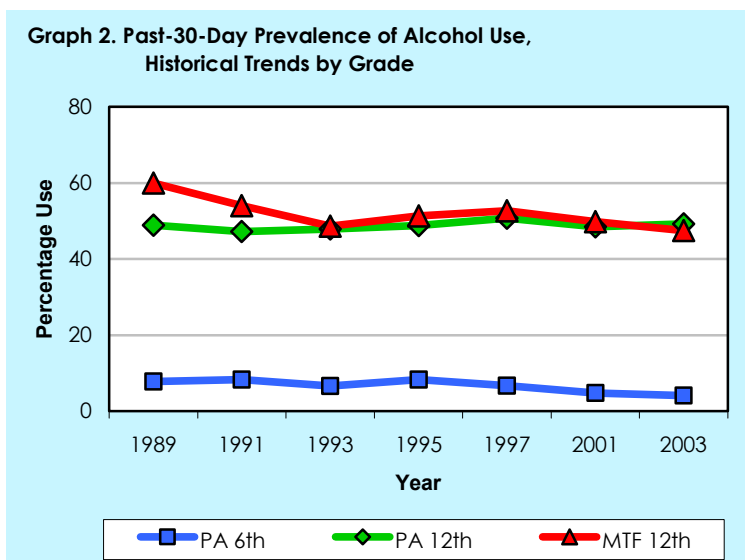
It is difficult to provide a general description of regional differences because prevalence rates change across substance categories. Nevertheless, the following overall pattern appears for alcohol, tobacco, marijuana and inhalant use: Students from south central and southeast Pennsylvania (Regions 5 and 6) generally reported the lowest prevalence rates, students from northwest and northeast Pennsylvania (Regions 1 and 3) generally reported the highest rates, and students from north central and southwest (Regions 2 and 4) generally fall in the middle.

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. 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 Pennsylvania students.

Both the 2001 and 2003 findings for alcohol use by Pennsylvania students are presented in Table 9. In addition to presenting lifetime and past-30-day prevalence and the prevalence of binge drinking by grade level, the data are broken out by gender, ethnicity and region. Long-term trend data for past-30-day use among Pennsylvania 6th and 12th graders, as well as a comparison trend for a national sample of 12th graders, are presented in Graph 2.

Lifetime prevalence of alcohol use ranges from a low of 28.7% for 6th graders to a high of 83.6% for 12th graders. Pennsylvania students in all three comparison grades (8th, 10th and 12th) reported rates of lifetime use that were between 7.0 and 11.1 percentage points higher than national findings from the *Monitoring the Future* study. Past-30-day prevalence of alcohol use ranges from a low of 4.1% for 6th graders to a high of 49.2% for 12th graders. In contrast to lifetime use, differences in past-30-day use of alcohol between Pennsylvania students and their national counterparts are minimal. Eighth graders reported a slightly lower rate of use while 10th and 12th graders reported slightly higher rates of use.



Binge Drinking

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, binge drinking prevalence rates range from a low of 1.5% among 6th graders to a high of 31.4% among 12th graders. Compared to national findings, 8th graders reported a lower rate of binge drinking, 10th graders reported a similar rate and 12th graders reported a higher rate.

Historical Trends

A comparison of prevalence rates recorded by the 2001 and 2003 *PAYS* is included in Table 9. As these results show, the overall rates of lifetime and past-30-day alcohol use as well as binge drinking have remained relatively constant over the past two years. The largest change occurred among 6th graders, who reported a 3.6 percentage-point reduction in lifetime alcohol use.

Past-30-day alcohol prevalence rates, as measured by all Pennsylvania surveys since 1989, are shown in Graph 2. These rates are reported only for 6th and 12th grade students, the two grade levels for which data have been collected across all survey years. The past-30-day prevalence for alcohol use among 6th grade students has decreased from a high of 8.3% in 1991 and 1995 to a low of 4.1% in 2003. There has been no substantial shift in the prevalence of past-30-day use by 12th graders since 1989. For this age group, rates have consistently stayed within a narrow range, with a low value of 47.2% in 1991 to the high value of 50.7% in 1997.

Graph 2 also compares the past-30-day prevalence trend for Pennsylvania 12th graders to national data from the *Monitoring the Future* study. From 1993 through 2003, national prevalence rates are similar to or only slightly higher than those reported by Pennsylvania students. The larger gap in 1989 and 1991 is attributable, at least in part, to an alternative question format used by the *PPAAUS* in those years.

Regional Variations

Both lifetime and past-30-day use of alcohol range from highs of 63.3% and 29.7%, respectively, in southwest Pennsylvania (Region 4) to lows of 58.1% and 22.7%, respectively, in south central Pennsylvania (Region 5). Binge drinking follows the same geographic pattern, with prevalence rates ranging from a high of 18.5% in southwest Pennsylvania (Region 4) to a low of 13.5% in south central and southeast Pennsylvania (Region 5 and Region 6).

Tobacco

After alcohol, tobacco (including cigarettes and smokeless tobacco) is the most commonly used drug among adolescents. Nationally, tobacco use has been dropping steadily since the late 1990s (Johnston et al., 2003).

Both the 2001 and 2003 findings for tobacco use by Pennsylvania students are presented in Table 10. In addition to presenting lifetime and past-30-day prevalence of cigarette use and the prevalence of smokeless (chewing) tobacco use by grade level, the data are broken out by gender, ethnicity and region. Long-term trend data for past-30-day use among Pennsylvania 6th and 12th graders, as well as a comparison trend for a national sample of 12th graders, are presented in Graph 3.

Cigarettes

Among students surveyed in Pennsylvania in 2003, lifetime prevalence rates for cigarette use range from a low of 8.9% among 6th graders to a high of 52.4% among 12th graders. Comparisons with 8th, 10th and 12th graders in the *Monitoring the Future* survey are available in Table 6. Tenth graders in Pennsylvania reported a slightly lower lifetime rate of cigarette use (40.4%) compared to their national counterparts (43.0%). Among 8th and 12th graders, the gap was smaller, with Pennsylvania students reporting rates of 27.8% and 52.4%, respectively, compared to 28.4% and 53.7%, respectively, for *Monitoring the Future*.

While the lifetime prevalence rate is an indicator of experimentation, the past-30-day prevalence of cigarette use is a good measure of current use. In 2003, past-30-day use of cigarettes ranged from a low of 2.1% among 6th graders to a high of 25.8% among 12th graders. In Table 7, results for Pennsylvania students are compared to results from the *Monitoring the Future* study. The past-30-day prevalence rates

for Pennsylvania 8th, 10th and 12th graders (10.9%, 19.0%, and 25.8%, respectively) are similar to those reported by their national counterparts (10.2%, 16.7% and 24.4%, respectively).

Smokeless Tobacco

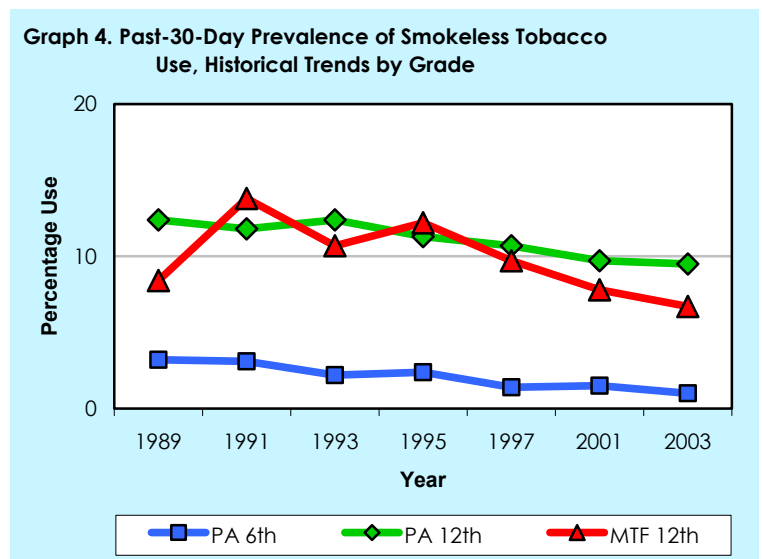
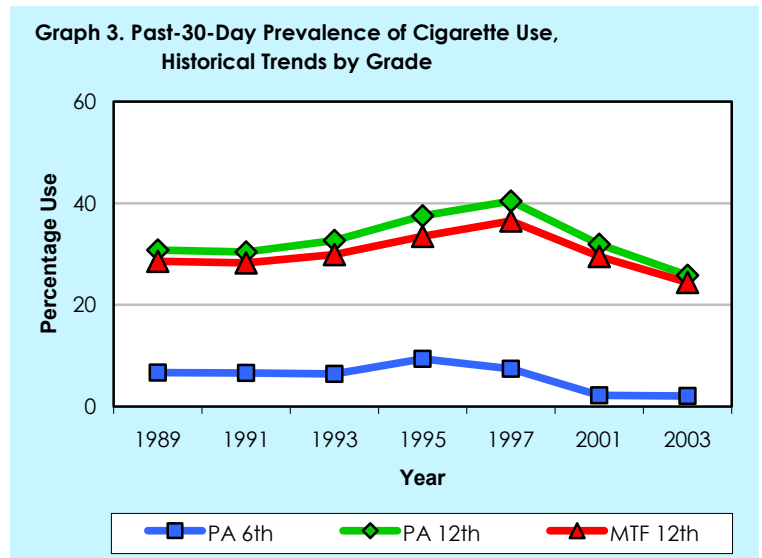
Table 10 also includes prevalence rates for smokeless tobacco. Lifetime prevalence rates for this type of tobacco use ranged between 2.7% for the 6th grade and 21.0% for the 12th grade. Comparisons with the *Monitoring the Future* sample indicate that Pennsylvania's 8th graders reported a lifetime prevalence rate (7.9%) that is slightly lower than the 8th graders in the national sample (11.3%). In contrast, 10th and 12th graders reported lifetime prevalence rates (15.0% and 21.0%, respectively) that were slightly above their counterparts in the national sample (14.6% and 17.0%, respectively).

Past-30-day prevalence rates for smokeless tobacco use range from a low of 1.0% among 6th graders to a high of 9.5% among 12th graders. Past 30-day rates for Pennsylvania's 8th, 10th and 12th graders (3.1%, 7.1% and 9.5%, respectively) are generally similar to or slightly higher than those reported in the *Monitoring the Future* study (4.1%, 5.3% and 6.7%, respectively).

Historical Trends

Past-30-day tobacco prevalence rates, as measured by all Pennsylvania surveys since 1989, are shown in Table 8. These rates are reported only for 6th and 12th grade students, the two grade levels for which data have been collected across all survey years. The past-30-day prevalence of cigarette use among 6th grade students has decreased from 9.4% in 1995 to 2.2% in 2001 and 2.1% in 2003. Among Pennsylvania 12th graders, prevalence rates for past-30-day cigarette use peaked in 1997 at 40.4% before declining to 25.8% in 2003. Graph 3 compares the past-30-day prevalence trend for Pennsylvania 12th graders to national data from the *Monitoring the Future* study. From 1989 through 2001, changes in past-30-day cigarette use among national respondents closely match those reported by Pennsylvania students.

As Table 8 shows, the past-30-day prevalence of smokeless tobacco use among Pennsylvania 6th grade students has also dropped slightly, with prevalence decreasing from 3.2% in 1989 to 1.0% in 2003. A similar downward trend has occurred among 12th graders, with rates dropping slightly from a high of 12.4% in 1989 and 1993 to a low of 9.5% in 2003. Graph 4 illustrates the time series of



past-30-day prevalence rates for Pennsylvania's 6th and 12th graders and provides a comparison with the national trend. Pennsylvania 12th graders had slightly higher past-30-day prevalence rates than *Monitoring the Future* 12th graders for all of those years except 1991 and 1995.

Regional Variations in Tobacco Use

The bottom panel in Table 10 compares tobacco use rates across geographic regions. Students from northwest Pennsylvania (Region 1) reported the highest lifetime rate of cigarette use (36.1%) and students from northeast Pennsylvania (Region 3) reported the highest past-30-day cigarette use (17.3%). For both lifetime and past-30-day cigarette use, students from southeast Pennsylvania (Region 6) reported the lowest prevalence levels (26.6% and 11.2%, respectively). Overall, regional differences in the prevalence of cigarette use were quite small, with the exception of southeast Pennsylvania (Region 6), which had notably lower rates than all the others.

Students from northwest Pennsylvania (Region 1) reported the highest lifetime use of smokeless tobacco (17.2%) and southeast Pennsylvania (Region 6) reported the lowest (6.4%). Likewise, past-30-day use rates were highest in northwest and north central Pennsylvania (Regions 1 and 2—7.9% and 8.0%, respectively) and lowest in southeast Pennsylvania (Region 6—2.3%). As with the patterns observed for cigarette use, regional variation in smokeless tobacco use was quite small, with the exception of southeast Pennsylvania (Region 6), which had notably lower rates than the other regions.

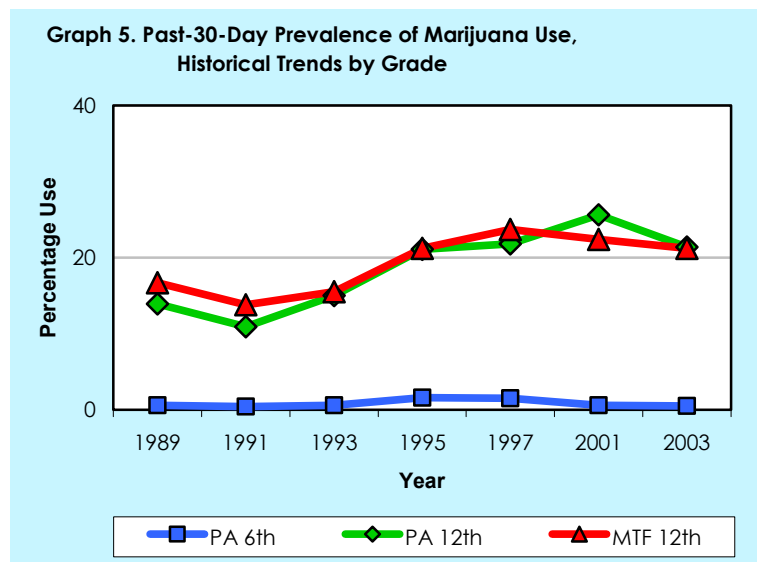
Marijuana

During the 1990s, there were major changes in trends of marijuana use throughout the United States. After a dramatic increase in the early 1990s, the lifetime and past-30-day prevalence-of-use rates showed a moderate reduction (Johnston et al., 2003). In 2003, the national past-30-day prevalence-of-use rates were 7.5%, 17.0% and 21.2%, for the 8th, 10th and 12th grades, respectively (Johnston et al., 2004).

The findings for lifetime and past-30-day prevalence of marijuana use by Pennsylvania students are presented in Table 11. The table is broken down by grade, gender, ethnicity and region.

The long-term trend for marijuana use by Pennsylvania students is presented in Table 8 and Graph 5.

Lifetime prevalence rates for marijuana use range from a low of 1.3% among 6th graders to a high of 42.8% among 12th graders. Eighth, 10th and 12th graders in Pennsylvania reported notably lower rates of lifetime marijuana use (10.8%, 27.5% and 42.8%, respectively) compared to their national counterparts in the *Monitoring the Future* study (17.5%, 36.4% and 46.1%, respectively). Past-30-day marijuana use ranges from a low of 0.5% among 6th graders to a high of 21.4% among 12th graders. Pennsylvania 8th and 10th graders reported slightly lower rates of past-30-day marijuana use (5.2% and 14.5%, respectively) and 12th graders reported about the same rate of use (21.4%) when compared to national results (7.5%, 17.0% and 21.2%, respectively).



Historical Trends

Past-30-day marijuana prevalence rates, as measured by all Pennsylvania surveys since 1989, are shown in Table 8. For 6th graders, past-30-day prevalence rates are low across the trend period, peaking at 1.6% in 1995 before dropping to 0.5% in 2003. In contrast, among Pennsylvania 12th graders, there has been a continuous and substantial increase in marijuana use. Between 1989 and 2001, the proportion of high school seniors who reported having used marijuana within the past 30 days increased from 13.9% to 25.6%. Marijuana use appears to have peaked in 2001 before declining to 21.4% in 2003. Whether or not this reduction is the beginning of a long-term trend remains to be determined by future surveys.

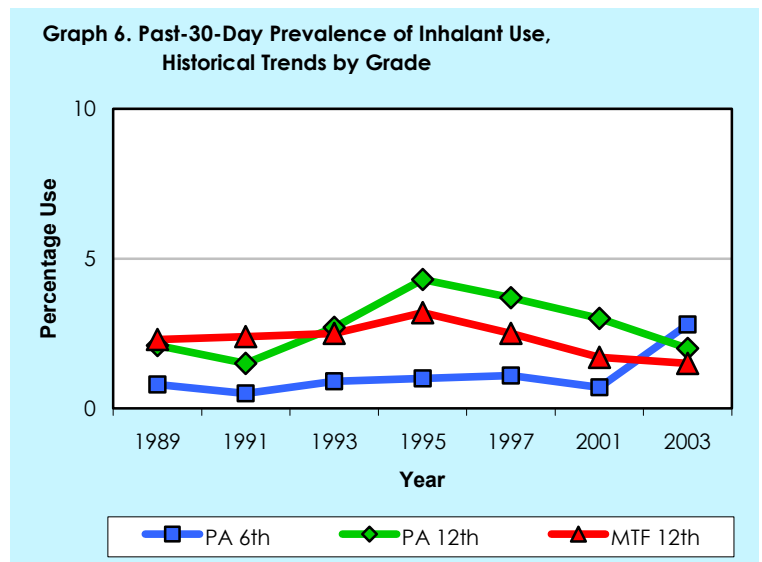
As Graph 5 shows, the upward trend in past-30-day marijuana use reported by Pennsylvania 12th graders during the 1990s reflects the national increase observed by the *Monitoring the Future* study, as does the decline since 2001. Please note, however, that this decline was stronger among Pennsylvania 12th graders than among their national counterparts.

Regional Variations in Marijuana Use

For lifetime and past-30-day marijuana use, students from northeast Pennsylvania (Region 3) reported the highest prevalence levels (23.1% and 13.1%, respectively). Students from south central Pennsylvania (Region 5) reported the lowest lifetime and past-30-day prevalence rates (18.3% and 7.8%, respectively). Northwest, north central and southwest Pennsylvania (Regions 1, 2 and 4) showed similar levels of lifetime (20.9%, 20.0% and 20.2%, respectively) and past-30-day (10.0%, 9.7% and 10.0%, respectively) use.

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.)?” As Chart 1 indicates, some changes were made in the wording of the survey questions measuring the level of inhalant use. These changes should be kept in mind while reviewing trend comparisons.



As Table 11 shows, lifetime prevalence rates for inhalant use range from a low of 7.3% among 6th graders to a high of 12.3% among 8th graders. Compared to results from the *Monitoring the Future* study, Pennsylvania 8th, 10th and 12th graders reported lifetime rates of inhalant use that were 3.5, 2.2 and 2.1 percentage points lower, respectively, than their national counterparts. Past-30-day use ranges from a low of 2.0% among 12th graders to a high of 5.0% among 8th graders. For the three comparison grades (8th, 10th and 12th), these rates are similar to national results.

Historical Trends

Past-30-day inhalant prevalence rates, as measured by all Pennsylvania surveys since 1989, are shown in Table 8 and Graph 6. Among 6th graders, prevalence levels have remained low over the trend period, with rates varying by only 0.6 percentage points between 1989 and 2001. The 2003 *PAYS* results show a slight increase for this age group, from 0.7% in 2001 to 2.8% in 2003. Among 12th graders, past-30-day inhalant use peaked in the mid 1990s, and has since decreased.

Regional Variations in Inhalant Use

Table 11 shows only slight differences in inhalant use across surveyed regions, with the southern regions of the state showing slightly lower rates of use than the northern regions. Lifetime use varies from a low of 9.0% in southeast Pennsylvania (Region 6) to a high of 11.7 in northeast Pennsylvania (Region 3) while past-30-day use varies from a low of 2.8% in southwest Pennsylvania (Region 4) to a high of 4.1% in northeast Pennsylvania (Region 3).

Other Drugs

The 2003 *PAYS* also measured the prevalence of use for cocaine, crack cocaine, heroin, hallucinogens, methamphetamines, Ecstasy and steroids. The lower prevalence-of-use rates for these substances make it difficult to provide meaningful comparisons across demographic groups or geographic regions. In addition, their historical trends involve small fluctuations rather than clear patterns. As a result, these relatively lower-prevalence substances are reviewed in less detail.

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.

As Table 12 shows, lifetime prevalence rates for cocaine use range from a low of 0.4% among 6th graders to a high of 7.4% among 12th graders. Pennsylvania 8th and 10th graders reported slightly lower rates of lifetime use (1.8% and 3.9%, respectively) compared to their national counterparts from the *Monitoring the Future* study (3.6% and 5.1%, respectively). Pennsylvania 12th graders had a rate similar to the national figure (7.4% versus 7.7%, respectively). Past-30-day cocaine use ranges from a low of 0.1% among 6th graders to a high of 2.4% among 12th graders.

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.

As Table 12 shows, lifetime prevalence rates for crack cocaine use range from a low of 0.4% among 6th graders to a high of 2.5% among 12th graders. Just 0.1% of 6th graders and 0.7% of 8th, 10th and 12th graders reported the use of crack in the past 30 days. Both the lifetime and past-30-day rates among Pennsylvania students are equal to or slightly lower than national results from the *Monitoring the Future* study.

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.

The findings for lifetime and past-30-day prevalence of heroin use by Pennsylvania students are presented in Table 13. Lifetime prevalence rates for heroin use range from a low of 0.2% among 6th graders to a high of 2.9% among 12th graders. Past-30-day prevalence of heroin use ranges from 0.1% among 6th graders to 1.3% among 12th graders. Both the lifetime and past-30-day rates among Pennsylvania students are similar to national results from the *Monitoring the Future* study.

It is also important to note that both lifetime and past-30-day rates of heroin use increased between 2001 and 2003. This change is most pronounced among Pennsylvania 12th graders. For this group of respondents, lifetime use of heroin increased from 1.7% in 2001 to 2.9% in 2003, and past-30-day use increased from 0.5% in 2001 to 1.3% in 2003. These changes, however, should be interpreted with caution. On the one hand, a shift from 0.5% to 1.3% represents a large relative increase—160 percent—in the prevalence of past-30-day heroin use. On the other hand, it represents a very small absolute increase—just 0.8 percentage points—in the actual number of respondents reporting the behavior. A change of such small absolute magnitude could easily be the result of measurement error associated with differences in sampling and/or survey administration that occurred between the two waves of the study. Data from the next wave of the *PAYS* or information from external sources will be needed to confirm this trend.

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 2003 *PAYS*, hallucinogens were defined as “hallucinogens (acid, LSD, and ‘shrooms).”

As Table 13 shows, lifetime prevalence rates for hallucinogen use range from a low of 0.3% among 6th graders to a high of 10.9% among 12th graders. Comparisons with 8th, 10th and 12th graders in the *Monitoring the Future* survey are available in Table 6. Eighth graders in Pennsylvania reported a slightly lower lifetime rate of hallucinogen use (2.9%) when compared to 8th graders from the *Monitoring the Future* study (4.0%). Rates for Pennsylvania 10th and 12th graders (6.1% and 10.9%, respectively), however, more closely match the national sample (6.9% and 10.6%, respectively). The prevalence of past-30-day hallucinogen use ranges from a low of 0.1% among 6th graders to a high of 3.4% among 12th graders. With such low overall rates, comparisons with national data from the *Monitoring the Future* study hold little statistical significance.

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. As Chart 1 indicates, some changes were made in the wording of the survey questions measuring the level of methamphetamine use. These changes should be kept in mind while reviewing trend comparisons.

As Table 14 shows, lifetime prevalence rates for methamphetamine use range from a low of 0.2% among 6th graders to a high of 3.0% among 12th graders. Comparisons with 8th, 10th and 12th graders in the *Monitoring the Future* survey are available in Table 6. Eighth, 10th and 12th graders in Pennsylvania reported lower lifetime rates of methamphetamine use (1.1%, 2.3% and 3.0%, respectively) compared to

their national counterparts (3.9%, 5.2% and 6.2%, respectively). All of the surveyed grades reported prevalence rates of less than 1.0% for the use of methamphetamine in the past 30 days.

Ecstasy

In the 2001 instrument, Ecstasy was part of an item targeting the use of “designer drugs,” a design which may have elicited responses about the use of other drugs such as GHB, Ketamine and Rohypnol. The 2003 instrument measured Ecstasy use as a separate item. Chart 1 summarizes this and other differences in wording between the 2001 and 2003 *PAYS* instruments. Trend analysis of Ecstasy prevalence rates is, therefore, not possible.

As Table 14 shows, lifetime prevalence rates for Ecstasy use range from a low of 0.2% among 6th graders to a high of 8.7% among 12th graders. Prevalence rates for past-30-day use range from a low of 0.0% among 6th graders to a high of 1.5% among 12th graders. For all three comparison grades (8th, 10th and 12th), both the lifetime and past-30-day prevalence rates reported by Pennsylvania students are similar to those reported by their national counterparts in the *Monitoring the Future* study.

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.

As Table 15 shows, the lifetime prevalence of steroid use ranges from a low of 1.2% among 6th graders to a high of 2.8% among 10th graders. Past-30-day prevalence rates for steroid use vary little across grade levels, ranging from a low of 0.3% among 6th graders to a high of 1.2% among 10th graders. For all three comparison grades (8th, 10th and 12th), both the lifetime and past-30-day prevalence rates reported by Pennsylvania students are similar to those reported by their national counterparts in the *Monitoring the Future* study.

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, methamphetamines, 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 wash out 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.

As Table 15 shows, lifetime prevalence rates for any illicit drug (other than marijuana) range from a low of 8.0% among 6th graders to a high of 20.9% among 12th graders. Past-30-day prevalence rates range from a low of 3.1% among 6th graders to a high of 7.9% among 12th graders.

Section 4

Other Antisocial Behaviors

Introduction

The 2003 *Pennsylvania Youth Survey* also measures a series of nine 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
- Carrying a Handgun
- Getting Suspended
- Selling Drugs
- Taking a Handgun to School
- Bringing a Weapon (Such as a Gun, Knife or Club) to School

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 eight other antisocial behaviors, prevalence rates are presented for the incidence of behavior over the past 12 months. These data are presented in Tables 16 and 17. For *Bringing a Weapon (Such as a Gun, Knife or Club) to School*, prevalence rates are reported for the past 30 days (see Table 18). In addition, frequency data are used to illustrate the number of occasions that students brought a weapon to school within the past 30 days.

Overall Results

Across grade levels, Pennsylvania students reported the highest rates for *Attacking Someone with Intent to Harm*, with slightly more than one out of ten 8th, 10th and 12th graders (12.7%, 13.2% and 12.2%) having reported attacking “someone with the idea of seriously hurting them.” Drug-related activities were also among the more prevalent other antisocial behaviors. Among 12th graders, nearly one out of five (17.8%) reported *Being Drunk or High at School* and about one out of ten (9.6%) reported *Selling Drugs*. About one out of ten 8th, 10th and 12th graders (10.2%, 9.2% and 9.3%) reported *Getting Suspended*, and about one out of twenty 8th, 10th and 12th graders (5.2%, 5.7% and 6.3%) reported *Being Arrested*. Prevalence rates for weapons-related antisocial behaviors—*Carrying a Handgun*, *Taking a Handgun to School*, and

Bringing a Weapon (Such as a Gun, Knife or Club) to School—are very low, as are the rates for *Attempting to Steal a Vehicle*.

Gender and Ethnic Differences

In contrast to the relative parity between the prevalence of ATOD use among male and female students, male students consistently reported higher rates of other antisocial behaviors. In particular, male students reported higher rates for *Attacking Someone with Intent to Harm* (14.4% versus 8.0%), *Carrying a Handgun* (5.2% versus 1.0%), *Getting Suspended* (12.3% versus 5.0%) and *Selling Drugs* (6.4% versus 3.1%). Male students reported only a slightly higher rate of *Being Drunk or High at School*, compared to female students (9.9% versus 8.3%, respectively).

In another contrast to the patterns observed with ATOD use—where African American students reported lower prevalence rates than White students for a number of substances—African American students reported elevated prevalence rates for the majority of other antisocial behaviors. For example, 20.4% of African American students reported *Attacking Someone with Intent to Harm*, compared to 9.9% of White students. Similarly, 6.7% of African American students reported *Carrying a Handgun*, compared to 2.6% of White students. The most pronounced ethnic difference was for *Getting Suspended*, with 25.1% of African American students reporting one or more episodes within the past month, compared to just 7.3% of White students.

2001–2003 Changes

Since prevalence rates for most antisocial behaviors are low, the majority of changes between 2001 and 2003 are relatively small and not statistically meaningful. The largest differences occurred among 8th, 10th and 12th graders for *Attacking Someone with Intent to Harm*. These rates increased from 10.5%, 11.6% and 10.3% to 12.7%, 13.2% and 12.2%, respectively. A more positive trend occurred among 10th and 12th graders for *Being Drunk or High at School*. Their rates decreased from 15.3% and 21.2% to 13.0% and 17.8%, respectively.

Regional Differences

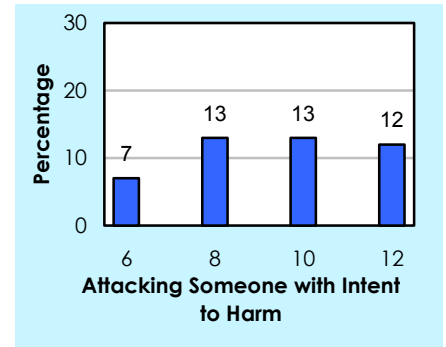
Overall, differences in the prevalence of other antisocial behavior across geographic regions are minimal. The largest gaps occur for *Being Drunk or High at School*, where rates range from a low of 7.9% among students from southeast Pennsylvania (Region 6) to a high of 12.3% among students from northeast Pennsylvania (Region 3), and for *Getting Suspended*, where rates range from a low of 6.2% among students from south central Pennsylvania (Region 5) to a high of 10.9% among students from southwest Pennsylvania (Region 4).

Detailed 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.

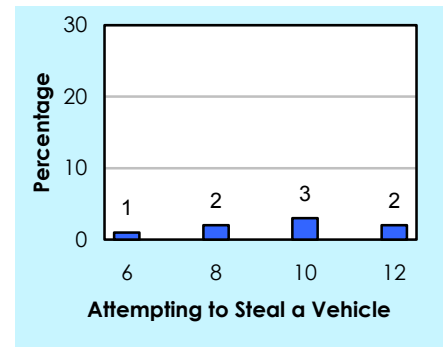
- Prevalence rates for *Attacking Someone with Intent to Harm* range from a low of 6.6% among 6th graders to a high of 13.2% among 10th graders.



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?”

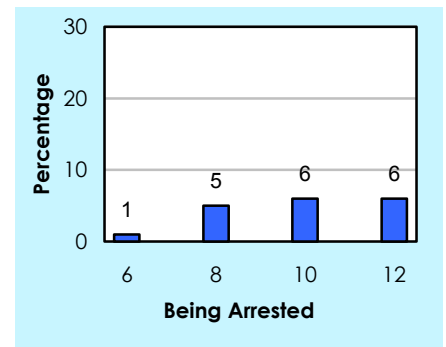
- Prevalence rates for *Attempting to Steal a Vehicle* range from a low of 0.7% among 6th graders to a high of 2.8% among 10th graders.



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.

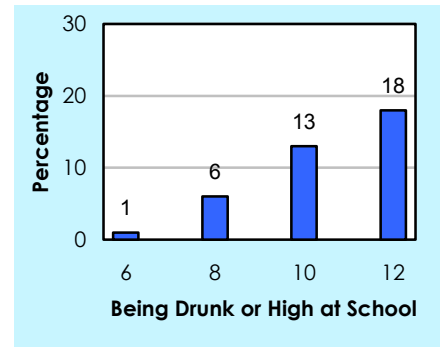
- Prevalence rates for *Being Arrested* range from a low of 1.4% among 6th graders to a high of 6.3% among 12th graders.



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?”

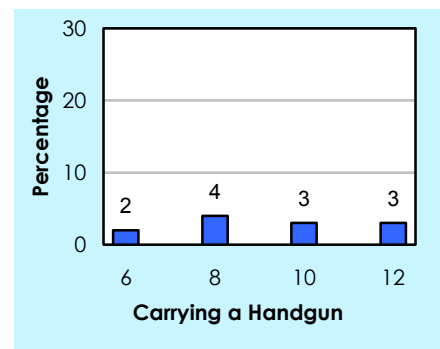
- Prevalence rates for *Being Drunk or High at School* range from a low of 0.9% among 6th graders to a high of 17.8% among 12th graders.



Carrying a Handgun

Carrying a handgun is measured by the question “How many times in the past year (12 months) have you carried a handgun?”

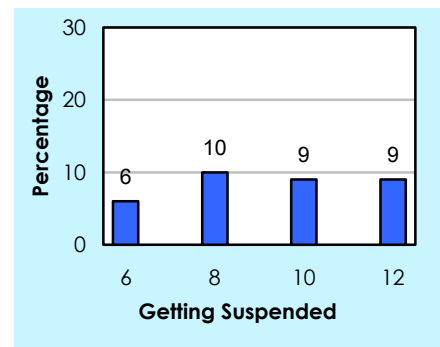
- Prevalence rates for *Carrying a Handgun* range from a low of 1.8% among 6th graders to a high of 4.1% among 8th graders.



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.

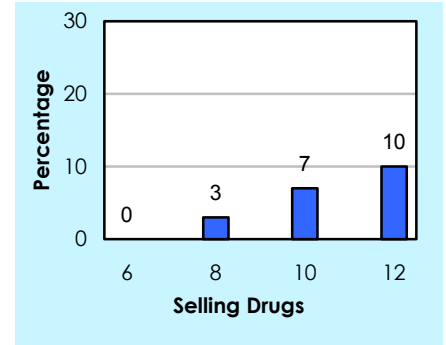
- Prevalence rates for *Getting Suspended* range from a low of 5.9% among 6th graders to a high of 10.2% among 8th graders.



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.”

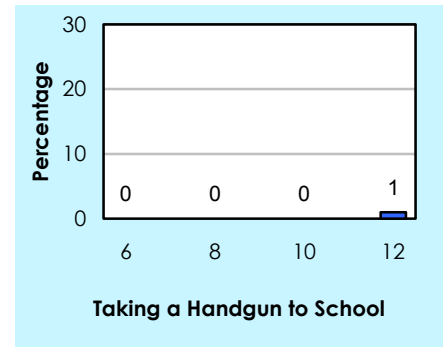
- Prevalence rates for *Selling Drugs* range from a low of 0.3% among 6th graders to a high of 9.6% among 12th graders.



Taking a Handgun to School

Taking a handgun to school is measured by the question “How many times in the past year (12 months) have you taken a handgun to school?”

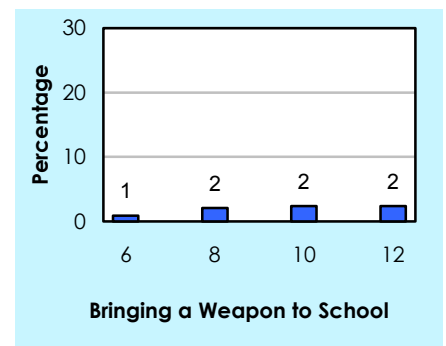
- Prevalence rates for *Taking a Handgun to School* are very low across all grade levels.



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 (Such as a Gun, Knife or Club) to School* range from a low of 0.9% among 6th graders to a high of 2.4% among 10th and 12th graders.
- In each grade level, a majority of students who reported bringing a weapon to school indicated that they had done so only “1 or 2 times” in the past 30 days.



Section 5

Special Topics

Introduction

For the 2001 study, Pennsylvania students were questioned on the following special topics: age of onset of ATOD use and other antisocial behavior, driving under the influence of alcohol or marijuana, knowledge of the physiological effects of ATOD use, willingness to try or use ATODs, and frequency of having been threatened or attacked at school. In addition to reporting results for the statewide sample, the analysis considers differences across demographic groups, historical trends, and regional variations within each topic.

Age of Onset of ATOD Use and Other Antisocial Behavior

Pennsylvania students were asked a series of 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, getting suspended from school, being arrested, carrying a handgun, attacking someone with intent to harm, and belonging to a gang.

As data presented in Tables 19 through 21 show, average age of onset for both ATOD use and other antisocial behaviors increases with grade level. The average age of onset for cigarette use, for example, increases from 10.5 years among 6th graders to 13.2 years among 12th graders. These results should not be interpreted as indicating that the current cohort of 6th graders began experimenting with tobacco at an earlier age than the current cohort of 12th graders. Rather, the average age of onset for each grade 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 Pennsylvania students first start using alcohol?” is best answered by examining the responses of 12th grade students because they can best reflect on their middle and high school experiences and accurately report the age they first started using drugs or engaging in other antisocial behaviors.

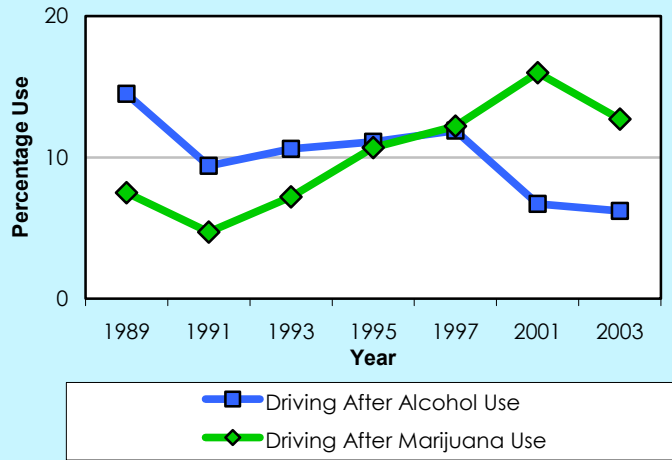
For the four ATOD categories, the earliest average age of onset reported by 12th graders was for cigarette use (13.2 years of age), followed by trying alcohol (13.9 years of age), marijuana use (14.5 years of age) and drinking alcohol regularly (15.4 years of age). For the five other antisocial behaviors, average age of onset reported by 12th graders ranges from 13.5 years of age for attacking someone with intent to harm to 14.8 years of age 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 meaningful difference between males and females, between African American and White students, across regions, and between the 2001 and 2003 surveys.

Driving After Alcohol or Marijuana Use

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 both items are presented in Table 22. As expected, given the age requirement for obtaining a driver's license, this rate increases dramatically once students reach the 12th grade. While only 0.4% of 6th graders, 1.8% of 8th graders and 4.1% of 10th graders reported the operation of a vehicle while under the influence of alcohol, more than one out of five high school seniors (21.4%) reported at least one drinking and driving incident. Results for driving after marijuana use show a similar pattern. Less than 1% of 6th graders, 1.5% of 8th graders and 4.3% of 10th graders report driving under the influence of marijuana, compared to 20.3% of 12th graders.

Graph 7. Percentage of 12th Graders Reporting Driving Under the Influence, Historical Trends



Male students reported a slightly higher rate than female students for both driving after alcohol use (7.6% versus 5.2%, respectively) and driving after marijuana use (7.4% versus 4.8%, respectively). White students were more likely than African American students to report both driving after alcohol use (6.6% versus 3.3%, respectively) and driving after marijuana use (6.2% versus 4.7%, respectively).

Male students reported a slightly higher rate than female students for both driving after alcohol use (7.6% versus 5.2%, respectively) and driving after marijuana use (7.4% versus 4.8%, respectively). White students were more likely than African American students to report both driving after alcohol use (6.6% versus 3.3%, respectively) and driving after marijuana use (6.2% versus 4.7%, respectively).

Trend data for driving under the influence are presented in Graph 7 and Table 27. Please note that in order to ensure comparability with the 1989 through 1997 statewide surveys, these results omit respondents who indicated that they do not drive. There has been an impressive reduction in the prevalence of drinking and driving among Pennsylvania students, with rates dropping from 14.5% in 1989 to 6.7% in 2001. In 2003, this positive trend continued, with a slight reduction to 6.2%. Driving under the influence of marijuana has shown the opposite pattern, with rates rising from a low of 4.7% in 1991 to a high of 16.0% in 2001. The latest results suggest that this dangerous pattern may be reversing. In 2003, 12.7% of Pennsylvania students reported smoking marijuana while driving, a 3.3 percentage-point reduction since 2001.

Knowledge of Physiological Effects of ATOD Use

Student knowledge of the physiological effects of ATOD use is tested with the following four items:

1. Nicotine is a chemical in cigarettes that makes smokers want to smoke more.
2. Inhalants cause lung damage.
3. If someone has just one drink of alcohol, it affects their coordination.
4. Smoking marijuana speeds up your heart rate.

As the data in Table 23 show, knowledge levels differ across the four substances. Strong majorities within each grade correctly recognize the physiological effects associated with cigarettes and inhalants. For cigarettes, correct response rates range from 81.4% among 6th graders to 95.1% among 12th graders. For

inhalants, correct response rates range from 69.6% among 6th graders to 88.6% among 12th graders. Understanding of physiological effect is notably lower for the other two items. For alcohol, correct response rates range from 39.9% among 6th graders to 67.4% among 12th graders. Just 32.2% of 6th graders, 44.4% of 8th graders, 44.5% of 10th graders and 42.1% of 12th graders correctly reported that smoking marijuana speeds up your heart rate.

Response patterns for males and females are close across all four measures. Knowledge differences between African American and White students, however, are noteworthy. Ninety percent of white students reported that nicotine is addictive, compared to 76.3% of African American students. The inhalants item yields a similar pattern, with 81.7% of White students indicating that inhalant use causes lung damage compared to 70.4% of African American students. While the knowledge gap is less pronounced for alcohol and marijuana, African American students were, again, less likely (between six and seven percentage points) to recognize the physiological effect of these drugs.

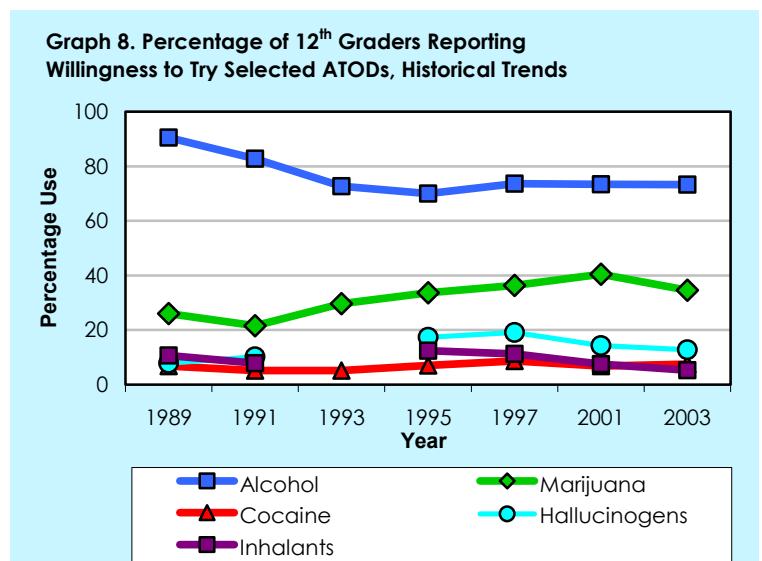
Data presented in Table 28 compare ATOD knowledge levels as measured in the 1997 *PPAAUS* and the 2001 and 2003 *PAYS*. While correct responses about the physiological effects of alcohol among 6th graders increased from 34.4% in 1997 to 39.0% in 2001, neither 6th nor 12th graders showed a substantial difference in alcohol knowledge levels between 2001 and 2003. Similarly, for marijuana knowledge, both grade levels failed to build on the notable improvements that were reported between 1997 and 2001. Knowledge of the addictive nature of nicotine, however, did increase among 6th graders, with the correct response rate rising from 74.1% in 2001 to 81.4% in 2003. For knowledge of the dangers of inhalants, Pennsylvania 12th graders built upon earlier improvements by increasing their correct response rate from 83.4% in 2001 to 88.6% in 2003. Knowledge of the dangers of inhalants among 6th graders increased between 1997 and 2001, but showed little change in 2003.

Changes in ATOD knowledge levels are summarized in Table 29. The mean number of correct answers for the four-question set posted by Pennsylvania 6th graders has gradually increased from 2.0 in 1997, 2.1 in 2001, to 2.2 in 2003. Mean scores for 12th graders show a similar pattern, increasing from 2.7 in 1997, 2.8 in 2001, to 2.9 in 2003.

For the most part, differences across geographic regions are minimal. The largest differences occurred for marijuana knowledge, which ranges from a low of 39.1% in northeast Pennsylvania (Region 3) to a high of 44.6% in northwest Pennsylvania (Region 1).

Willingness to Try or Use ATODs

In addition to current and past ATOD usage, Pennsylvania students were questioned regarding their willingness to try or use alcohol, marijuana, cocaine, hallucinogens and inhalants. As Tables 24 and 25 show, interest in alcohol use was by far the highest among the five substances. The number of students who 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” ranged from 17.7% among 6th graders to 73.3% among 12th graders. Pennsylvania students reported the second highest level of willingness for marijuana, with rates ranging from



2.0% among 6th graders to 34.6% among 12th graders. Interest in cocaine, hallucinogens and inhalants use was much lower, with 7.5%, 12.8% and 5.3% of 12th graders, respectively, reporting a willingness to try these drugs.

Overall, differences between male and female students' willingness to try or use ATODs are minimal. The largest difference occurs for alcohol use, where 50.7% of female students reported a willingness to use compared to 47.1% of male students. With the exception of one category, differences between African American and White students are also minimal. Slightly more than half of White students (50.1%) reported willingness to try or use alcohol, compared to 32.9% of African American students.

Trend data for student willingness to try ATODs are presented in Table 30 and Graph 8. For 6th graders, the only clear pattern is the remarkable reduction in willingness to try alcohol, which has declined from a high of 60.2% in 1989 to lows of 17.5% and 17.7% in 2001 and 2003. The trend pattern for high school seniors is more complex. Willingness to try or use alcohol dropped from a high of 90.5% in 1989 to 70.0% in 1995, before leveling off in the low 70s through 2003. Mirroring the prevalence-of-use pattern reported in Table 8, willingness to try or use marijuana increased from a low of 21.6% in 1991 to a high of 40.5% in 2001, before decreasing to 34.6% in 2003. Willingness to use hallucinogens and inhalants peaked in 1995 or 1997, before declining through 2003. Interest in cocaine use among 12th graders has remained in the five to nine percent range throughout the trend period.

For the most part, differences across geographic regions are minimal. The largest differences occur for willingness to try marijuana and alcohol, which range from lows of 17.4% and 46.8% in south central Pennsylvania (Region 5) to highs of 21.5% and 50.6% in northeast Pennsylvania (Region 3).

Threatened or Attacked 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. Of the four categories presented in Table 26, Pennsylvania students were most likely to report having "been threatened to be hit or beaten up," with rates ranging from highs of 30.5% and 27.2% among 8th and 10th graders, to lows of 21.9% and 17.9% among 6th and 12th graders. Reports of actually having "been attacked and hit by someone, or beaten up" are lower, with rates ranging from 6.0% among 12th graders to 11.9% among 8th graders. Fortunately, reports of threats and attacks using weapons on school property are much lower. Eighth graders reported the highest rates for both having "been threatened by someone with a weapon" (6.2%) and having "been attacked by someone with a weapon" (2.7%).

Not surprisingly, differences between male and female students are pronounced on these measures. Male students are nearly twice as likely as female students (32.2% versus 17.6%, respectively) to report having "been threatened to be hit or beaten up," and nearly three times more likely (14.1% versus 5.1%, respectively) to report having "been attacked and hit by someone, or beaten up." While differences between African American students and White students are small, African American students do report slightly higher rates of threats and attacks involving weapons, though the prevalence of these two behaviors are low for both groups. Differences across geographic regions are minimal.

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 and 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). See Appendix D for a matrix showing the relationship between specific risk factors and specific categories of adolescent problem behavior.

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 and Pandina, 1982; Newcomb, Maddahian and Skager, 1987; Newcomb and 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. It 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 et al., 1992). The Social Development Strategy is a theoretical framework that organizes risk and protective factors for adolescent problem behavior prevention (see Appendix E).

Measurement

The *Communities That Care*[®] *Youth Survey* 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. Because they are very broad, some risk factors are measured by multiple scales. For example, “Poor Family Management” is a single risk factor, but it is measured by two risk factor scales: “Poor Family Supervision” and “Poor Family Discipline.” In total, 16 risk factors are measured by 22 risk factor scales, while each of the nine protective factors is measured by a single protective factor scale.

Risk and protective factor scales are scored against the *Communities That Care*[®] normative database, which includes data from a larger pool of students in several states. A student’s risk or protective factor scale score is expressed as a number ranging from 0 to 100. A score of 50, which matches the median for the normative database, indicates that 50% of the respondents in this comparative sample reported a higher score and 50% reported a lower score. Similarly, a score of 75 indicates that 25% of the comparative sample reported a higher score and 75% reported a lower 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.

Overall Results

Comparisons Across Risk and Protective Factors

Tables 33 through 40 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.

Tables 31 and 32 summarize these findings by presenting the risk and protective factor scales with the lowest and highest scores for each surveyed grade. Pennsylvania 6th graders, for example, reported the highest scores for the following risk factor scales: *Personal Transitions and Mobility* (56), *Community Disorganization* (47) and *Gang Involvement* (46). While policies that target any risk factor could potentially be an important resource, the high scores on these scales suggest that directing prevention programming in these areas could be especially beneficial. Sixth grade respondents reported the lowest scores for the following risk factor scales: *Perceived Availability of Drugs and Handguns* (17), *Friends’ Use of Drugs* (23) and *Favorable Attitudes toward ATOD Use* (23). The low scores in these areas represent strengths that communities in Pennsylvania can build on.

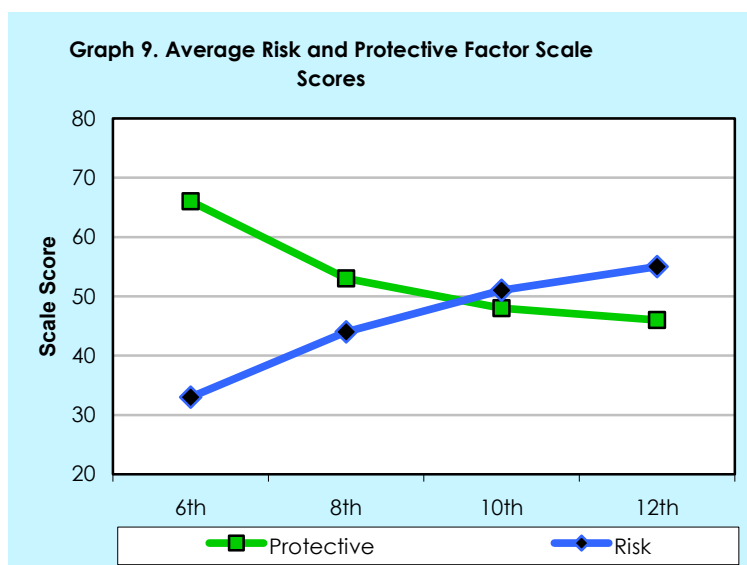
While it is important for prevention planners to examine the risk and protective factor profile within each grade level, patterns that emerge across age groups can also help guide policy decisions. Key developmental strengths and weaknesses, for example, are shared by many Pennsylvania students. Protective factor scale scores for *Belief in the Moral Order* are among the highest across all four surveyed grades, while scores for both *Community Rewards for Prosocial Involvement* and *School Rewards for Prosocial Involvement* are among the lowest across grade levels. Similarly, risk factor scales that measure attitudes that are supportive of drug use—*Favorable Attitudes toward ATOD Use* and *Low Perceived Risks of Drug Use*—are suppressed across grade levels, while scores for *Community Disorganization* are among the highest reported by 6th, 8th and 10th graders.

In contrast, other components of Pennsylvania’s risk and protective factor profile show substantial differences across age groups. Protective factor scale scores for both *Religiosity* and *School Opportunities for Prosocial Involvement* shift from being among the lowest for 6th graders to being among the highest for 8th, 10th and 12th graders, while scores for *Social Skills* shift from being among the highest for 6th graders to being among the lowest for 12th graders. Similarly, the risk factor scale *Personal Transitions and Mobility* shifts from being among the highest for 6th and 8th graders to being among the lowest for 12th graders, while *Friends’ Use of Drugs* shifts from being among the lowest for 6th graders to among the highest for 12th graders.

Comparisons Across Grade Levels

An overall picture of how risk and protective factor scales change across grade levels is provided by examining average risk and protective factor scale scores reported by Pennsylvania students. These results are presented in the bottom data rows of Tables 33 through 40 and in Graph 9.

As Graph 9 shows, most protective factor scale scores decrease as students enter higher grade levels. The average score across all nine protective factor scales ranges from a high of 66 among 6th graders to a low of 46 among 12th graders. Risk factor scale scores present the opposite pattern, with scale scores increasing as students enter higher grades. The average score across all 22 risk factor scales ranges from a low of 33 among 6th graders to a high of 55 among 12th graders.



2001–2003 Changes

Changes in Pennsylvania’s risk and protective factor profile from 2001 to 2003 can be summarized by comparing the average protective factor scale score within each grade level. As the bottom data rows of Tables 33 through 40 show, there was little or no difference in average scores between years. In 2003, 8th graders reported an average protective factor scale score of 53, just one point below the average score for 2001. Sixth, 10th and 12th graders reported the same average protective factor scales scores in 2001 and 2003. For risk factors, 6th, 10th and 12th graders reported average risk factor scale scores in 2003 that are one point below the 2001 averages. Eighth graders reported the same average risk factor in both 2003 and 2001.

In contrast to the average scores across risk and protective factor scales, scores for several individual scales shifted substantially between 2001 and 2003. Some of these changes were positive (protection levels increased or risk levels decreased) and some were negative (protection levels decreased or risk levels increased). In particular:

- Scores on the *Belief in the Moral Order* scale increased seven and eight points among 10th and 12th graders, respectively.
- Scores on the *Community Disorganization* scale increased seven points among 8th and 12th graders and nine points among 10th graders.
- Scores on the *Personal Transitions and Mobility* scale increased between eight and 10 points within each grade level.
- Scores on the *Favorable Attitudes toward Antisocial Behavior* scale decreased between four and seven points within each grade level.
- Scores on the *Sensation Seeking* scale decreased six points among 10th and 12th graders.

Regional Differences

As the average scores presented in the bottom data rows of Tables 33 through 40 show, overall differences in the risk and protective factor profiles across Pennsylvania's six geographic regions are modest. For example, the average protective factor score reported by 8th graders ranges from a low of 52 among northeast Pennsylvania (Region 3) students to a high of 55 among south central Pennsylvania (Region 5) students.

Despite these relatively small differences, a pattern of regional weakness and strength does appear. Northeast Pennsylvania (Region 3) appears the most vulnerable. Within each of the four surveyed grades, students from northeast Pennsylvania (Region 3) reported the lowest (or one of the lowest) average protective factor scores, as well as the highest (or one of the highest) average risk factor scores.

In contrast, northwest Pennsylvania (Region 1), south central Pennsylvania (Region 5) and southeast Pennsylvania (Region 6) appear the least vulnerable. Students from northwest Pennsylvania (Region 1) and south central Pennsylvania (Region 5) reported the highest (or one of the highest) average protective factor scores, while students from southeast Pennsylvania (Region 6) reported the lowest (or one of the lowest) average risk factor scores. Some of the most pronounced examples of these regional differences include:

- The protective factor scale *Family Rewards for Prosocial Involvement* among 10th graders, which ranges from a low of 42 among northeast Pennsylvania (Region 3) students to a high of 52 among northwest Pennsylvania (Region 1) students.
- The protective factor scale *Religiosity* among 12th graders, which ranges from a low of 44 among northeast Pennsylvania (Region 3) students to a high of 53 among southwest Pennsylvania (Region 4) students.
- The risk factor scale *Poor Family Discipline* among 10th graders, which ranges from a low of 49 among south central Pennsylvania (Region 5) students to a high of 61 among northeast Pennsylvania (Region 3) students.
- The risk factor scale *Community Disorganization* among 10th graders, which ranges from a low 53 among southeast Pennsylvania (Region 6) students to a high of 63 among northeast Pennsylvania (Region 3) students.

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.

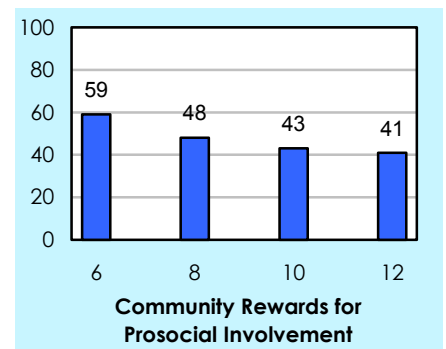
The *Communities That Care*[®] Youth Survey measures a variety of protective factor scales across four domains: Community Domain, Family Domain, School Domain, and Peer and Individual Domain. Unlike some risk factors, each of the protective factors is measured using a single protective factor scale. Below, each protective factor scale is described and the results for Pennsylvania are reported.

Community Rewards for Prosocial Involvement

Students who feel recognized and rewarded by members of their community are less likely to engage in negative behaviors, because that recognition helps increase a student's self-esteem and the feeling of being bonded to that community. This protective factor is measured using the *Community Rewards for Prosocial Involvement* scale.

The protective factor **Community Rewards for Prosocial Involvement** is measured by a single scale using survey items such as "There are people in my neighborhood who are proud of me when I do something well."

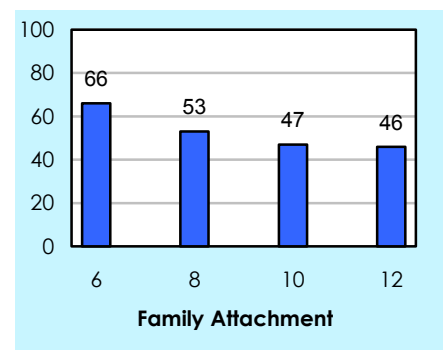
- Scores for *Community Rewards for Prosocial Involvement* range from a high of 59 among 6th graders to a low of 41 among 12th graders.
- Within each surveyed grade, *Community Rewards for Prosocial Involvement* is among the lowest protective factor scale scores reported by Pennsylvania students.
- Scores on the *Community Rewards for Prosocial Involvement* scale declined slightly between 2001 and 2003. Most notably, 10th and 12th graders reported scores that are three points lower in 2003.



Family Attachment

One of the most effective ways to reduce the risk of problem behaviors among young people is to help strengthen their bonds with family members who embody healthy beliefs and clear standards. Children who are bonded to family members who have healthy beliefs are less likely to do things that threaten that bond, such as use drugs, commit crimes or drop out of school. Positive bonding can act as a buffer against risk factors. 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.

The protective factor **Family Attachment** is measured by a single



scale using survey items such as “Do you share your thoughts and feelings with your mother?”

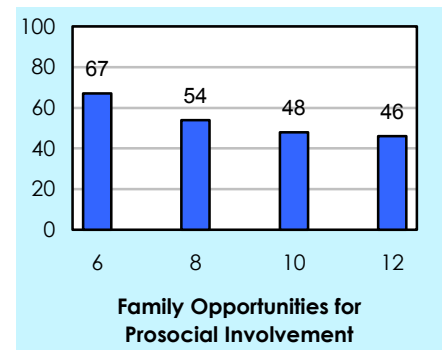
- Scores for *Family Attachment* range from a high of 66 among 6th graders to a low of 46 among 12th graders.
- In the 8th and 10th grades, *Family Attachment* is among the lowest protective factor scale scores reported by Pennsylvania students.
- Scores on the *Family Attachment* scale declined slightly between 2001 and 2003. Most notably, 6th and 8th graders reported scores that are two points lower in 2003.

Family Opportunities for Prosocial Involvement

When students have the opportunity to make meaningful contributions to their families, they are less likely to get involved in risky behaviors. By having the opportunity to make a contribution, students feel as if they’re an integral part of their families. These strong bonds allow students to adopt the family norms, which can protect students from risk. For instance, children whose parents have high expectations for their school success and achievement are less likely to drop out of school.

The protective factor **Family Opportunities for Prosocial Involvement** is measured by a single scale using survey items such as “My parents ask me what I think before most family decisions affecting me are made.”

- Scores for *Family Opportunities for Prosocial Involvement* range from a high of 67 among 6th graders to a low of 46 among 12th graders.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Family Opportunities for Prosocial Involvement*, with the only change occurring among 6th and 8th graders, who reported scores that are one point lower in 2003.

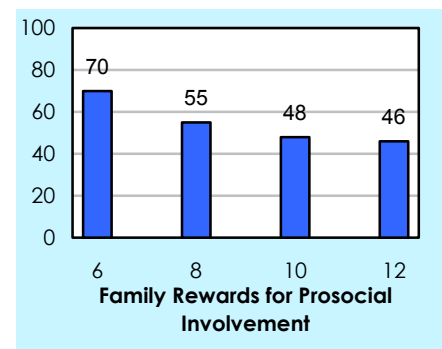


Family Rewards for Prosocial Involvement

When family members reward their children for positive participation in activities, it helps children feel motivated to contribute and stay involved with the family, thus reducing their risk for problem behaviors. When families promote clear standards for behavior, and when young people consequently develop strong bonds of attachment and commitment to their families, young people’s behavior becomes consistent with those standards.

The protective factor **Family Rewards for Prosocial Involvement** is measured by a single scale using survey items such as “How often do your parents tell you they’re proud of you for something you’ve done?”

- Scores for *Family Rewards for Prosocial Involvement* range from a high of 70 among 6th graders to a low of 46 among 12th graders.
- In the 6th and 8th grades, *Family Rewards for Prosocial Involvement* is among the highest protective factor scale scores reported by Pennsylvania students.

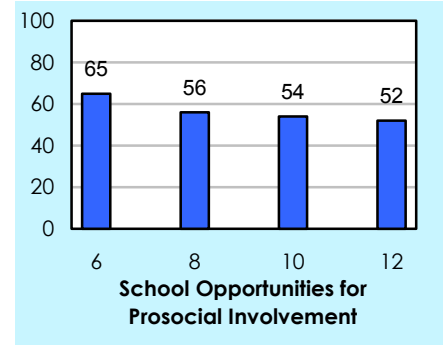


- Between 2001 and 2003, Pennsylvania students reported little difference in *Family Rewards for Prosocial Involvement*, with the only change occurring among 8th graders, who reported a score that is two points lower in 2003.

School Opportunities for Prosocial Involvement

Giving students opportunities to participate in important activities at school helps to reduce the likelihood that they will become involved in problem behaviors. Students who feel they have opportunities to be involved are more likely to contribute to school activity. This bond can protect a student from engaging in behaviors that violate socially accepted standards.

The protective factor **School Opportunities for Prosocial Involvement** is measured by a single scale using survey items such as “In my school, students have lots of chances to help decide things like class activities and rules.”

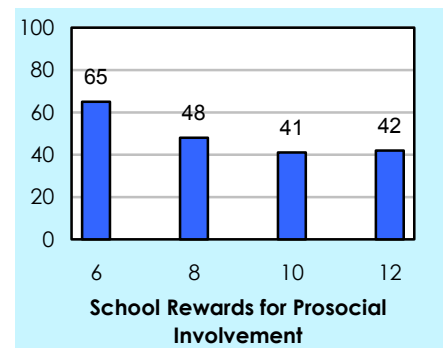


- Scores for *School Opportunities for Prosocial Involvement* range from a high of 65 among 6th graders to a low of 52 among 12th graders.
- In the 6th grade, *School Opportunities for Prosocial Involvement* is among the lowest protective factor scale scores reported by Pennsylvania students, while in the 8th, 10th and 12th grades, it is among the highest protective factor scale scores.
- Between 2001 and 2003, Pennsylvania students reported little difference in *School Opportunities for Prosocial Involvement*, with the largest change occurring among 6th graders, who reported a score that is one point higher in 2003, and among 8th and 12th graders, who reported scores that are one point lower in 2003.

School Rewards for Prosocial Involvement

Making students feel appreciated and rewarded for their involvement at school helps reduce the likelihood of their involvement in drug use and other problem behaviors. This is because students who feel appreciated for their activity at school bond to their school.

The protective factor **School Rewards for Prosocial Involvement** is measured by a single scale using survey items such as “The school lets my parents know when I have done something well.”



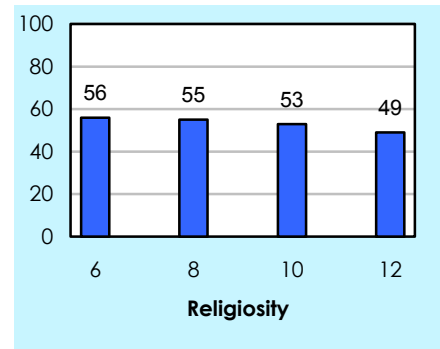
- Scores for *School Rewards for Prosocial Involvement* range from a high of 65 among 6th graders to a low of 41 among 10th graders.
- Within each surveyed grade, *School Rewards for Prosocial Involvement* is among the lowest protective factor scale scores reported by Pennsylvania students.
- Between 2001 and 2003, Pennsylvania students reported little difference in *School Rewards for Prosocial Involvement*, with the only change occurring among 6th graders, who reported a score that is three points higher in 2003. Scores for 8th, 10th and 12th graders were unchanged.

Religiosity

Religious institutions can help students develop firm prosocial beliefs. Students who have high levels of religious connection are less vulnerable to becoming involved in antisocial behaviors, because they have already adopted a social norm against those activities.

The protective factor **Religiosity** is measured by a single scale using the survey item “How often do you attend religious services or activities?”

- Scores for *Religiosity* range from a high of 56 among 6th graders to a low of 49 among 12th graders.
- In the 6th grade, *Religiosity* is the lowest protective factor scale score reported by Pennsylvania students, while in the 8th, 10th and 12th grades, it is among the highest protective factor scale scores.
- Scores on the *Religiosity* scale declined slightly between 2001 and 2003. Most notably, 6th and 8th graders reported scores that are three points lower in 2003.

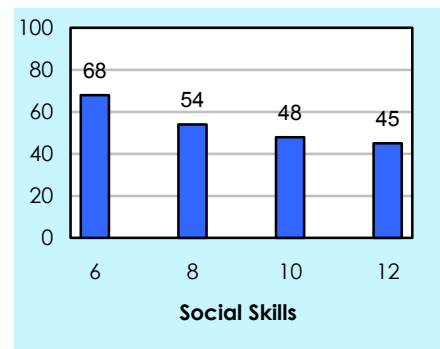


Social Skills

Students who have developed a high level of social skills are more likely to do well interacting with others, and will find these interactions rewarding. If they are skilled at avoiding trouble, they are less likely to engage in problem behaviors, such as drug use.

The protective factor **Social Skills** is measured by presenting students with a series of scenarios and giving them four possible responses to each scenario. The following is one scenario on the survey: “You are visiting another part of town, and you don’t know any of the people your age there. You are walking down the street, and some teenager you don’t know is walking toward you. He is about your size, and as he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you do or say?”

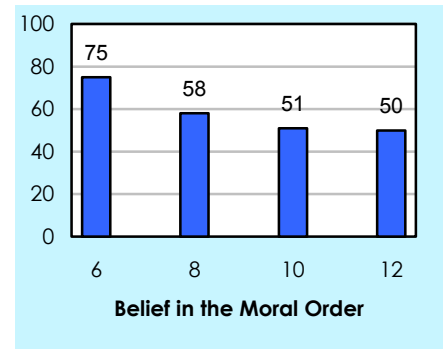
- Scores for *Social Skills* range from a high of 68 among 6th graders to a low of 45 among 12th graders.
- In the 6th grade, *Social Skills* is among the highest protective factor scale scores reported by Pennsylvania students, while in the 12th grade it is among the lowest protective factor scale scores.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Social Skills*, with the largest change occurring among 8th graders, who reported a score that is two points lower in 2003.



Belief in the Moral Order

When people feel bonded to society, they are more motivated to follow society's standards and expectations. It is important for families, schools and communities to have clearly stated policies on drug use. Young people who have developed a positive belief system are less likely to become involved in problem behaviors. For example, young people who believe that drug use is socially unacceptable or harmful are likely to be protected against peer influences to use drugs.

The protective factor **Belief in the Moral Order** is measured by a single scale using survey items such as "It is all right to beat up people if they start the fight."



- Scores for *Belief in the Moral Order* range from a high of 75 among 6th graders to a low of 50 among 12th graders.
- Within each surveyed grade, *Belief in the Moral Order* is among the highest protective factor scale scores reported by Pennsylvania students.
- Scores on the *Belief in the Moral Order* scale increased substantially between 2001 and 2003. In particular, the score for 12th graders is eight points higher in 2003.

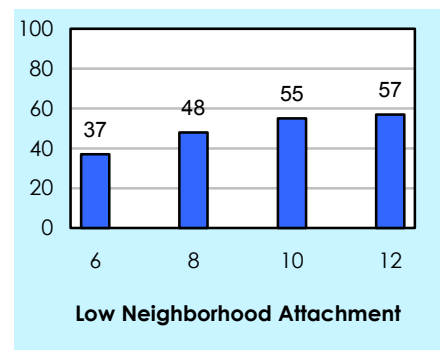
Risk Factors

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.

The *Communities That Care*[®] *Youth Survey* measures a variety of risk factor scales across four major domains. On the following pages, each of the risk factor scales measured in the Community, Family, School, and Peer and Individual Domains is described and the results for Pennsylvania are reported.

Low Neighborhood Attachment

Higher rates of drug usage, delinquency and violence occur in communities or neighborhoods where people feel little attachment to the community. This situation is not specific to low-income neighborhoods. It also can be found in affluent neighborhoods. Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in their lives. If the key players in the neighborhood—such as merchants, teachers, clergy, police and human 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 was developed to measure a component of the risk factor **Low Neighborhood Attachment and Community Disorganization**. This scale is measured by survey 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."

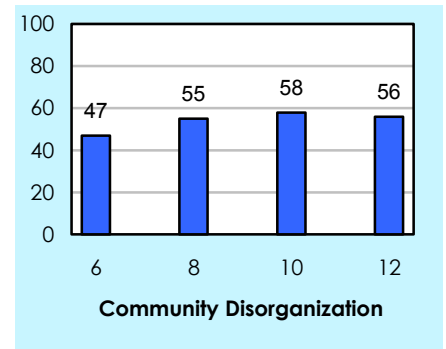
- Scores for *Low Neighborhood Attachment* range from a low of 37 among 6th graders to a high of 57 among 12th graders.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Low Neighborhood Attachment*, with the largest change occurring among 6th graders who reported a score that is two points lower in 2003, and among 10th graders who reported a score that is two points higher in 2003.

Community Disorganization

The *Community Disorganization* scale pertains to students' perceptions of their communities' appearance and other external attributes.

The *Community Disorganization* scale was developed to measure a component of the risk factor **Low Neighborhood Attachment and Community Disorganization**. This scale is measured by several survey items that would indicate a neighborhood in disarray (e.g., the existence of graffiti, abandoned buildings, fighting and drug selling) as well as the item "I feel safe in my neighborhood."

- Scores for *Community Disorganization* range from a low of 47 among 6th graders to a high of 58 among 10th graders, before decreasing slightly to 56 among 12th graders.
- In the 6th, 8th and 10th grades, *Community Disorganization* is among the highest risk factor scale scores reported by Pennsylvania students.
- Scores on the *Community Disorganization* scale increased substantially between 2001 and 2003. In particular, 10th graders reported a score that is nine points higher in 2003.

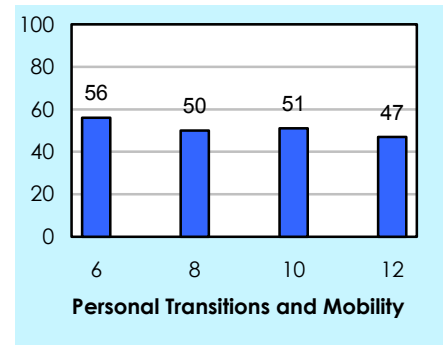


Personal Transitions and Mobility

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 new environments, students no longer have the bonds they had in their old environments. Consequently, students may be less likely to become attached to their new environments and develop the bonds that help protect them from involvement in problem behaviors.

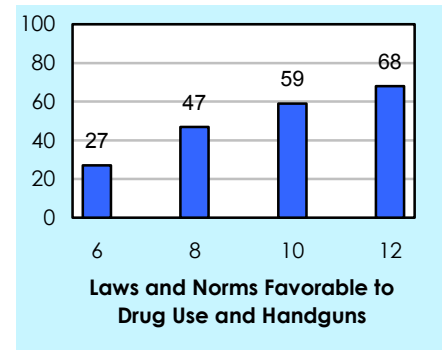
Personal Transitions and Mobility measures how often the student has changed homes or schools in the past year and since kindergarten. The *Personal Transitions and Mobility* scale was developed to measure a component of the risk factor **Transitions and Mobility**. This scale is measured by survey items such as "How many times have you changed schools since kindergarten?" and "How many times have you changed homes since kindergarten?"

- While risk factor levels generally increase in higher grade levels, scores for *Personal Transitions and Mobility* decline from a high of 56 among 6th graders to a low of 47 among 12th graders.
- In the 6th and 8th grades, *Personal Transitions and Mobility* is among the highest risk factor scale scores reported by Pennsylvania students, while in the 12th grade it is among the lowest risk factor scale scores.
- Scores on the *Personal Transitions and Mobility* scale increased substantially between 2001 and 2003. In particular, 8th and 10th graders reported scores that are 10 points higher in 2003.



Laws and Norms Favorable to Drug Use and Handguns

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 community-level anti-drug message can have.

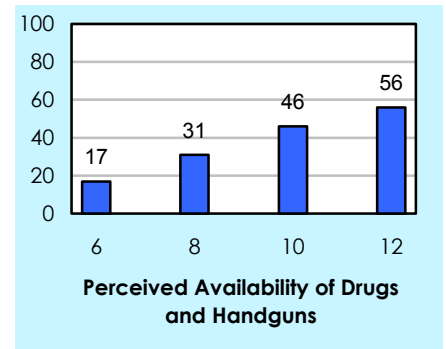
The *Laws and Norms Favorable to Drug Use and Handguns* scale was developed to measure a component of the risk factor **Community Laws and Norms Favorable toward Drug Use, Firearms and Crime**. This scale is measured by survey items such as “How wrong would most adults in your neighborhood think it was 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?”

- Scores for *Laws and Norms Favorable to Drug Use and Handguns* range from a low of 27 among 6th graders to a high of 68 among 12th graders.
- In the 10th and 12th grades, *Laws and Norms Favorable to Drug Use and Handguns* is the highest risk factor scale score reported by Pennsylvania students.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Laws and Norms Favorable to Drug Use and Handguns*, with the largest change occurring among 8th and 12th graders, who reported scores that are two points higher in 2003.

Perceived Availability of Drugs and Handguns

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

The *Perceived Availability of Drugs and Handguns* scale on the survey is designed to assess students' feelings about how easily they can get alcohol, other drugs, or handguns. This scale represents a combination of two risk factors: **Availability of Drugs** and **Availability of Handguns**. This scale is measured by survey items such as "If you wanted to get some marijuana, how easy would it be for you to get some?"



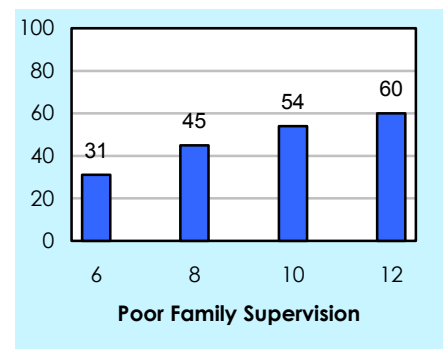
Elevation of this risk factor scale score may indicate the need to make alcohol, tobacco and other drugs more difficult for students to acquire. For instance, a number of policy changes have been shown to reduce the availability of alcohol and cigarettes. Minimum-age requirements, taxation and responsible beverage service have all been shown to affect the perception of availability of alcohol.

- Scores for *Perceived Availability of Drugs and Handguns* range from a low of 17 among 6th graders to a high of 56 among 12th graders.
- In the 6th and 8th grades, *Perceived Availability of Drugs and Handguns* is the lowest risk factor scale reported by Pennsylvania students.
- In 2003, Pennsylvania 8th graders reported an average score on the *Perceived Availability of Drugs and Handguns* scale that is one point higher, and 10th and 12th graders reported a score that is one point lower, compared to results from the 2001 survey.

Poor Family Supervision

Poor family supervision is defined as parents failing to supervise and monitor their children (knowing where they are and whom they're with). Children who experience poor family supervision are at higher risk of developing problems with drug use, delinquency, violence and school dropout.

The *Poor Family Supervision* scale was developed to measure a component of the risk factor **Family Management Problems**. This scale is measured by survey items such as "Would your parents know if you did not come home on time?"



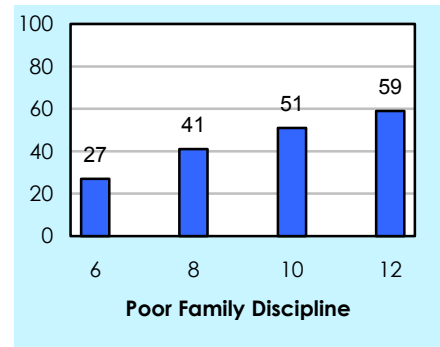
- Scores for *Poor Family Supervision* range from a low of 31 among 6th graders to a high of 60 among 12th graders.
- In the 12th grade, *Poor Family Supervision* is among the highest risk factor scale scores reported by Pennsylvania students.
- Scores on the *Poor Family Supervision* scale declined slightly between 2001 and 2003. Most notably, 6th graders reported a score that is three points lower in 2003.

Poor Family Discipline

Poor family discipline is defined as parents failing to communicate clear expectations for behavior and giving excessively severe, harsh or inconsistent punishment. Children exposed to poor family disciplinary practices are at higher risk of developing problems with drug use, delinquency, violence and school dropout.

The *Poor Family Discipline* scale was developed to measure a component of the risk factor **Family Management Problems**. This scale is measured by survey items such as “Would your parents know if you did not come home on time?” and “My family has clear rules about alcohol and drug use.”

- Scores for *Poor Family Discipline* range from a low of 27 among 6th graders to a high of 59 among 12th graders.
- Scores on the *Poor Family Discipline* scale remained the same or declined slightly between 2001 and 2003. Most notably, 12th graders reported a score that is three points lower in 2003.

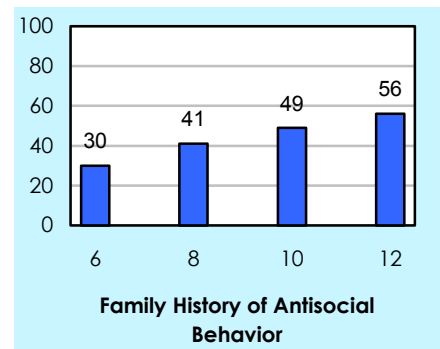


Family History of Antisocial Behavior

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 is present, their risk for delinquency increases. Similarly, children who are born to teenage mothers 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.

The *Family History of Antisocial Behavior* scale was developed to measure a component of the risk factor **Family History of the Problem Behavior**. This scale is measured by survey items such as “Has anyone in your family ever had a severe alcohol or drug problem?”

- Scores for *Family History of Antisocial Behavior* range from a low of 30 among 6th graders to a high of 56 among 12th graders.
- Scores on the *Family History of Antisocial Behavior* scale increased between 2001 and 2003. Most notably, 6th and 8th graders reported scores that are four points higher in 2003.

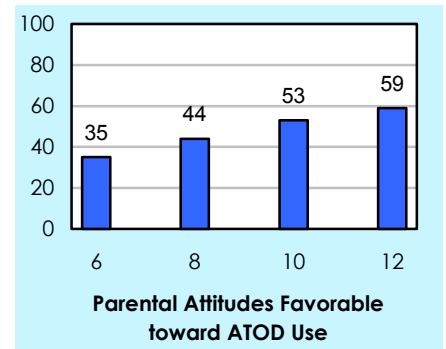


Parental Attitudes Favorable toward ATOD Use

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.

The *Parental Attitudes Favorable toward ATOD Use* scale was developed to measure a component of the risk factor **Favorable Parental Attitudes and Involvement in the Problem Behavior**. This scale is measured by survey items such as "How wrong do your parents feel it would be for you to smoke marijuana?"

- Scores for *Parental Attitudes Favorable toward ATOD Use* range from a low of 35 among 6th graders to a high of 59 among 12th graders.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Parental Attitudes Favorable toward ATOD Use*, with the largest change occurring among 10th graders who reported a score that is two points higher in 2003 and among 12th graders who reported a score that is two points lower in 2003.

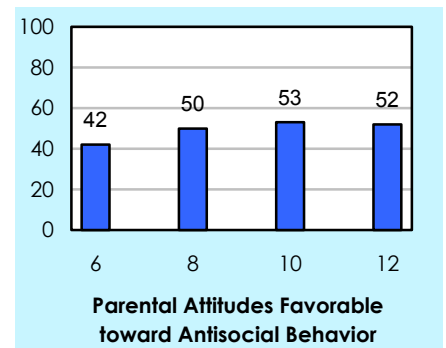


Parental Attitudes Favorable toward Antisocial Behavior

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.

The *Parental Attitudes Favorable toward Antisocial Behavior* scale was developed to measure a component of the risk factor **Favorable Parental Attitudes and Involvement in the Problem Behavior**. This scale is measured by survey items such as "How wrong do your parents feel it would be for you to pick a fight with someone?"

- Scores for *Parental Attitudes Favorable toward Antisocial Behavior* range from a low of 42 among 6th graders to highs of 53 and 52 among 10th and 12th graders, respectively.
- In the 8th grade, *Parental Attitudes Favorable toward Antisocial Behavior* is among the highest risk factor scale scores reported by Pennsylvania students.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Parental Attitudes Favorable toward Antisocial Behavior*, with the largest change occurring among 8th graders who reported a score that is two points higher in 2003.

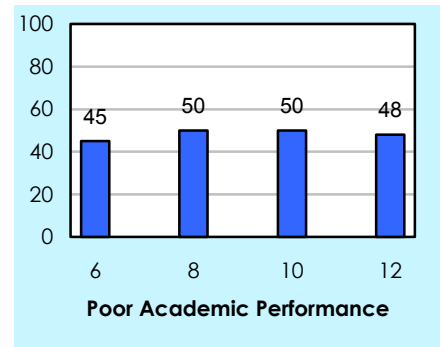


Poor Academic Performance

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.

The *Poor Academic Performance* scale was developed to measure a component of the risk factor **Academic Failure Beginning in Late Elementary School**. This scale is measured by the survey items “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 not only do students believe that they have lower grades than they might expect to get, but also that they perceive that compared to their peers they have below-average grades.

- Scores for *Poor Academic Performance* increase from a low of 45 among 6th graders to a high of 50 among 8th and 10th graders, before decreasing slightly to 48 among 12th graders.
- In the 8th grade, *Poor Academic Performance* is among the highest risk factor scale scores reported by Pennsylvania students.
- Scores on the *Poor Academic Performance* scale remained the same or declined slightly between 2001 and 2003. Most notably, 12th graders reported a score that is three points lower in 2003.

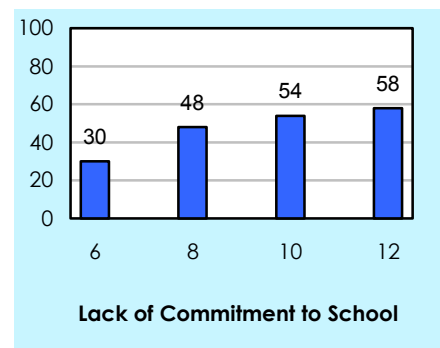


Lack of Commitment to School

Lack of Commitment to School assesses a student’s general feelings about his or her schooling. Elevated findings for this risk factor scale can suggest that students feel less attached to, or connected with, their classes and school environment. 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.

The risk factor **Lack of Commitment to School** is measured by a single scale using survey items such as “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?”

- Scores for *Lack of Commitment to School* range from a low of 30 among 6th graders to a high of 58 among 12th graders.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Lack of Commitment to School*, with the largest change occurring among 6th graders who reported a score that is two points lower in 2003.

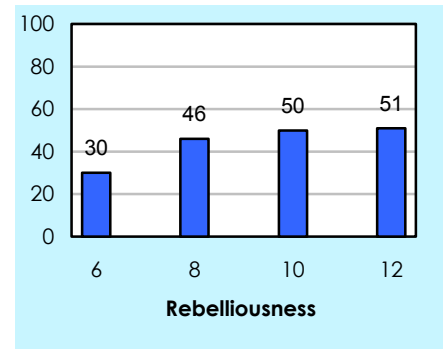


Rebelliousness

The survey also determines 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.

The risk factor **Rebelliousness** is measured by a single scale using survey items such as "I ignore the rules that get in my way."

- Scores for *Rebelliousness* range from a low of 30 among 6th graders to a high of 51 among 12th graders.
- Scores on the *Rebelliousness* scale decreased between 2001 and 2003. Most notably, 6th graders reported a score that is six points lower in 2003.

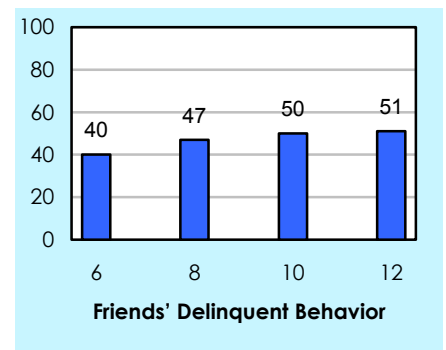


Friends' Delinquent Behavior

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.

The *Friends' Delinquent Behavior* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "In the past year, how many of your four best friends have been suspended from school?" Elevated scores may indicate that students are interacting with more antisocial peers than average. Low scores may indicate that students are interacting with fewer antisocial peers than average.

- Scores for *Friends' Delinquent Behavior* range from a low of 40 among 6th graders to a high of 51 among 12th graders.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Friends' Delinquent Behavior*, with the largest change occurring among 12th graders who reported a score that is three points lower in 2003.

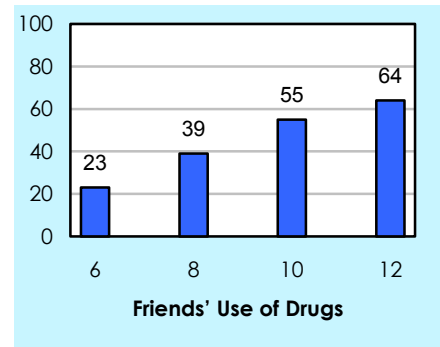


Friends' Use of Drugs

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.

The *Friends' Use of Drugs* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "In the past year, how many of your best friends have used marijuana?"

- Scores for *Friends' Use of Drugs* range from a low of 23 among 6th graders to a high of 64 among 12th graders.
- In the 6th grade, *Friends' Use of Drugs* is among the lowest risk factor scale scores reported by Pennsylvania students, while in the 12th grade it is among the highest risk factor scale scores.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Friends' Use of Drugs*, with the largest change occurring among 12th graders who reported a score that is two points lower in 2003.

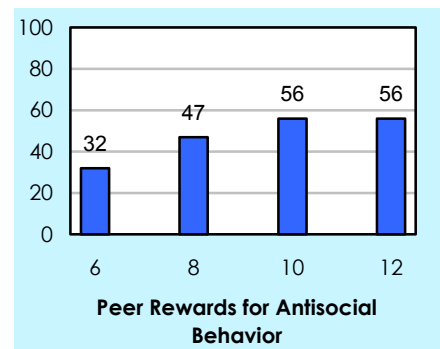


Peer Rewards for Antisocial Behavior

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behavior. When students feel that they get positive feedback from their peers for using alcohol, tobacco or other drugs, or getting involved in delinquent behaviors, they are more likely to engage in these behaviors. When young people believe that their peer groups are involved in antisocial behaviors, they are more likely to become involved in antisocial behaviors themselves.

The *Peer Rewards for Antisocial Behavior* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "What are the chances you would be seen as cool if you smoked marijuana?"

- Scores for *Peer Rewards for Antisocial Behavior* range from a low of 32 among 6th graders to a high of 56 among 10th and 12th graders.
- In the 10th grade, *Peer Rewards for Antisocial Behavior* is among the highest risk factor scale scores reported by Pennsylvania students.
- Scores on the *Peer Rewards for Antisocial Behavior* scale increased slightly between 2001 and 2003. Most notably, 12th graders reported a score that is three points higher in 2003.

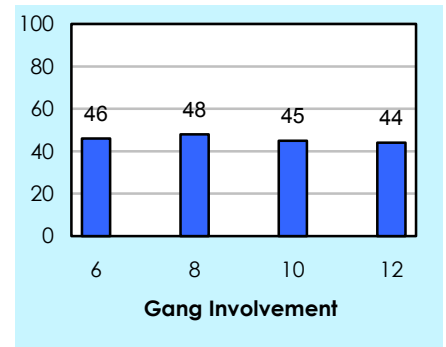


Gang Involvement

The risk factor **Gang Involvement** measures individual and peer participation in gangs. 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.

The risk factor **Gang Involvement** is measured by a single scale using survey items such as “Have you ever belonged to a gang?” and “Think of your four best friends: In the past year, how many of your best friends have been members of a gang?”

- Unlike most risk factor scales, scores for *Gang Involvement* show little change across grade levels, ranging from a high of 48 among 8th graders to a low of 44 among 12th graders.
- In the 6th grade, *Gang Involvement* is among the highest risk factor scale scores reported by Pennsylvania students, while in the 10th and 12th grades it is among the lowest risk factor scale scores.
- Between 2001 and 2003, Pennsylvania students reported little difference in *Gang Involvement*, with the largest change occurring among 8th graders who reported a score that is two points higher in 2003.

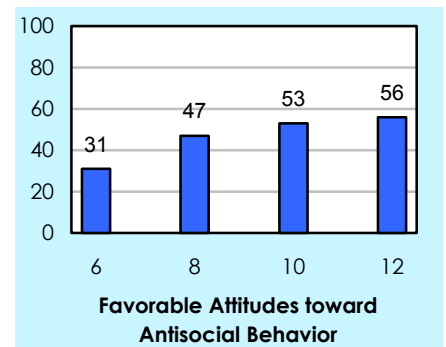


Favorable Attitudes toward Antisocial Behavior

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 begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This acceptance places them at higher risk for antisocial behaviors.

The *Favorable Attitudes toward Antisocial Behavior* scale was developed to measure a component of the risk factor **Favorable Attitudes toward the Problem Behavior**. This scale is measured by survey items such as “How wrong do you think it is for someone your age to pick a fight with someone?”

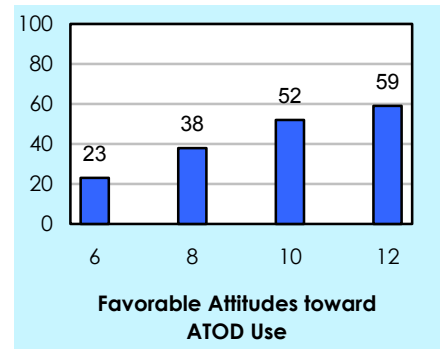
- Scores for *Favorable Attitudes toward Antisocial Behavior* range from a low of 31 among 6th graders to a high of 56 among 12th graders.
- Scores on the *Favorable Attitudes toward Antisocial Behavior* scale decreased substantially between 2001 and 2003. In particular, 10th graders reported a score that is seven points lower in 2003.



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 begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This acceptance places them at higher risk. The 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.

The *Favorable Attitudes toward ATOD Use* scale was developed to measure a component of the risk factor **Favorable Attitudes toward the Problem Behavior**. This scale is measured by survey items such as “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 can indicate that students see little wrong with using drugs.

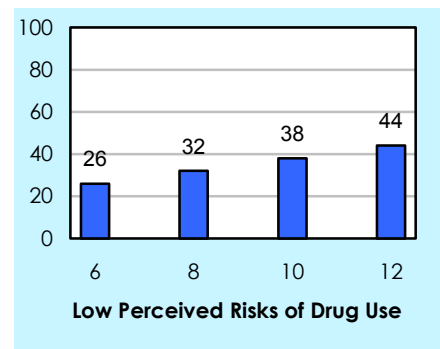


- Scores for *Favorable Attitudes toward ATOD Use* range from a low of 23 among 6th graders to a high of 59 among 12th graders.
- In the 6th and 8th grades, *Favorable Attitudes toward ATOD Use* is one of the lowest risk factor scales reported by Pennsylvania students.
- Scores on the *Favorable Attitudes toward ATOD Use* scale decreased between 2001 and 2003. In particular, 12th graders reported a score that is eight points lower in 2003.

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.

The *Low Perceived Risks of Drug Use* scale was developed to measure a component of the risk factor **Favorable Attitudes toward the Problem Behavior**. This scale is measured by 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.



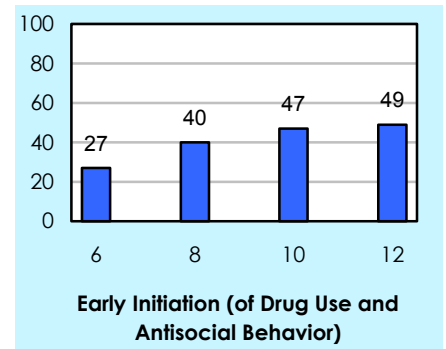
- Scores for *Low Perceived Risks of Drug Use* range from a low of 26 among 6th graders to a high of 44 among 12th graders.
- In the 8th, 10th and 12th grades, *Low Perceived Risks of Drug Use* is one of the lowest risk factor scales reported by Pennsylvania students.
- Scores on the *Low Perceived Risks of Drug Use* scale decreased slightly between 2001 and 2003 except for the 8th grade, which increased by one point. In particular, the 10th and 12th grades reported scores that are three points lower in 2003.

Early Initiation (of Drug Use and Antisocial Behavior)

This risk factor scale measures early initiation of antisocial behavior (both drug use and involvement in other delinquent behaviors) in early adolescence, such as misbehaving in school, experimenting with cigarettes, and getting into fights with other children. The earlier young people commit crimes, the greater the likelihood that they will have chronic problems with similar behaviors later in life.

The risk factor scale *Early Initiation (of Drug Use and Antisocial Behavior)* was developed to measure a component of the risk factor **Early Initiation of the Problem Behavior**. This scale is measured by survey items that ask when drug use and other antisocial behaviors began. The earlier that drug experimentation begins, the more likely it is that experimentation will become consistent, regular use. The delinquent behaviors that are measured on the survey include getting suspended from school, getting arrested, carrying a handgun and attacking somebody with the intent to harm.

- Scores for *Early Initiation (of Drug Use and Antisocial Behavior)* range from a low of 27 among 6th graders to a high of 49 among 12th graders.
- In the 10th grade, *Early Initiation (of Drug Use and Antisocial Behavior)* is one of the lowest risk factor scales reported by Pennsylvania students.
- Scores on the *Early Initiation (of Drug Use and Antisocial Behavior)* scale decreased slightly between 2001 and 2003 except for the 8th grade, which remained even. In particular, the 12th grade reported a score that is three points lower in 2003.



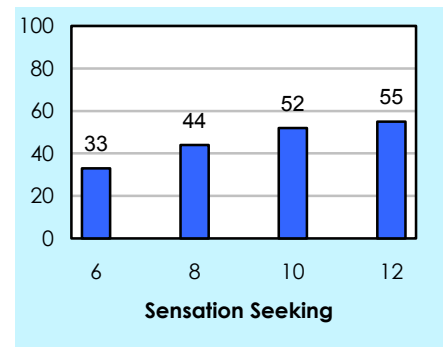
Sensation Seeking

Individual characteristics that may have a biological or physiological basis are sometimes referred to as “constitutional factors.” *Sensation Seeking* is among those constitutional factors that appear to increase the likelihood of a young person’s using drugs, engaging in delinquent behavior and/or committing violent acts.

Sensation Seeking is assessed by asking how often students participate in behaviors to experience thrills or a particular feeling or emotion.

The *Sensation Seeking* scale was developed to measure a component of the risk factor **Constitutional Factors**. This scale is measured by survey items such as “How many times have you done crazy things even if they are a little dangerous?”

- Scores for *Sensation Seeking* range from a low of 33 among 6th graders to a high of 55 among 12th graders.
- Scores on the *Sensation Seeking* scale decreased substantially between 2001 and 2003. In particular, 10th and 12th graders reported scores that are six points lower in 2003.



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Appendix A

Detailed Tables

Table 1. Enrollment Totals

	Grade				
	6th	8th	10th	12th	Total
	N	N	N	N	N
Region					
1 - NW	10,365	11,682	12,246	10,560	44,853
2 - NC	7,147	7,958	8,024	7,029	30,158
3 - NE	18,168	18,204	18,093	15,327	69,792
4 - SW	30,161	30,888	32,313	27,967	121,329
5 - SC	18,297	19,307	18,552	15,933	72,089
6 - SE	55,362	54,534	54,886	42,014	20,6796
Statewide	139,500	142,573	144,114	118,830	545,017

Table 2. Final Recruitment List

	Grade				
	6th	8th	10th	12th	Total
	N	N	N	N	N
Region					
1 - NW	2,140	2,245	2,209	2,194	8,788
2 - NC	2,198	2,104	2,176	2,538	9,016
3 - NE	2,479	2,685	2,514	2,326	10,004
4 - SW	5,418	5,444	5,502	4,975	21,339
5 - SC	2,409	2,557	2,425	2,279	9,670
6 - SE	2,369	2,472	2,988	2,500	10,329
Statewide	17,013	17,507	17,814	16,812	69,146

Table 3. Enrollment Totals

		Participation Agreement					Returned Surveys					Valid Surveys				
		6 th	8 th	10 th	12 th	Total	6 th	8 th	10 th	12 th	Total	6 th	8 th	10 th	12 th	Total
		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Sample Grades	Region															
	1 - NW	1,350	944	977	446	3,717	1,078	780	784	380	3,022	1,067	766	736	369	2,938
	2 - NC	1,268	1,838	1,774	2,361	7,241	415	1,362	1,276	1,776	4,829	407	1,327	1,189	1,657	4,580
	3 - NE	343	0	710	630	1,683	295	83	723	450	1,551	295	82	687	422	1,486
	4 - SW	67	55	49	569	740	59	50	44	461	614	59	49	44	446	598
	5 - SC	222	443	516	914	2,095	200	285	376	417	1,278	196	284	356	393	1,229
	6 - SE	1,097	787	2,348	1,623	5,855	957	636	1,219	1,001	3,813	937	608	1,168	928	3,641
	Statewide	4,347	4,067	6,374	6,543	21,331	3,004	3,196	4,422	4,485	15,107	2,961	3,116	4,180	4,215	14,472
Piggyback Grades	Region															
	1 - NW	731	1,267	1,551	1,197	4,746	829	1,088	1,304	926	4,147	814	1,044	1,243	865	3,966
	2 - NC	2,331	2,127	2,198	989	7,645	2,683	1,896	1,931	805	7,315	2,615	1,839	1,846	764	7,064
	3 - NE	243	1,011	880	66	2,200	307	849	162	72	1,390	298	809	157	63	1,327
	4 - SW	0	416	375	0	791	3	376	337	0	716	1	371	327	0	699
	5 - SC	1,621	1,970	1,651	914	6,156	1,377	1,594	1,194	763	4,928	1,355	1,561	1,141	740	4,797
	6 - SE	2,199	2,822	2,494	1,027	8,542	1,776	2,311	1,886	774	6,747	1,747	2,252	1,811	710	6,520
	Statewide	7,125	9,613	9,149	4,193	30,080	6,975	8,114	6,814	3,340	25,243	6,830	7,876	6,525	3,142	24,373
Volunteer Schools	Region															
	1 - NW	845	1,116	956	796	3,713	321	421	335	234	1,311	316	410	313	191	1,230
	2 - NC	1,006	1,093	1,042	610	3,751	901	966	849	435	3,151	892	937	807	400	3,036
	3 - NE	269	278	241	281	1,069	256	259	184	221	920	242	246	149	210	847
	4 - SW	777	1,247	1,207	587	3,818	659	1,036	941	453	3,089	645	992	873	421	2,931
	5 - SC	2,484	2,552	2,402	2,129	9,567	2,017	1,853	1,554	1,176	6,600	1,991	1,800	1,475	1,119	6,385
	6 - SE	5,629	7,833	8,050	4,520	26,032	4,186	5,966	4,799	2,689	17,640	4,073	5,826	4,522	2,478	16,899
	Statewide	11,010	14,119	13,898	8,923	47,950	8,340	10,501	8,662	5,208	32,711	8,159	10,211	8,139	4,819	31,328

Table 4. Final Statewide Dataset

	Grade									
	6 th		8 th		10 th		12 th		Total	
	N	% of Target	N	% of Target	N	% of Target	N	% of Target	N	% of Target
Region										
1 - NW	1,881	194%	1,810	185%	1,979	200%	1,234	126%	6,904	177%
2 - NC	3,022	325%	3,166	336%	3,035	319%	2,421	256%	11,644	309%
3 - NE	835	83%	1,137	113%	993	98%	695	69%	3,660	91%
4 - SW	705	68%	1,412	137%	1,244	120%	867	84%	4,228	102%
5 - SC	1,551	154%	1,845	182%	1,497	148%	1,133	113%	6,026	149%
6 - SE	2,684	256%	2,860	273%	2,979	284%	1,638	157%	10,161	243%
Statewide	10,678	178%	12,230	203%	11,727	194%	7,988	133%	42,623	177%

Table 5. Selected Demographic Characteristics of Surveyed Youth

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Grade														
6 th	10,678	25.1	1,881	27.2	3,022	26.0	835	22.8	705	16.7	1,551	25.7	2,684	26.4
8 th	12,230	28.7	1,810	26.2	3,166	27.2	1,137	31.1	1,412	33.4	1,845	30.6	2,860	28.1
10 th	11,727	27.5	1,979	28.7	3,035	26.1	993	27.1	1,244	29.4	1,497	24.8	2,979	29.3
12 th	7,988	18.7	1,234	17.9	2,421	20.8	695	19.0	867	20.5	1,133	18.8	1,638	16.1
Gender														
Female	21,457	50.3	3,495	50.6	5,800	49.8	1,819	49.7	2,155	51.0	3,096	51.4	5,092	50.1
Male	20,890	49.0	3,360	48.7	5,789	49.7	1,818	49.7	2,042	48.3	2,888	47.9	4,993	49.1
Did Not Respond	276	0.6	49	0.7	55	0.5	23	0.6	31	0.7	42	0.7	76	0.7
Ethnicity														
African American	1,536	3.6	238	3.4	339	2.9	174	4.8	235	5.6	96	1.6	454	4.5
American Indian	360	0.8	52	0.8	131	1.1	29	0.8	22	0.5	54	0.9	72	0.7
Asian	639	1.5	65	0.9	172	1.5	42	1.1	31	0.7	59	1.0	270	2.7
Latino	795	1.9	78	1.1	165	1.4	188	5.1	32	0.8	84	1.4	248	2.4
White	36,784	86.3	6,083	88.1	10,135	87.0	2,950	80.6	3,659	86.5	5,466	90.7	8,491	83.6
Other/Multiple	2,122	5.0	331	4.8	598	5.1	237	6.5	201	4.8	232	3.8	523	5.1
Did Not Respond	387	0.9	57	0.8	104	0.9	40	1.1	48	1.1	35	0.6	103	1.0
Primary Language Spoken at Home														
English	41,193	96.6	6,764	98.0	11,287	96.9	3,494	95.5	4,140	97.9	5,908	98.0	9,600	94.5
Spanish	364	0.9	30	0.4	69	0.6	79	2.2	18	0.4	49	0.8	119	1.2
Other Language	697	1.6	66	1.0	198	1.7	47	1.3	40	0.9	40	0.7	306	3.0
Did Not Respond	369	0.9	44	0.6	90	0.8	40	1.1	30	0.7	29	0.5	136	1.3
Totals	42,623	100.0	6,904	100.0	11,644	100.0	3,660	100.0	4,228	100.0	6,026	100.0	10,161	100.0

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

Table 6. Lifetime Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth Compared to the Monitoring the Future Study

	Pennsylvania Statewide								Monitoring the Future ¹		
	2001				2003				2003		
	6 th %	8 th %	10 th %	12 th %	6 th %	8 th %	10 th %	12 th %	8 th %	10 th %	12 th %
Alcohol	32.3	57.4	75.8	83.8	28.7	56.7	76.4	83.6	45.6	66.0	76.6
Cigarettes	8.9	27.1	43.8	57.0	8.9	27.8	40.4	52.4	28.4	43.0	53.7
Smokeless Tobacco	--	--	--	--	2.7	7.9	15.0	21.0	11.3	14.6	17.0
Marijuana	1.3	10.9	30.9	47.1	1.3	10.8	27.5	42.8	17.5	36.4	46.1
Inhalants	2.3	5.8	7.5	12.5	7.3	12.3	10.5	9.1	15.8	12.7	11.2
Cocaine	0.4	1.0	3.0	6.0	0.4	1.8	3.9	7.4	3.6	5.1	7.7
Crack Cocaine	0.4	0.9	1.7	2.3	0.4	1.8	1.9	2.5	2.5	2.7	3.6
Heroin	0.2	0.5	0.9	1.7	0.2	1.0	1.4	2.9	1.6	1.5	1.5
Hallucinogens	0.2	1.8	6.3	12.7	0.3	2.9	6.1	10.9	4.0	6.9	10.6
Methamphetamines	0.6	1.8	3.3	4.4	0.2	1.1	2.3	3.0	3.9	5.2	6.2
Ecstasy	--	--	--	--	0.2	2.7	4.8	8.7	3.2	5.4	8.3
Steroids	0.9	2.1	2.8	2.5	1.2	2.5	2.8	2.3	2.5	3.0	3.5
Any Illicit Drug Other Than Marijuana	--	--	---	--	8.0	15.8	17.5	20.9	--	--	--

Note: The symbol "--" indicates that data are not available because the drug was not included in the survey.

¹Johnston, O'Malley and Bachman (2004).

Table 7. Past-30-Day Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth Compared to the Monitoring the Future Study

	Pennsylvania Statewide								Monitoring the Future ¹		
	2001				2003				2003		
	6 th %	8 th %	10 th %	12 th %	6 th %	8 th %	10 th %	12 th %	8 th %	10 th %	12 th %
Alcohol	4.8	17.4	36.4	48.5	4.1	17.0	37.9	49.2	19.7	35.4	47.5
Binge Drinking	2.4	8.6	20.9	31.2	1.5	8.8	21.5	31.4	11.9	22.2	27.9
Cigarettes	2.2	10.6	20.2	31.9	2.1	10.9	19.0	25.8	10.2	16.7	24.4
Smokeless Tobacco	1.5	4.1	7.0	9.7	1.0	3.1	7.1	9.5	4.1	5.3	6.7
Marijuana	0.6	5.3	17.0	25.6	0.5	5.2	14.5	21.4	7.5	17.0	21.2
Inhalants	0.7	1.9	2.1	3.0	2.8	5.0	2.9	2.0	4.1	2.2	1.5
Cocaine	0.2	0.4	1.0	1.9	0.1	0.7	1.3	2.4	0.9	1.3	2.1
Crack Cocaine	0.1	0.4	0.5	0.6	0.1	0.7	0.7	0.7	0.7	0.7	0.9
Heroin	0.1	0.2	0.4	0.5	0.1	0.4	0.7	1.3	0.4	0.3	0.4
Hallucinogens	0.1	0.8	2.2	3.6	0.1	1.3	2.3	3.4	1.2	1.5	1.8
Methamphetamines	0.3	0.6	1.0	0.9	0.0	0.5	0.7	0.9	1.2	1.4	1.7
Ecstasy	--	--	--	--	0.0	0.9	1.3	1.5	0.7	1.1	1.3
Steroids	0.3	0.6	0.9	1.0	0.3	0.8	1.2	0.9	0.7	0.8	1.3
Any Illicit Drug Other Than Marijuana	--	--	--	--	3.1	6.7	6.8	7.9	--	--	--

Note: Binge drinking is defined as five or more drinks in a row in the past two weeks. The symbol "--" indicates that data are not available because the drug was not included in the survey.

¹Johnston, O'Malley and Bachman (2004).

Table 8. Summary of Past-30-Day Prevalence for ATOD Use in Pennsylvania, Historical Trends

	6 th Grade							12 th Grade						
	1989 %	1991 %	1993 %	1995 %	1997 %	2001 %	2003 %	1989 %	1991 %	1993 %	1995 %	1997 %	2001 %	2003 %
Alcohol	7.8	8.3	6.6	8.3	6.7	4.8	4.1	48.9	47.2	47.9	48.8	50.7	48.5	49.2
Cigarettes	6.7	6.6	6.4	9.4	7.4	2.2	2.1	30.8	30.4	32.7	37.5	40.4	31.9	25.8
Smokeless Tobacco	3.2	3.1	2.2	2.4	1.4	1.5	1.0	12.4	11.8	12.4	11.3	10.7	9.7	9.5
Marijuana	0.6	0.4	0.6	1.6	1.5	0.6	0.5	13.9	10.9	15.0	21.1	21.8	25.6	21.4
Inhalants	0.8	0.5	0.9	1.0	1.1	0.7	2.8	2.1	1.5	2.7	4.3	3.7	3.0	2.0
Cocaine	0.2	0.2	0.2	0.3	0.4	0.2	0.1	2.4	1.2	1.1	2.0	2.6	1.9	2.4
Crack Cocaine	--	0.1	0.1	0.2	0.2	0.1	0.1	--	0.3	0.5	0.6	0.7	0.6	0.7
Heroin	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.3	0.2	0.5	0.6	0.5	1.3
Hallucinogens	0.1	0.2	0.1	0.3	0.4	0.1	0.1	1.4	1.9	2.5	5.4	5.0	3.6	3.4
Methamphetamines	--	--	0.3	0.4	0.4	0.3	0.0	--	--	0.2	0.6	1.0	0.9	0.9
Steroids	--	0.5	0.5	0.7	0.7	0.3	0.3	--	0.6	0.6	0.7	0.9	1.0	0.9

Note: The symbol "--" indicates that data are not available because the drug was not included in the survey.

Table 9. Prevalence of Alcohol Use, by Selected Demographic Characteristics

	<i>Lifetime</i>		<i>Past-30-Day</i>		<i>Binge Drinking</i>	
	2001	2003	2001	2003	2001	2003
Grade						
6 th	32.3	28.7	4.8	4.1	2.4	1.5
8 th	57.4	56.7	17.4	17.0	8.6	8.8
10 th	75.8	76.4	36.4	37.9	20.9	21.5
12 th	83.8	83.6	48.5	49.2	31.2	31.4
Gender						
Female	61.6	60.9	25.3	26.0	13.5	14.6
Male	61.5	60.4	26.3	26.4	16.6	16.1
Ethnicity						
African American	46.9	48.7	17.2	16.9	11.3	11.5
White	63.2	61.4	26.9	26.7	15.4	15.5
Region						
1 - NW	64.7	62.3	29.1	26.7	18.5	16.3
2 - NC	57.7	61.7	25.0	25.8	12.6	14.9
3 - NE	63.7	62.0	27.8	28.5	17.5	17.0
4 - SW	69.7	63.3	30.3	29.7	18.7	18.5
5 - SC	61.8	58.1	23.9	22.7	13.4	13.5
6 - SE	58.3	58.9	23.8	24.6	13.6	13.5

Note: Binge drinking is defined as five or more drinks in a row in the past two weeks.

Table 10. Prevalence of Tobacco Use, by Selected Demographic Characteristics

	Cigarettes				Smokeless Tobacco			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	8.9	8.9	2.2	2.1	--	2.7	1.5	1.0
8 th	27.1	27.8	10.6	10.9	--	7.9	4.1	3.1
10 th	43.8	40.4	20.2	19.0	--	15.0	7.0	7.1
12 th	57.0	52.4	31.9	25.8	--	21.0	9.7	9.5
Gender								
Female	33.9	32.6	16.0	14.9	--	4.7	2.2	1.7
Male	32.3	30.5	14.9	13.1	--	18.1	8.7	8.5
Ethnicity								
African American	29.8	31.3	9.0	9.1	--	7.0	4.0	3.7
White	33.3	31.3	16.1	14.1	--	11.6	5.5	5.1
Region								
1 - NW	39.7	36.1	18.9	15.8	--	17.2	9.9	7.9
2 - NC	28.2	35.1	12.4	16.3	--	17.1	5.0	8.0
3 - NE	35.5	35.9	18.8	17.3	--	13.1	7.2	6.6
4 - SW	39.3	33.9	19.6	14.8	--	13.4	8.5	6.3
5 - SC	33.8	33.9	16.1	15.8	--	13.9	5.7	6.2
6 - SE	29.6	26.6	13.0	11.2	--	6.4	3.0	2.3

Note: The symbol "--" indicates that data are not available because the drug was not included in the survey.

Table 11. Prevalence of Marijuana and Inhalant Use, by Selected Demographic Characteristics

	Marijuana				Inhalants			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	1.3	1.3	0.6	0.5	2.3	7.3	0.7	2.8
8 th	10.9	10.8	5.3	5.2	5.8	12.3	1.9	5.0
10 th	30.9	27.5	17.0	14.5	7.5	10.5	2.1	2.9
12 th	47.1	42.8	25.6	21.4	12.5	9.1	3.0	2.0
Gender								
Female	19.6	18.7	10.2	9.1	5.9	9.1	1.5	3.1
Male	23.3	21.0	12.9	10.9	7.7	10.6	2.3	3.4
Ethnicity								
African American	21.5	22.5	11.2	10.2	3.7	8.8	1.5	2.7
White	21.5	19.5	11.6	9.8	7.1	9.6	1.9	3.1
Region								
1 - NW	22.6	20.9	12.4	10.0	7.7	10.6	1.9	3.4
2 - NC	15.6	20.0	8.4	9.7	5.0	10.7	1.2	3.6
3 - NE	22.8	23.1	12.9	13.1	7.7	11.7	2.2	4.1
4 - SW	24.3	20.2	13.3	10.0	7.0	9.2	2.1	2.8
5 - SC	19.8	18.3	9.9	7.8	6.5	10.7	2.0	3.5
6 - SE	21.2	18.8	11.5	9.8	6.7	9.0	1.9	3.0

Table 12. Prevalence of Cocaine Use, by Selected Demographic Characteristics

	Cocaine				Crack Cocaine			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	0.4	0.4	0.2	0.1	0.4	0.4	0.1	0.1
8 th	1.0	1.8	0.4	0.7	0.9	1.8	0.4	0.7
10 th	3.0	3.9	1.0	1.3	1.7	1.9	0.5	0.7
12 th	6.0	7.4	1.9	2.4	2.3	2.5	0.6	0.7
Gender								
Female	2.1	2.8	0.7	0.9	1.2	1.4	0.3	0.5
Male	2.9	3.7	1.0	1.3	1.4	1.8	0.5	0.6
Ethnicity								
African American	1.2	2.4	0.6	1.1	0.8	1.7	0.4	1.3
White	2.5	3.2	0.9	1.0	1.3	1.5	0.4	0.5
Region								
1 - NW	2.8	3.3	1.1	1.1	1.4	1.6	0.4	0.6
2 - NC	2.0	3.4	0.7	1.1	1.0	2.2	0.3	0.6
3 - NE	2.6	3.1	0.7	0.9	1.8	1.9	0.6	0.6
4 - SW	4.3	3.5	1.5	1.2	1.7	1.6	0.4	0.7
5 - SC	2.2	2.9	0.9	1.0	1.7	1.5	0.5	0.5
6 - SE	2.0	3.2	0.6	1.2	1.0	1.5	0.3	0.5

Table 13. Prevalence of Heroin and Hallucinogen Use, by Selected Demographic Characteristics

	Heroin				Hallucinogens			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.1
8 th	0.5	1.0	0.2	0.4	1.8	2.9	0.8	1.3
10 th	0.9	1.4	0.4	0.7	6.3	6.1	2.2	2.3
12 th	1.7	2.9	0.5	1.3	12.7	10.9	3.6	3.4
Gender								
Female	0.7	1.1	0.2	0.4	4.1	4.0	1.1	1.2
Male	0.9	1.5	0.3	0.8	5.8	5.7	2.1	2.2
Ethnicity								
African American	0.6	1.0	0.4	0.7	1.8	2.9	0.7	1.5
White	0.8	1.3	0.3	0.5	5.2	4.8	1.6	1.6
Region								
1 - NW	0.9	1.2	0.2	0.6	5.4	4.6	1.5	1.7
2 - NC	0.7	1.4	0.2	0.4	4.0	4.7	1.0	1.4
3 - NE	0.8	1.2	0.2	0.4	6.2	5.6	2.2	2.0
4 - SW	1.4	1.2	0.5	0.6	6.4	4.9	2.0	1.6
5 - SC	0.9	1.4	0.4	0.5	4.3	4.6	1.5	1.5
6 - SE	0.5	1.4	0.2	0.7	4.5	4.8	1.5	1.8

Table 14. Prevalence of Methamphetamine and Ecstasy Use, by Selected Demographic Characteristics

	Methamphetamines				Ecstasy			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	0.6	0.2	0.3	0.0	--	0.2	--	0.0
8 th	1.8	1.1	0.6	0.5	--	2.7	--	0.9
10 th	3.3	2.3	1.0	0.7	--	4.8	--	1.3
12 th	4.4	3.0	0.9	0.9	--	8.7	--	1.5
Gender								
Female	2.4	1.4	0.6	0.4	--	4.1	--	0.8
Male	2.6	1.8	0.8	0.6	--	3.8	--	1.0
Ethnicity								
African American	1.2	1.3	0.7	0.9	--	3.2	--	1.3
White	2.5	1.5	0.6	0.4	--	3.8	--	0.8
Region								
1 - NW	3.2	1.6	0.8	0.4	--	3.0	--	0.7
2 - NC	2.3	2.0	0.5	0.7	--	3.2	--	0.8
3 - NE	2.5	2.1	0.6	0.6	--	4.8	--	1.1
4 - SW	4.1	1.6	1.1	0.5	--	3.4	--	0.4
5 - SC	2.6	1.1	0.9	0.3	--	3.9	--	1.1
6 - SE	1.8	1.6	0.5	0.5	--	4.4	--	1.2

Note: The symbol "--" indicates that data are not provided because the 2001 rates are not comparable to the 2003 rates due to differences between the survey items. In 2001, respondents were asked on how many occasions they had "used designer drugs (Ecstasy, XTC, MDMA, etc.)," while in 2003 they were asked on how many occasions they had "used Ecstasy."

Table 15. Prevalence of Steroid Use and Any Illicit Drug (Other Than Marijuana), by Selected Demographic Characteristics

	Steroids				Any Illicit Drug (Other Than Marijuana)			
	Lifetime		Past-30-Day		Lifetime		Past-30-Day	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	0.9	1.2	0.3	0.3	--	8.0	--	3.1
8 th	2.1	2.5	0.6	0.8	--	15.8	--	6.7
10 th	2.8	2.8	0.9	1.2	--	17.5	--	6.8
12 th	2.5	2.3	1.0	0.9	--	20.9	--	7.9
Gender								
Female	1.4	1.8	0.3	0.6	--	14.0	--	5.2
Male	2.8	2.5	1.1	1.0	--	16.7	--	6.9
Ethnicity								
African American	1.2	2.7	0.6	0.8	--	13.0	--	5.6
White	2.1	2.1	0.6	0.8	--	15.1	--	5.8
Region								
1 - NW	2.7	2.8	1.0	1.1	--	15.9	--	6.3
2 - NC	1.8	2.3	0.5	0.9	--	15.7	--	6.2
3 - NE	2.1	2.6	0.6	0.7	--	17.6	--	6.9
4 - SW	2.7	2.2	1.0	0.9	--	14.8	--	5.7
5 - SC	2.0	2.2	0.7	1.0	--	16.2	--	6.2
6 - SE	1.8	1.9	0.6	0.7	--	14.5	--	5.9

Note: The combination rate “Any Illicit Drug (Other Than Marijuana)” is not provided for 2001 because differences between the 2001 and 2003 survey items prevent the calculation of comparable rates. In 2001, respondents were asked on how many occasions they had “used designer drugs (Ecstasy, XTC, MDMA, etc.),” while in 2003 they were asked on how many occasions they had “used Ecstasy.”

Table 16. Prevalence of Other Antisocial Behaviors in the Past Year, by Selected Demographic Characteristics

	<i>Attacking Someone with Intent to Harm</i>		<i>Attempting to Steal a Vehicle</i>		<i>Being Arrested</i>		<i>Being Drunk or High at School</i>	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	6.0	6.6	0.7	0.7	1.5	1.4	1.0	0.9
8 th	10.5	12.7	1.9	2.2	4.1	5.2	6.0	6.0
10 th	11.6	13.2	3.2	2.8	5.9	5.7	15.3	13.0
12 th	10.3	12.2	2.7	2.2	7.0	6.3	21.2	17.8
Gender								
Female	6.3	8.0	1.2	1.5	2.4	3.0	8.9	8.3
Male	12.9	14.4	2.9	2.5	6.7	6.3	11.9	9.9
Ethnicity								
African American	17.6	20.4	4.5	4.3	9.6	9.1	9.4	9.7
White	8.4	9.9	1.8	1.6	3.9	4.1	10.3	8.8
Region								
1 - NW	9.8	10.8	2.4	2.0	4.7	4.1	11.4	9.7
2 - NC	7.9	10.8	1.7	2.1	3.2	4.6	7.9	10.0
3 - NE	11.0	12.8	2.4	2.5	4.5	4.8	12.3	12.3
4 - SW	12.9	12.0	2.8	2.2	5.4	5.2	12.0	9.4
5 - SC	9.0	10.6	1.7	1.7	3.3	3.2	9.7	8.6
6 - SE	9.1	10.5	2.0	1.7	5.0	4.8	9.7	7.9

Table 17. Prevalence of Other Antisocial Behaviors in the Past Year, by Selected Demographic Characteristics

	<i>Carrying a Handgun</i>		<i>Getting Suspended</i>		<i>Selling Drugs</i>		<i>Taking a Handgun to School</i>	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	3.2	1.8	6.3	5.9	0.3	0.3	0.2	0.1
8 th	4.8	4.1	9.5	10.2	2.4	2.8	0.4	0.4
10 th	4.3	3.1	9.7	9.2	7.5	7.1	0.7	0.4
12 th	4.4	3.3	10.8	9.3	11.1	9.6	0.9	0.6
Gender								
Female	1.0	1.0	5.4	5.0	2.9	3.1	0.1	0.1
Male	7.5	5.2	12.7	12.3	7.2	6.4	0.8	0.6
Ethnicity								
African American	5.5	6.7	27.1	25.1	6.0	7.4	1.5	1.2
White	4.0	2.6	6.7	7.3	4.9	4.4	0.4	0.3
Region								
1 - NW	6.0	3.6	9.4	8.5	5.1	4.8	0.6	0.3
2 - NC	5.2	4.2	6.9	7.4	3.7	4.6	0.4	0.5
3 - NE	3.8	3.2	6.7	10.5	5.7	5.9	0.5	0.3
4 - SW	4.6	3.5	9.2	10.9	5.5	4.5	0.5	0.4
5 - SC	5.0	3.1	6.1	6.2	4.2	4.0	0.4	0.4
6 - SE	3.1	2.4	10.8	7.8	5.1	4.9	0.6	0.3

Table 18. Frequency of Bringing a Weapon to School in the Past 30 Days, by Selected Demographic Characteristics

	2001 %	2003								
		Any Occasion %	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 %
Grade										
6 th	--	0.9	99.1	0.7	0.0	0.0	0.0	0.0	0.0	0.1
8 th	--	2.1	97.9	1.4	0.3	0.1	0.1	0.0	0.0	0.1
10 th	--	2.4	97.6	1.5	0.3	0.2	0.1	0.1	0.1	0.2
12 th	--	2.4	97.6	1.3	0.2	0.1	0.1	0.1	0.2	0.4
Gender										
Female	--	1.1	98.9	0.7	0.1	0.0	0.0	0.0	0.0	0.1
Male	--	2.8	97.2	1.8	0.3	0.2	0.1	0.1	0.1	0.3
Ethnicity										
African American	--	2.9	97.1	1.9	0.3	0.1	0.2	0.1	0.0	0.4
White	--	1.6	98.4	1.1	0.2	0.1	0.0	0.0	0.1	0.2
Region										
1 - NW	--	1.9	98.1	1.1	0.2	0.1	0.1	0.1	0.1	0.3
2 - NC	--	2.2	97.8	1.2	0.3	0.1	0.1	0.1	0.1	0.2
3 - NE	--	2.4	97.6	1.5	0.3	0.1	0.1	0.0	0.1	0.3
4 - SW	--	2.0	98.0	1.2	0.2	0.1	0.1	0.1	0.0	0.3
5 - SC	--	1.8	98.2	1.2	0.1	0.1	0.1	0.0	0.1	0.2
6 - SE	--	1.7	98.3	1.2	0.1	0.1	0.1	0.1	0.0	0.1

Note: Rounding can produce totals that do not equal 100%. The symbol "--" indicates that data are not available because the behavior was not included in the survey.

Table 19. Average Age of Onset, by Selected Demographic Characteristics

	<i>Trying Alcohol</i>		<i>Drinking Alcohol Regularly</i>		<i>Smoking Cigarettes</i>	
	2001	2003	2001	2003	2001	2003
Grade						
6 th	10.4	10.5	11.0	10.8	10.5	10.5
8 th	11.5	11.5	12.5	12.3	11.5	11.4
10 th	12.8	12.9	14.2	14.2	12.4	12.4
12 th	13.8	13.9	15.4	15.4	13.1	13.2
Gender						
Female	12.8	12.9	14.6	14.4	12.4	12.4
Male	12.3	12.5	14.4	14.3	12.2	12.2
Ethnicity						
African American	12.3	12.3	13.9	13.8	12.0	11.8
White	12.6	12.7	14.5	14.5	12.4	12.4
Region						
1 - NW	12.6	12.8	14.4	14.4	12.2	12.2
2 - NC	12.6	12.6	14.7	14.4	12.4	12.2
3 - NE	12.7	12.6	14.4	14.2	12.5	12.3
4 - SW	12.5	12.6	14.3	14.4	12.1	12.2
5 - SC	12.5	12.7	14.4	14.5	12.3	12.2
6 - SE	12.5	12.7	14.5	14.4	12.4	12.4

Table 20. Average Age of Onset, by Selected Demographic Characteristics

	<i>Smoking Marijuana</i>		<i>Getting Suspended from School</i>		<i>Being Arrested</i>	
	2001	2003	2001	2003	2001	2003
Grade						
6 th	11.2	10.9	10.5	10.6	10.9	11.0
8 th	12.4	12.2	11.7	11.7	12.2	12.2
10 th	13.6	13.6	12.8	12.8	13.7	13.5
12 th	14.5	14.5	13.9	13.8	14.9	14.8
Gender						
Female	14.0	14.0	13.0	12.9	13.9	13.6
Male	13.6	13.6	12.3	12.3	13.6	13.4
Ethnicity						
African American	13.4	13.2	11.7	11.7	13.2	12.9
White	13.9	13.9	12.8	12.6	13.8	13.6
Region						
1 - NW	13.8	13.7	12.8	12.7	13.7	13.6
2 - NC	14.1	13.8	12.5	12.7	13.4	13.4
3 - NE	13.9	13.7	13.0	12.3	14.0	13.5
4 - SW	13.4	13.6	12.5	12.6	13.5	13.7
5 - SC	13.8	13.9	12.5	12.6	13.6	13.4
6 - SE	13.8	13.8	12.4	12.4	13.7	13.3

Table 21. Average Age of Onset, by Selected Demographic Characteristics

	<i>Carrying a Handgun</i>		<i>Attacking Someone with Intent to Harm</i>		<i>Belonging to a Gang</i>	
	2001	2003	2001	2003	2001	2003
Grade						
6 th	10.8	10.8	10.7	10.7	10.8	10.7
8 th	12.0	11.9	11.9	11.8	12.1	12.1
10 th	13.0	13.0	12.9	12.9	13.0	13.1
12 th	13.6	14.1	13.6	13.5	13.4	13.6
Gender						
Female	12.4	12.5	12.7	12.8	12.0	12.0
Male	12.6	12.6	12.4	12.3	12.3	12.3
Ethnicity						
African American	13.1	13.1	12.1	12.0	12.1	12.0
White	12.4	12.6	12.6	12.6	12.3	12.3
Region						
1 - NW	12.5	12.7	12.7	12.6	12.3	12.4
2 - NC	12.2	12.4	12.1	12.6	12.2	12.3
3 - NE	12.8	13.2	12.8	12.4	12.7	12.5
4 - SW	12.9	12.4	12.7	12.5	12.3	12.2
5 - SC	12.3	12.4	12.5	12.8	12.2	12.1
6 - SE	12.6	12.6	12.3	12.3	12.1	12.1

Table 22. Percentage of Students Reporting Any Occasion of Driving Under the Influence, by Selected Demographic Characteristics

	<i>Driving after Alcohol Use</i>		<i>Driving after Marijuana Use</i>	
	2001	2003	2001	2003
Grade				
6 th	0.5	0.4	0.3	0.2
8 th	1.5	1.8	1.3	1.5
10 th	3.8	4.1	4.8	4.3
12 th	21.5	21.4	24.1	20.3
Gender				
Female	4.8	5.2	5.3	4.8
Male	7.7	7.6	8.5	7.4
Ethnicity				
African American	4.4	3.3	5.2	4.7
White	6.4	6.6	7.0	6.2
Region				
1 - NW	8.3	7.5	8.0	6.0
2 - NC	5.1	7.4	5.8	6.8
3 - NE	6.3	6.0	7.8	6.7
4 - SW	7.0	7.1	6.9	5.9
5 - SC	5.9	7.0	6.5	6.2
6 - SE	5.4	5.5	6.5	5.8

Table 23. Percentage of Students Providing Correct Responses about the Physiological Effects of ATOD Use, by Selected Demographic Characteristics

	<i>Alcohol Knowledge</i>		<i>Marijuana Knowledge</i>		<i>Nicotine Knowledge</i>		<i>Inhalant Knowledge</i>	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	39.0	39.9	32.3	32.2	74.1	81.4	68.9	69.6
8 th	44.0	45.6	42.5	44.4	84.9	88.4	74.9	80.2
10 th	56.0	57.8	45.4	44.5	91.5	92.2	80.2	86.2
12 th	66.2	67.4	43.3	42.1	93.6	95.1	83.4	88.6
Gender								
Female	52.5	54.1	41.4	41.6	86.5	89.6	77.9	81.9
Male	49.6	50.4	40.8	40.0	86.0	88.8	75.9	80.2
Ethnicity								
African American	43.5	45.8	33.7	35.4	68.6	76.3	63.9	70.4
White	52.2	52.6	42.4	41.2	88.8	90.0	78.7	81.7
Region								
1 - NW	49.4	53.5	39.7	44.6	85.9	89.5	76.1	80.8
2 - NC	50.6	53.3	38.9	42.0	85.2	89.1	77.6	81.0
3 - NE	52.3	50.0	37.0	39.1	85.6	87.1	75.6	79.2
4 - SW	49.2	53.1	39.5	41.2	86.3	88.5	74.7	81.1
5 - SC	50.9	50.6	44.0	42.3	87.9	88.2	76.9	79.3
6 - SE	51.7	52.7	42.0	39.8	85.6	90.6	77.6	82.3

Table 24. Percentage of Students Reporting Willingness to Try Selected ATODs, by Selected Demographic Characteristics

	<i>Alcohol</i>		<i>Marijuana</i>		<i>Cocaine</i>	
	2001	2003	2001	2003	2001	2003
Grade						
6 th	17.5	17.7	2.2	2.0	1.1	1.1
8 th	40.5	42.7	13.8	13.2	3.5	4.3
10 th	63.9	64.4	32.1	27.5	5.5	6.1
12 th	73.4	73.3	40.5	34.6	6.8	7.5
Gender						
Female	50.2	50.7	21.2	18.4	4.3	4.4
Male	47.8	47.1	23.2	19.4	4.1	4.9
Ethnicity						
African American	31.2	32.9	18.7	18.5	1.8	3.9
White	51.2	50.1	22.6	18.8	4.4	4.6
Region						
1 - NW	52.2	48.3	21.0	18.3	5.1	4.8
2 - NC	44.9	50.3	18.7	19.1	3.4	5.3
3 - NE	51.6	50.6	24.8	21.5	4.6	5.0
4 - SW	55.3	49.7	23.3	18.4	5.7	4.9
5 - SC	48.4	46.8	21.0	17.4	4.1	4.3
6 - SE	46.2	48.7	22.4	19.1	3.7	4.4

Note: Prevalence rate represents 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.

Table 25. Percentage of Students Reporting Willingness to Try Selected ATODs, by Selected Demographic Characteristics

	<i>Hallucinogens</i>		<i>Inhalants</i>	
	2001	2003	2001	2003
Grade				
6 th	1.0	0.8	1.4	1.2
8 th	4.4	5.1	4.2	5.1
10 th	10.4	9.8	5.3	5.6
12 th	14.3	12.8	7.5	5.3
Gender				
Female	6.8	6.2	4.5	4.1
Male	8.2	7.7	4.8	4.5
Ethnicity				
African American	3.3	5.1	2.1	3.5
White	7.8	7.0	4.7	4.2
Region				
1 - NW	7.4	6.3	4.7	4.2
2 - NC	6.4	6.9	3.7	4.6
3 - NE	9.3	8.6	5.7	6.1
4 - SW	8.5	6.6	4.7	3.8
5 - SC	7.0	6.4	4.5	4.2
6 - SE	7.2	7.0	4.5	4.0

Note: Prevalence rate represents 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.

Table 26. Percentage of Students Reporting That They Have Been Threatened or Attacked on School Property in the Past Year, by Selected Demographic Characteristics

	<i>Threatened to Be Hit or Beaten Up</i>		<i>Attacked or Beaten Up</i>		<i>Threatened with a Weapon</i>		<i>Attacked with a Weapon</i>	
	2001	2003	2001	2003	2001	2003	2001	2003
Grade								
6 th	--	21.9	--	10.0	--	3.5	--	1.5
8 th	--	30.5	--	11.9	--	6.2	--	2.7
10 th	--	27.2	--	9.2	--	5.3	--	2.6
12 th	--	17.9	--	6.0	--	3.9	--	2.0
Gender								
Female	--	17.6	--	5.1	--	3.0	--	1.2
Male	--	32.2	--	14.1	--	6.7	--	3.3
Ethnicity								
African American	--	23.2	--	9.0	--	6.8	--	3.7
White	--	24.1	--	9.0	--	4.3	--	1.9
Region								
1 - NW	--	25.4	--	9.0	--	4.8	--	2.2
2 - NC	--	27.0	--	10.2	--	4.9	--	2.2
3 - NE	--	26.3	--	10.3	--	5.4	--	2.5
4 - SW	--	24.6	--	9.6	--	5.4	--	2.8
5 - SC	--	24.9	--	9.7	--	4.4	--	2.0
6 - SE	--	23.6	--	8.9	--	4.3	--	1.8

Note: The symbol "--" indicates that data are not available because the behavior was not included in the survey.

Table 27. Percentage of 12th Grade Students Reporting Driving Under the Influence, Historical Trends

	1989	1991	1993	1995	1997	2001	2003
Driving after Alcohol Use	14.5	9.4	10.6	11.1	11.9	6.7	6.2
Driving after Marijuana Use	7.5	4.7	7.2	10.7	12.2	16.0	12.7

Note: Rate represents the percentage of students who indicated that they drove under the influence of alcohol or marijuana “about once or twice a month,” “about once or twice a week” or “almost every day.” It omits students who indicated “I don’t drive.”

Table 28. Percentage of Students Providing Correct Responses about the Physiological Effects of ATOD Use, Historical Trends

	6 th			12 th		
	1997	2001	2003	1997	2001	2003
Alcohol Knowledge	34.4	39.0	39.9	66.0	66.2	67.4
Marijuana Knowledge	22.8	32.3	32.2	28.5	43.3	42.1
Nicotine Knowledge	78.2	74.1	81.4	92.8	93.6	95.1
Inhalant Knowledge	62.5	68.9	69.6	77.0	83.4	88.6

Table 29. Number of Correct Responses about the Physiological Effects of ATOD Use, Historical Trends

	6 th			12 th		
	1997	2001	2003	1997	2001	2003
No Correct Responses	15.2	13.7	9.5	3.8	4.0	2.9
One Correct Response	18.3	15.2	15.3	9.2	5.4	3.9
Two Correct Responses	29.7	28.6	31.7	23.6	19.8	19.5
Three Correct Responses	26.9	30.4	31.7	44.8	44.1	46.7
All Four Correct Responses	9.9	12.1	11.7	18.6	26.6	27.0
Mean Number of Correct Answers	2.0	2.1	2.2	2.7	2.8	2.9

Table 30. Percentage of Students Reporting Willingness to Try Selected ATODs, Historical Trends

	1989	1991	1993	1995	1997	2001	2003
6th Grade							
Alcohol	60.2	39.3	28.0	28.7	30.4	17.5	17.7
Marijuana	2.1	1.7	2.9	5.5	6.2	2.2	2.0
Cocaine	1.0	1.1	1.4	2.1	2.9	1.2	1.1
Hallucinogens	0.8	1.2	--	2.5	2.9	1.0	0.8
Inhalants	2.3	2.5	--	4.2	3.9	1.4	1.2
12th Grade							
Alcohol	90.5	82.8	72.7	70.0	73.6	73.4	73.3
Marijuana	26.0	21.6	29.7	33.6	36.4	40.5	34.6
Cocaine	6.8	5.1	5.2	7.0	8.7	6.8	7.5
Hallucinogens	7.8	10.2	--	17.3	19.1	14.3	12.8
Inhalants	10.7	7.8	--	12.4	11.3	7.5	5.3

Note: The symbol "--" indicates that data are not available because the item was not included in the survey. Prevalence rate represents 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.

Table 31. Highest and Lowest Protective Factor Scale Scores, 2003 Pennsylvania Statewide by Grade

	<i>Lowest Scale Scores</i>		<i>Highest Scale Scores</i>	
	Scale Name	Score	Scale Name	Score
Grade				
6th	Religiosity	56	Belief in the Moral Order	75
	Community Rewards for Prosocial Involvement	59	Family Rewards for Prosocial Involvement	70
	School Opportunities for Prosocial Involvement	65	Social Skills	68
	School Rewards for Prosocial Involvement	65		
8th	Community Rewards for Prosocial Involvement	48	Belief in the Moral Order	58
	School Rewards for Prosocial Involvement	48	School Opportunities for Prosocial Involvement	56
	Family Attachment	53	Family Rewards for Prosocial Involvement	55
			Religiosity	55
10th	School Rewards for Prosocial Involvement	41	School Opportunities for Prosocial Involvement	54
	Community Rewards for Prosocial Involvement	43	Religiosity	53
	Family Attachment	47	Belief in the Moral Order	51
12th	Community Rewards for Prosocial Involvement	41	School Opportunities for Prosocial Involvement	52
	School Rewards for Prosocial Involvement	42	Belief in the Moral Order	50
	Social Skills	45	Religiosity	49

Table 32. Highest and Lowest Risk Factor Scale Scores, 2003 Pennsylvania Statewide by Grade

	<i>Lowest Scale Scores</i>		<i>Highest Scale Scores</i>	
	Scale Name	Score	Scale Name	Score
Grade				
6th	Perceived Availability of Drugs and Handguns	17	Personal Transitions and Mobility	56
	Friends' Use of Drugs	23	Community Disorganization	47
	Favorable Attitudes toward ATOD Use	23	Gang Involvement	46
8th	Perceived Availability of Drugs and Handguns	31	Community Disorganization	55
	Low Perceived Risks of Drug Use	32	Personal Transitions and Mobility	50
	Favorable Attitudes toward ATOD Use	38	Parental Attitudes Favorable toward Antisocial Behavior	50
			Poor Academic Performance	50
10th	Low Perceived Risks of Drug Use	38	Laws and Norms Favorable to Drug Use and Handguns	59
	Gang Involvement	45	Community Disorganization	58
	Early Initiation (of Drug Use and Antisocial Behavior)	47	Peer Rewards for Antisocial Behavior	56
12th	Gang Involvement	44	Laws and Norms Favorable to Drug Use and Handguns	68
	Low Perceived Risks of Drug Use	44	Friends' Use of Drugs	64
	Personal Transitions and Mobility	47	Poor Family Supervision	60

Table 33. 6th Grade Protective Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Community Rewards for Prosocial Involvement	59	59	60	62	56	60	60	60	59	56	56	59	60	60
Family Domain														
Family Attachment	68	66	66	65	62	63	65	63	67	67	66	67	72	68
Family Opportunities for Prosocial Involvement	68	67	67	67	63	63	64	64	71	68	65	67	70	68
Family Rewards for Prosocial Involvement	70	70	69	70	64	67	66	66	70	69	67	71	73	72
School Domain														
School Opportunities for Prosocial Involvement	64	65	62	67	66	66	61	62	60	61	63	67	65	67
School Rewards for Prosocial Involvement	62	65	62	67	64	66	63	63	61	66	60	68	62	64
Peer and Individual Domain														
Religiosity	59	56	61	57	59	53	59	55	64	54	59	55	58	57
Social Skills	68	68	69	69	70	68	68	65	68	65	68	69	68	69
Belief in the Moral Order	73	75	73	77	74	75	73	74	68	73	73	76	73	76
Averages	66	66	65	67	64	65	64	64	65	64	64	67	67	67

Table 34. 6th Grade Risk Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Low Neighborhood Attachment	39	37	39	38	41	39	37	39	40	41	40	40	39	34
Community Disorganization	43	47	47	48	41	49	43	49	43	52	42	50	42	41
Personal Transitions and Mobility	47	56	50	55	54	63	40	51	37	62	41	53	50	55
Laws and Norms Favorable to Drug Use and Handguns	28	27	28	27	28	28	28	29	30	28	29	28	27	25
Perceived Availability of Drugs and Handguns	17	17	20	17	17	19	18	18	18	18	18	18	16	16
Family Domain														
Poor Family Supervision	34	31	34	29	36	32	37	35	37	32	35	29	31	29
Poor Family Discipline	28	27	29	27	31	29	32	30	32	28	29	26	25	26
Family History of Antisocial Behavior	26	30	33	33	31	31	28	31	28	30	26	28	22	31
Parental Attitudes Favorable toward ATOD Use	36	35	36	36	37	36	38	36	37	36	36	35	35	35
Parental Attitudes Favorable toward Antisocial Behavior	42	42	44	42	44	42	42	42	45	43	42	40	40	43
School Domain														
Poor Academic Performance	46	45	49	47	46	47	45	48	45	47	48	45	44	43
Lack of Commitment to School	32	30	31	28	32	30	34	32	35	33	33	29	31	29
Peer and Individual Domain														
Rebelliousness	36	30	36	30	37	31	35	31	38	32	39	31	34	29
Friends' Delinquent Behavior	40	40	42	39	39	41	37	41	39	44	39	39	40	39
Friends' Use of Drugs	23	23	25	24	22	24	24	25	24	25	23	24	22	22
Peer Rewards for Antisocial Behavior	31	32	32	30	31	33	32	32	33	33	32	32	30	33
Gang Involvement	45	46	45	45	45	47	44	46	46	47	45	46	45	45
Favorable Attitudes toward Antisocial Behavior	37	31	37	29	36	30	37	31	40	32	38	29	36	31
Favorable Attitudes toward ATOD Use	25	23	26	23	25	24	26	24	26	24	26	23	24	23
Low Perceived Risks of Drug Use	27	26	29	26	27	26	26	28	25	28	25	26	27	25
Early Initiation (of Drug Use and Antisocial Behavior)	28	27	29	27	29	28	27	28	30	29	28	27	28	25
Sensation Seeking	38	33	39	32	38	32	39	34	41	32	39	33	36	33
Averages	34	33	35	33	35	35	34	35	35	35	34	33	33	32

Table 35. 8th Grade Protective Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Community Rewards for Prosocial Involvement	50	48	50	49	50	49	52	46	50	47	50	49	50	48
Family Domain														
Family Attachment	55	53	53	51	49	50	54	51	54	54	56	53	57	53
Family Opportunities for Prosocial Involvement	55	54	54	54	52	50	52	54	52	55	56	54	56	52
Family Rewards for Prosocial Involvement	57	55	56	55	53	53	55	53	54	57	57	56	58	55
School Domain														
School Opportunities for Prosocial Involvement	57	56	54	57	58	57	58	56	56	55	56	58	58	56
School Rewards for Prosocial Involvement	48	48	45	48	51	49	51	44	46	48	47	50	48	47
Peer and Individual Domain														
Religiosity	58	55	59	57	59	53	60	52	60	55	57	58	57	56
Social Skills	56	54	53	54	58	55	57	52	53	51	56	57	57	56
Belief in the Moral Order	54	58	52	60	55	61	56	56	50	55	55	62	54	59
Averages	54	53	53	54	54	53	55	52	53	53	54	55	55	54

Table 36. 8th Grade Risk Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Low Neighborhood Attachment	47	48	48	48	50	49	44	50	48	48	46	48	47	46
Community Disorganization	48	55	50	57	45	56	49	60	51	61	47	57	47	50
Personal Transitions and Mobility	40	50	41	52	44	52	37	53	36	47	38	51	41	51
Laws and Norms Favorable to Drug Use and Handguns	45	47	48	49	40	47	43	49	47	48	48	48	44	44
Perceived Availability of Drugs and Handguns	30	31	33	33	27	32	28	33	34	33	31	31	30	29
Family Domain														
Poor Family Supervision	47	45	46	46	47	46	52	47	50	45	44	43	48	45
Poor Family Discipline	41	41	42	40	42	41	43	43	42	42	38	38	41	42
Family History of Antisocial Behavior	37	41	44	47	42	42	36	42	37	41	36	39	35	39
Parental Attitudes Favorable toward ATOD Use	43	44	45	44	44	45	42	47	43	43	42	44	42	43
Parental Attitudes Favorable toward Antisocial Behavior	48	50	51	51	50	50	50	52	48	51	48	49	47	49
School Domain														
Poor Academic Performance	50	50	53	51	48	51	48	54	50	49	52	51	49	49
Lack of Commitment to School	47	48	48	45	46	47	45	49	51	51	49	46	46	47
Peer and Individual Domain														
Rebelliousness	49	46	50	45	48	45	47	46	51	48	50	45	47	45
Friends' Delinquent Behavior	46	47	47	48	42	46	42	51	47	48	44	45	47	47
Friends' Use of Drugs	38	39	43	42	33	38	36	42	41	41	37	37	37	37
Peer Rewards for Antisocial Behavior	45	47	46	47	38	45	42	49	50	49	44	46	45	45
Gang Involvement	46	48	46	48	45	47	45	49	45	48	46	47	46	47
Favorable Attitudes toward Antisocial Behavior	53	47	53	46	52	46	53	49	57	51	52	45	52	45
Favorable Attitudes toward ATOD Use	41	38	44	38	39	38	39	42	44	39	40	37	40	35
Low Perceived Risks of Drug Use	31	32	33	31	29	31	30	36	32	32	30	31	31	30
Early Initiation (of Drug Use and Antisocial Behavior)	40	40	45	42	38	40	36	43	43	42	39	39	39	38
Sensation Seeking	48	44	49	44	48	43	48	43	52	45	50	43	47	43
Averages	44	44	46	45	43	44	43	47	45	46	43	44	43	43

Table 37. 10th Grade Protective Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Community Rewards for Prosocial Involvement	46	43	47	45	48	44	44	42	48	43	47	45	46	42
Family Domain														
Family Attachment	48	47	46	49	48	45	41	42	44	47	47	48	49	49
Family Opportunities for Prosocial Involvement	48	48	47	50	48	46	39	44	44	48	48	48	48	47
Family Rewards for Prosocial Involvement	48	48	48	52	50	46	39	42	45	49	48	49	48	47
School Domain														
School Opportunities for Prosocial Involvement	54	54	52	52	54	53	55	55	54	52	55	54	54	55
School Rewards for Prosocial Involvement	41	41	41	41	45	41	40	38	44	43	41	42	40	40
Peer and Individual Domain														
Religiosity	55	53	57	54	55	50	53	48	56	54	56	55	54	53
Social Skills	48	48	46	47	54	48	46	43	44	48	48	51	48	50
Belief in the Moral Order	44	51	45	52	48	52	42	46	41	50	46	55	43	52
Averages	48	48	48	49	50	47	44	44	47	48	48	50	48	48

Table 38. 10th Grade Risk Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Low Neighborhood Attachment	53	55	53	55	52	55	53	56	52	57	53	53	53	53
Community Disorganization	49	58	49	58	40	59	53	63	58	61	49	58	48	53
Personal Transitions and Mobility	41	51	40	51	42	52	41	51	38	47	38	53	42	53
Laws and Norms Favorable to Drug Use and Handguns	59	59	59	61	54	61	61	62	63	62	60	60	57	56
Perceived Availability of Drugs and Handguns	47	46	49	47	42	46	50	49	51	48	47	44	46	44
Family Domain														
Poor Family Supervision	55	54	55	53	54	54	62	62	59	53	53	52	55	56
Poor Family Discipline	52	51	51	53	52	52	59	61	52	51	51	49	53	51
Family History of Antisocial Behavior	47	49	51	52	35	50	57	54	55	49	48	47	46	50
Parental Attitudes Favorable toward ATOD Use	51	53	54	54	48	54	56	55	54	52	52	51	50	54
Parental Attitudes Favorable toward Antisocial Behavior	53	53	54	54	48	52	60	56	59	53	55	52	52	53
School Domain														
Poor Academic Performance	51	50	53	52	47	51	49	51	50	48	53	51	52	50
Lack of Commitment to School	54	54	55	55	53	55	55	54	57	55	54	53	54	54
Peer and Individual Domain														
Rebelliousness	53	50	53	50	50	51	55	55	56	51	54	50	52	49
Friends' Delinquent Behavior	49	50	49	51	43	49	50	55	52	50	47	48	51	48
Friends' Use of Drugs	56	55	58	58	49	54	61	62	61	57	56	53	54	52
Peer Rewards for Antisocial Behavior	54	56	55	56	51	55	59	58	56	59	55	55	53	55
Gang Involvement	44	45	43	46	44	46	46	49	46	44	44	46	45	44
Favorable Attitudes toward Antisocial Behavior	60	53	59	52	57	52	63	56	63	56	58	51	59	53
Favorable Attitudes toward ATOD Use	58	52	58	52	53	51	62	55	61	53	57	49	57	51
Low Perceived Risks of Drug Use	41	38	40	39	38	39	43	44	42	39	41	37	41	37
Early Initiation (of Drug Use and Antisocial Behavior)	49	47	50	50	41	47	51	52	54	49	48	45	48	44
Sensation Seeking	58	52	58	52	55	50	60	56	59	52	58	50	57	50
Averages	52	51	52	52	48	52	55	55	54	52	51	50	51	50

Table 39. 12th Grade Protective Factor Scale Scores, Statewide and Regional Estimates

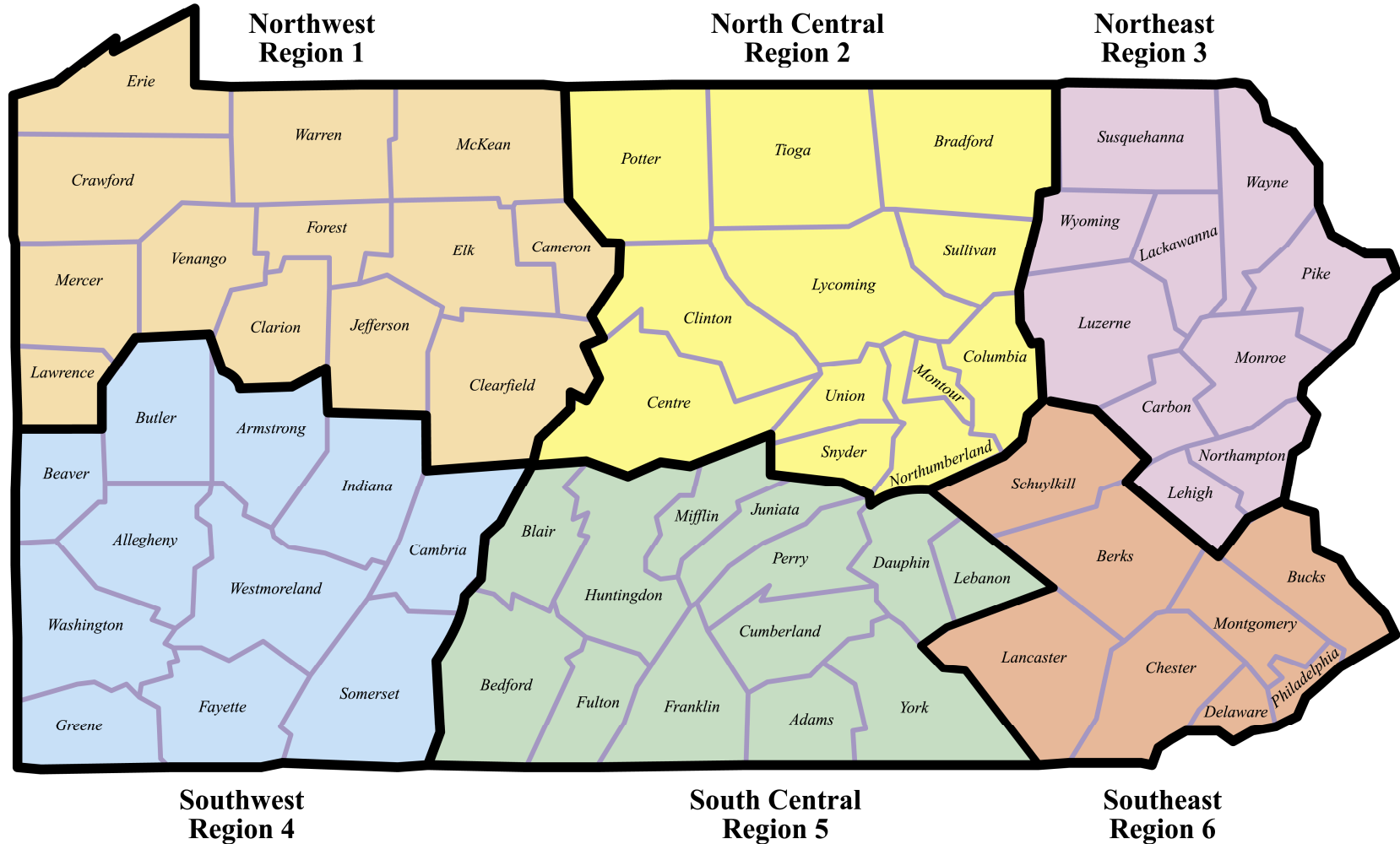
	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Community Rewards for Prosocial Involvement	44	41	44	43	44	42	43	41	47	42	46	42	42	38
Family Domain														
Family Attachment	47	46	47	48	47	45	40	46	46	48	49	45	47	46
Family Opportunities for Prosocial Involvement	46	46	45	48	45	45	38	46	44	45	48	45	46	46
Family Rewards for Prosocial Involvement	46	46	45	47	48	46	40	48	47	49	48	44	45	47
School Domain														
School Opportunities for Prosocial Involvement	53	52	48	52	57	52	50	52	54	48	54	49	53	55
School Rewards for Prosocial Involvement	42	42	40	43	47	43	41	42	43	42	43	40	42	43
Peer and Individual Domain														
Religiosity	49	49	52	51	51	47	43	44	53	53	52	50	48	47
Social Skills	44	45	45	48	47	46	40	43	43	44	44	46	44	45
Belief in the Moral Order	42	50	42	55	44	52	38	49	43	49	45	52	41	49
Averages	46	46	45	48	48	46	41	46	47	47	48	46	45	46

Table 40. 12th Grade Risk Factor Scale Scores, Statewide and Regional Estimates

	Statewide		Region											
			1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE	
	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003	2001	2003
Community Domain														
Low Neighborhood Attachment	57	57	57	57	57	59	62	59	58	58	56	57	57	56
Community Disorganization	49	56	49	57	43	59	59	60	57	60	47	59	48	52
Personal Transitions and Mobility	39	47	41	48	41	50	37	50	37	45	36	45	40	49
Laws and Norms Favorable to Drug Use and Handguns	66	68	67	67	64	68	72	70	67	70	65	69	65	66
Perceived Availability of Drugs and Handguns	57	56	58	56	55	57	60	56	59	57	57	56	57	55
Family Domain														
Poor Family Supervision	61	60	61	56	62	60	68	63	61	60	57	60	61	58
Poor Family Discipline	62	59	60	58	63	61	65	63	61	59	58	59	63	60
Family History of Antisocial Behavior	55	56	58	57	51	57	60	61	59	53	53	56	54	54
Parental Attitudes Favorable toward ATOD Use	61	59	63	58	59	62	64	63	58	57	60	60	62	55
Parental Attitudes Favorable toward Antisocial Behavior	53	52	53	50	51	53	61	53	56	55	52	54	52	47
School Domain														
Poor Academic Performance	51	48	49	49	47	48	52	48	50	47	51	51	52	48
Lack of Commitment to School	58	58	60	57	59	56	63	58	57	61	56	60	56	55
Peer and Individual Domain														
Rebelliousness	55	51	54	47	54	51	58	50	57	53	53	52	54	51
Friends' Delinquent Behavior	54	51	53	47	50	51	60	54	54	52	50	50	54	51
Friends' Use of Drugs	66	64	66	61	64	64	72	66	65	63	67	64	65	64
Peer Rewards for Antisocial Behavior	53	56	51	56	56	57	54	53	53	57	54	58	52	56
Gang Involvement	44	44	44	43	44	44	45	44	44	44	43	43	44	44
Favorable Attitudes toward Antisocial Behavior	60	56	57	51	61	55	65	57	59	59	60	56	60	56
Favorable Attitudes toward ATOD Use	67	59	66	56	69	60	71	59	64	60	67	60	67	59
Low Perceived Risks of Drug Use	47	44	45	41	50	45	51	46	45	44	46	45	46	43
Early Initiation (of Drug Use and Antisocial Behavior)	52	49	53	48	48	49	56	48	55	51	50	49	52	48
Sensation Seeking	61	55	60	53	61	56	63	54	62	55	61	56	60	54
Averages	56	55	56	53	55	56	60	56	56	55	55	55	56	54

Appendix B

Counties by Region



Appendix C

Other Resources

Web Sites

Office of National Drug Control Policy www.whitehousedrugpolicy.gov

National Clearinghouse for Alcohol and Drug Information www.health.org/index.htm

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 <http://depts.washington.edu/sdrg>

Prevention Program Guides

Communities That Care[®] *prevention strategies: A research guide to what works.* (2000). Seattle, WA: Developmental Research and Programs, Inc.

Sloboda, Z., & David, S. L. (1997). Preventing drug use among children and adolescents: A research-based guide (NIH Publication No. 97-4212). Rockville, MD: National Clearinghouse for Alcohol and Drug Information. (ERIC Document Reproduction Service No. ED 424525).

Blueprint Programs www.colorado.edu/cspv/blueprints

Prevention Planning

Hawkins, J. D., Catalano, R. F., & Associates. (1992). *Communities That Care[®]: Action for drug abuse prevention* (1st ed.). San Francisco: Jossey-Bass.

Appendix D

Risk Factors and Problem Behaviors

Communities That Care®

Risk Factors	Adolescent Problem Behaviors				
	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence
Community					
Availability of drugs	●				●
Availability of firearms			●		●
Community laws and norms favorable toward drug use, firearms and crime	●	●			●
Media portrayals of violence					●
Transitions and mobility	●	●		●	
Low neighborhood attachment and community disorganization	●	●			●
Extreme economic deprivation	●	●	●	●	●
Family					
Family history of the problem behavior	●	●	●	●	●
Family management problems	●	●	●	●	●
Family conflict	●	●	●	●	●
Favorable parental attitudes and involvement in the problem behavior	●	●			●
School					
Academic failure beginning in late elementary school	●	●	●	●	●
Lack of commitment to school	●	●	●	●	●
Peer and Individual					
Early and persistent antisocial behavior	●	●	●	●	●
Rebelliousness	●	●		●	
Friends who engage in the problem behavior	●	●	●	●	●
Gang involvement	●	●			●
Favorable attitudes toward the problem behavior	●	●	●	●	
Early initiation of the problem behavior	●	●	●	●	●
Constitutional factors	●	●			●

Note: Not all of the risk factors and adolescent problem behaviors presented in this graphic are measured by the 2003 PAYS.

Appendix E

The Social Development Strategy

