2005 Pennsylvania Youth Survey Report



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Introduction

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 public school students in grades 6, 8, 10, and 12 is conducted every two years. Key survey results from the 2005 PAYS are compared to survey results from the 2003 and 2001 PAYS and the University of Michigan's Monitoring the Future (MTF) survey. The MTF survey is a measure widely used to assess current substance abuse and risky behaviors, and the PAYS shares many of the same survey items.

The 2005 PAYS was sponsored by the Pennsylvania Commission on Crime and Delinquency (PCCD), in collaboration with the Department of Education, Department of Health, Liquor Control Board, and the Department of Public Welfare. The PCCD contracted with Westat, an independent research company, to conduct the survey, which was administered across the state between October and December of 2005. Participating schools were provided detailed instructions for administering the PAYS, including a teacher-read script designed to protect students' privacy by allowing for anonymous and voluntary participation.

The final statewide sample frame produced a statewide sample of 232 randomly selected schools. Statewide, 92 of the 232 randomly selected schools participated in the survey. The 92 participating schools yielded 14,926 surveys for an overall student response rate of 40 percent. A weighting factor was applied to each student survey record to adjust for nonresponse and for varying probabilities of selection. Those wishing to read more details about the overall survey methodology may refer to Appendix C.

Students completed the self-administered PAYS questionnaire during one class period. Before the survey was conducted, local parental permission procedures were followed. In some schools, some or all of the student respondents completed the survey in a computer lab using an Internet-based survey administration system. All schools administering the Internet survey received formal training for the task. Westat utilized a subcontractor, SmartTrack, Inc., to conduct training and support administration for the Internet-based PAYS. In addition, Westat utilized the services of The Crider Group to recruit schools, and the services of Rothenbach Research and Consulting, LLC, to assist with data analysis and report development.

The data gathered in the 2005 PAYS serve two primary needs. First, the survey results provide an important benchmark for alcohol, tobacco, and other drug (ATOD) use and delinquent behavior among young Pennsylvanians, and help to indicate whether prevention and treatment programs are achieving their intended results. Second, the survey assesses risk factors that are related to these behaviors and the

protective factors that guard against them. This information allows community leaders and school administrators to direct prevention resources to areas where they are likely to have the greatest impact.

This report is organized into six sections:

- Section 1: Overview of Key Findings. This section summarizes key trends across various issues, and ends with a focused discussion on three issues which PCCD believes are noteworthy, especially as they relate to what might be priority prevention issues for young Pennsylvanians across the state.
- Section 2: Alcohol, Tobacco and Other Drug Use. This section presents data on lifetime and 30 day use of Alcohol, Tobacco, and Other Drugs among young Pennsylvanians.
- Section 3: Age of Onset, Willingness to Try ATODs, and Driving Under the Influence. This section presents data on the age of onset, willingness to try ATODs, and driving while impaired.
- Section 4: Antisocial Behaviors and Symptoms of Depression. This section presents data on antisocial behaviors, students reporting being attacked or threatened on school property, and gang membership.
- Section 5: Risk and Protective Factors. This section of the report presents data on the risk and protective factor scores.
- Section 6: Additional Prevention Planning Data. This section presents data on items such as perceived risk of harm, frequency of weapons usage, and disapproval of drug use.

For readers, it is worth pointing out that Sections 2, 3, 4, and 5 each begins with a focused summary of what appears to be the most important trends. As readers make their way through these sections, as well as Section 6, a focus on 12th graders and *how they differ from other* young Pennsylvanians, becomes quite apparent. This focus on 12th graders is intentional. Since the 2005 PAYS ATOD data, as well as other data, for 12th graders tells such a clear and convincing story, it seems worth guiding readers, especially prevention planners and providers, through the daunting task of digesting hundreds of data tables.

Finally, readers especially interested in historical data and trends should review with care the data presented in Appendix A and Appendix D.

Section 1 Overview of Key Findings: Discussion and Implications

Where was Pennsylvania in 2005?

On many fronts, Pennsylvania was in an unusual place in 2005. When compared to previous administrations of the Pennsylvania Youth Survey (PAYS), younger students in the state, those in grades 6, 8, and 10, have some of the lowest substance abuse and risky behavior prevalence rates ever recorded. On the other hand, older students, those in grade 12, have some of the highest substance abuse and risky behavior rates ever recorded. This tale of two different groups of young Pennsylvanians dominates throughout this 2005 PAYS report.

Not only are the 2005 statistical estimates some of the lowest ever for students in grades 6, 8, and 10, but many numbers are also well below national benchmark numbers. For example, in 2005 past 30-day use of alcohol by 8th graders in Pennsylvania was 14.5 percent, nearly 3 percentage points lower than what was reported for 8th graders from the 2005 Monitoring the Future (MTF) study, a national survey used to assess substance abuse and risky behaviors. The 30-day marijuana use rate was also nearly 3 percentage points lower than what was reported from the MTF study.

Perhaps it is fair to suggest that for younger Pennsylvanians prevention activities in the state work, and they work very well. Not only are these younger students using fewer substances, but they also are less willing to even try alcohol, marijuana, cocaine or inhalants. In 2005, nearly all of these numbers are down. For example, in 2001, 32.1 percent of the 10th graders statewide reported that they were willing to marijuana compared to 25.1 percent in 2005.

What may be working for younger Pennsylvanians, however, is not necessarily working as effectively for high school seniors in the state, and as readers make their way through this report an extremely clear picture of 12th graders emerges. Not only are many of the statistics for seniors at all-time highs—especially the binge drinking statistics, but seniors in the state also drink, smoke, and use more drugs than their peers nationally. Seniors are also more willing to try alcohol and drugs, and to drive while under the influence.

But beyond the data for seniors, two new concerns emerge from the 2005 PAYS: the high numbers of young Pennsylvanians using prescription drugs for non-medical reasons (without a medical doctor's orders) and the numbers who are gambling for money on a regular basis. For the first time, PAYS asked students both about the use of prescription drugs and gambling for money. Statewide, about 1 in 6 (16.6 percent) high school seniors reported the use of prescription narcotics at some time in their life (a good measure of experimentation), and 1 in 10 (11.6 percent) reported using in the prior 12 months. Statewide, about 1 in 4 students in grade 10 (24.5 percent) and grade 12 (25.4 percent) reported gambling for money in the last 30 days. There are yet no trend data to help put these statistics in context or perspective;

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however, both of these issues are worth pursuing further for these rates suggest unknown environmental influences provoking these behaviors.

Key Findings

Alcohol, Tobacco and Other Drug Use

With the exception of Pennsylvania students in grade 12, Pennsylvania youth model MTF ATOD use trends, with the percentages of students drinking alcohol the past 30 days and their lifetime declining from 2001 to 2005. For high school seniors, however, the percentage of students drinking alcohol the past 30 days and their lifetime increased from 2001 and 2005. In fact, the drinking rates for high school seniors are at all-time highs. Data in Tables D-1 and D-2 show ATOD lifetime and 30-day use data for the 2001 PAYS, 2003 PAYS, 2005 PAYS, and 2005 MTF (see Appendix D). Important results follow below:

Lifetime Alcohol and 30-Day Use

- o For younger Pennsylvanians, both lifetime and 30-day use of alcohol are at an all-time low (see Graph 1-1 for 30-day use rates going back to 1989).
- o Moreover, the prevalence rates for students in grades 6, 8, and 10 all reflect gradual downward trends from 2001 to 2005.
- O Such trends, however, do not hold true for high school seniors. In 2005, lifetime and 30-day prevalence rates for 12th graders were higher than 2001 rates. For example, in 2001, the 30-day alcohol usage rate for 12th graders was 48.5 percent. In 2003, it was 49.2 percent, and in 2005, it climbed higher to 53.7 percent.

Binge Drinking

- o In 2005, the prevalence rate for binge drinking, that is, having five or more drinks in a row in the past 2 weeks, was 33.7 percent compared to 31.2 percent in 2001. And of those 12th graders that binge drink, nearly 40 percent have done so four or more times in the last 2 weeks.
- O This trend represents a fairly substantial number of high school seniors who potentially have or could develop problem-drinking behaviors over time. As important, these prevalence rates are at dangerously high levels and beg for intervention.

Cigarette Smoking

- o For younger Pennsylvanians, both lifetime and 30-day use of cigarettes are an all-time low (see Graph 1-2 for 30-day use rates going back to 1989).
- Moreover, the prevalence rates for students in grades 6, 8, and 10 all reflect gradual downward trends from 2001 to 2005. Such trends, however, do not hold true for 12th graders. Lifetime and 30-day prevalence rates for 12th graders are lower than 2001 rates, but both reflect slight upward movement from 2003.
- o For example, in 2001, the 30-day smoking cigarette rate for 12th graders was 31.9 percent. In 2003, it was 25.8 percent, but in 2005, it climbed slightly higher to 28.5 percent. This rate is still much lower than what was reported in 2001, but there should be concern about the change in the direction of the trend.

Smokeless Tobacco Use

- o Beyond the slight upward turn in the cigarette use rate for high school seniors, there also should be concerns about 12th graders' use of smokeless tobacco products.
- o In 2005, lifetime and 30-day prevalence rates for smokeless tobacco products both increased. In 2001, 9.7 percent of the 12th graders in the state reported using smokeless tobacco.
- o In 2003, the rate was 9.5 percent, and in 2005, it climbed slightly higher to 11.1 percent. The lifetime rate also climbed higher.

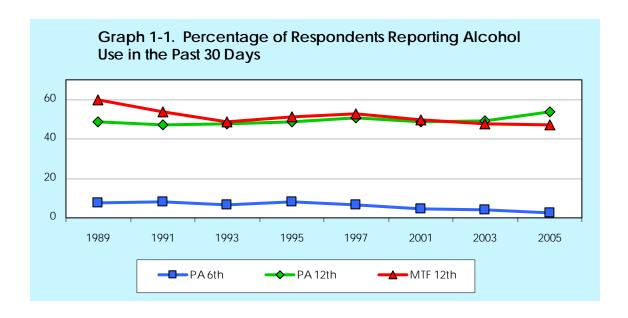
Marijuana Use

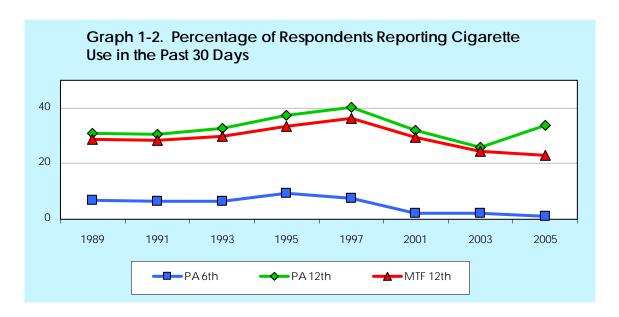
- o For younger Pennsylvanians, both lifetime and 30-day use of marijuana are at an all-time low (see Graph 1-3 for 30-day use rates going back to 1989). And the prevalence rates for students in grades 6, 8, and 10 all reflect perfect downward trends from 2001 to 2005.
- Such trends, however, do not hold true for 12th graders. Lifetime and 30 day prevalence rates for 12th graders are lower than 2001 rates, but both reflect slight upward movement from 2003. For example, in 2001, the 30 day marijuana prevalence rate for 12th graders was 25.6 percent. In contrast, in 2003, it was 21.4 percent, and in 2005, 22.9 percent. This rate is still lower than what was reported in 2001.
- O Nevertheless, there should be concern about the change in the direction of the trend, especially when nearly 20 percent of the 12th graders statewide also said they go to school drunk or high and drive a car while or shortly after smoking marijuana.

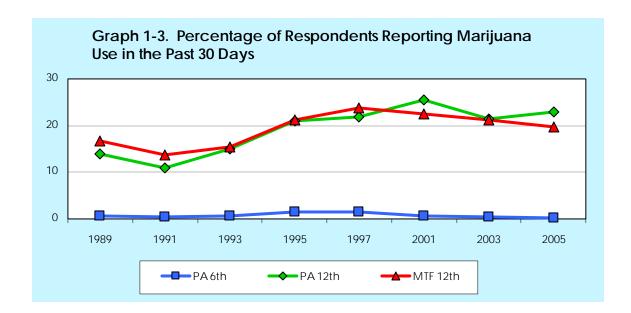
Variations by Select Demographics

- o In general, males drink alcohol more than females; however, females smoke cigarettes more than males.
- Whites drink alcohol and smoke cigarettes more than African Americans and Hispanics, and students in the Southwest region of the state drink alcohol more than students in other regions of the state. See Appendix F for a map of the counties within each region.

Selected ATOD Trends for 6th and 12th Graders







Prescription Drug Use for Nonmedical Purposes

For the first time in 2005, the PAYS asked respondents questions about prescription medicines and their use for nonmedical purposes. Since this is a first for Pennsylvania, there are no trend data to help put the findings into context. Overall, the use of prescription drugs by Pennsylvania's youth, especially those in grades 6, 8, and 10, models MTF prevalence rates, and Pennsylvania prevalence rates are lower, especially in grade 8. However, prevalence rates for 12th graders in Pennsylvania outpace their national counterparts according to MTF study findings. Once again, high school seniors are engaged in risky behaviors far in excess of what one would expect, and this reality is especially true for the use of narcotics.

Data in Tables 2-3, 2-4 and 2-5 show lifetime, 12-month, and 30-day prescription drug use data, including 2005 MTF prevalence rates (see Section 2). Important results follow:

- Amphetamines. In general, compared to MTF findings, Pennsylvania youth reported similar rates of amphetamines use. However, 10th and 12th graders in Pennsylvania report slightly higher 30-day rates than do their peers nationwide on the MTF. For example, 4.4 percent of the 12th graders in Pennsylvania reported using amphetamines in the past 30 days compared to 3.9 percent of MTF 12th graders.
- Sedatives. In general, compared to MTF findings, Pennsylvania youth reported similar rates of sedatives use. However, 10th and 12th graders in Pennsylvania report slightly higher 30-day rates than do their peers nationwide on the MTF. For example, 4.2 percent of the 10th and 12th graders in Pennsylvania reported using sedatives in the past 30 days compared to 3.2 percent of MTF 12th graders
- **Tranquilizers.** In general, compared to MTF findings, Pennsylvania youth reported similar rates of tranquilizers use. However, 12th graders in Pennsylvania report slightly higher lifetime and 30-day rates than do their peers nationwide on the MTF. For example, 11.2 percent the 12th graders in Pennsylvania reported using tranquilizers lifetime and compared to 9.9 percent of MTF 12th graders.
- Narcotics. Regardless of the time period, high school seniors in Pennsylvania report higher narcotics use than do their peers nationwide on the MTF. For example, 16.6 percent the 12th graders in Pennsylvania reported using narcotics in their lifetime compared to 12.8 percent of

MTF 12th graders. And the 30-day use of narcotics by 12th graders in Pennsylvania is the only 30-day use prevalence rate for prescription drugs that exceeds 5 percent. Statewide, 5.4 percent of the 12th graders reported using narcotics in the past 30 days.

• Variations by Select Demographics. Prescription drug use rates are similar for males and females. Hispanics report higher use rates than Whites or African Americans, and students in the Southwest region of the state report higher use rates than students in other regions of the state.

Age of Onset, Willingness to Try ATODs, and Driving Under the Influence

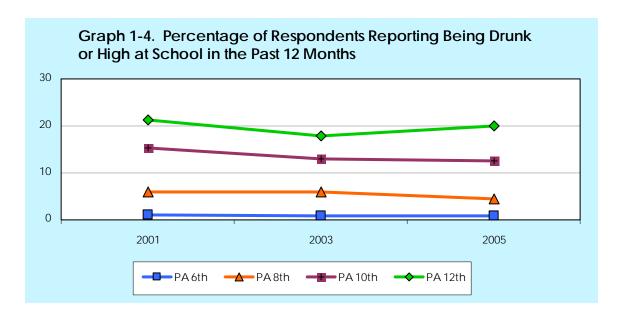
In Pennsylvania, many 12th graders are willing to try ATODs, and a sizable proportion, more than 20 percent, report driving under the influence of either alcohol or marijuana. These drivers not only run the risk of harming themselves, but also run the risk of harming friends and family members, as well as other citizens. Data in Tables E-14 through E-19 show age of onset for ATOD use, and prevalence rates for willingness to try ATODs and driving under the influence. Important results follow:

- Age of Onset. In general, age of initiation means are moving in a positive direction, with young people trying ATODs at much older ages. For the most part, the 2005 age of onset ATOD numbers changed very little when compared to the 2001 and 2003 rates. Take, for example, alcohol use. In 2005, Pennsylvania youth, on average, reported having their first use of alcohol (having more than a sip or two of alcohol) at age 12.8, while the average age of first regular use of alcohol (drinking alcoholic beverages regularly, or at least once or twice a month) was at age 14.5, approximately a year and a half later. In 2001, Pennsylvania youth, on average, reported having their first use of alcohol at age 12.5, while the average age of first regular use of alcohol was at age 14.4.
- Willingness to Try ATODs. With the exception of 10th graders willing to try inhalants, younger students in Pennsylvania grades 6, 8 and 10 report that they are less likely to try alcohol, marijuana, cocaine, hallucinogens, or inhalants than are their peers from previous PAYS administrations. Many of the willingness prevalence rates are at an all-time low for these younger students. Just the opposite is true for 12th graders in the state, and in many situations, most of their rates are at an all-time high. Take, for example, the willingness to try alcohol or cocaine. In 2005, 77.5 percent of the 12th graders said they were willing to try alcohol compared to 73.4 percent in 2001. In 2005, 8.0 percent of the 12th graders said they were willing to try cocaine compared to 6.8 percent in 2001. In the previous section of this report, a great deal of attention was paid to how much alcohol 12th graders consumed. The willingness to try alcohol or a drug like cocaine does not automatically lead to the use of that substance; however, it is a contributing factor and a factor worth diligent monitoring.
- **Driving Under the Influence.** In reality, driving while under the influence of either alcohol or marijuana should only be a problem for 12th graders. Students in the other grades surveyed grades 6, 8, and 10 are too young legally to drive. Statewide, slightly more than one-fifth of the 12th graders surveys reported driving under the influence in 2005. Driving after marijuana use is worst than it was in 2003 yet better than 2001. In 2005, 22.9 percent of the 12th graders reported driving after marijuana compared to 24.1 percent in 2001. But driving after alcohol use is worse than it was in both 2003 and 2001. In 2005, 23.9 percent of the 12th graders reported driving after alcohol use compared to 21.5 in 2001.
- Variations by Select Demographics. In general, males are more willing to try ATODs and to drive under the influence than females. Whites are more willing to try ATODs and to drive under the influence than African Americans, and students in the Southwest are more willing to try ATODs and to drive under the influence than students in other regions of the state.

Antisocial Behaviors, Threatened or Attacked at School, and Gang Membership

In Pennsylvania, 6th and 8th graders engage in some antisocial behaviors such as selling illegal drugs or being arrested, but in general, these younger students avoid such behaviors. On the other hand, 10th and 12th graders are much more likely to engage in risky and dangerous antisocial behaviors. Rates for students being threatened or attacked with a weapon on school property are also low; however, gang membership rates have increased slightly over rates reported for previous survey years. Data in Tables D-11, D-12 and D-13 show prevalence rates for antisocial behaviors, being threatened or attacked with a weapon on school property, and gang membership. Data in Graph 1-4 show prevalence rates for being drunk or high at school for 6th and 12th graders only going back to 2001. Important results follow:

- Antisocial Behaviors. Overall, prevalence rates for younger Pennsylvanians, students in grades 6 and 8, dropped in 2005. Some prevalence rates have fallen below 2001 rates. In 2005, for example, 1.7 percent of the students in grade 8 reported attempting to steal a vehicle compared to 1.9 percent in 2003. In 2005, 4.5 percent of the students in grade 8 reported being drunk or high at school compared to 6.0 in 2001. Two significant problems stand out for 8th graders: getting suspended and attacking someone with intent to harm. In 2005, for example, the rate for getting suspended climbed slightly higher to 11.1 percent. In 2003, the rate was 9.5 percent and in 2003 it was 10.2 percent. While younger students improved many of their of social skills and overall are behaving better, older students, those in grades 10 and 12, have not, and with a few exceptions, 2005 prevalence rates increased compared to 2001 rates. Older students being arrested both 10th and 12th graders, for example, increased from 2001 to 2005. In 2001, 7.0 percent of the 12th graders reported being arrested, and in 2005, the prevalence rate increased to 8.3 percent. In 2001, 7.5 percent of the 10th graders reported selling drugs, and in 2005, the prevalence rate increased to 8.3 percent. The rate for 12th graders for the same behavior stands at 11.2 percent in 2005. In 2001, the rate was similar 11.1 percent.
- Being Threatened or Attacked on School Property. For the most part, rates for students being threatened or attacked with a weapon on school property are unchanged from 2003. PAYS did not ask these questions prior to 2003. In both 2003 and 2005, 8th graders reported being threatened with a weapon more than any other group of students. In 2003, 6.2 percent of the 8th graders said they were threatened with a weapon on school property compared to 6.0 percent in 2005. These students also are more likely to say they were attacked with a weapon. In 2003, 2.7 percent of the 8th graders said they were attacked with a weapon on school property compared to 2.9 percent in 2005.
- Gang Membership. Statewide, gang membership is down for 6th and 8th graders yet increased for 10th and 12th graders. In 2005, roughly 8 percent of the 10th graders reported being a member of a gang, compared to 4.6 percent in 2001 and 5.9 percent in 2003. And roughly 6 percent of the 2005 12th grades reported being a member of a gang compared to 4.6 percent in 2001 and 4.5 percent in 2003. In 2005, statewide, 7 percent of the students surveyed reported being in a gang.
- Variations by Select Demographics. In general, males are more likely to report that they are engaged in antisocial behaviors, including gang membership, than females. African Americans and Hispanics are more likely to report gang membership than whites, and African Americans students also are more likely to report that they are engaged in antisocial behaviors than Whites. Students in the Northeast and Southwest regions of the state are more likely to report that they are engaged in antisocial behaviors than students in other regions of the state.



Protective and Risk Factor Scores

The protective factors, also known as assets, are conditions that buffer young people from risks by either reducing the impact of the risks or changing the way that young people respond to them. The risk factors are conditions that increase the likelihood of a young person becoming involved in drug use, delinquency, school dropout, and/or violence. A factor score of "50" is average. Statewide, in general, score changes between 2001 and 2005 remained stable. The one noteworthy finding is the increased risk factor scores for 12th graders.

Data in Tables D-23 and D-24 show the protective and risk factor scores. Important results follow:

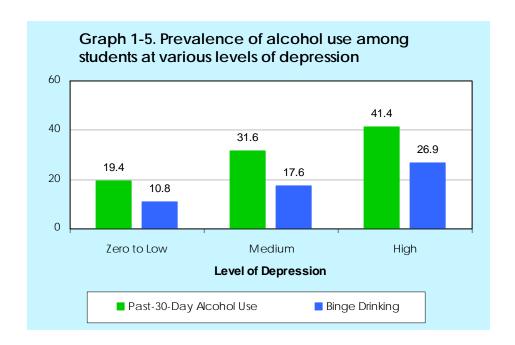
- Protective Factor Scores. With the exception of the percentile scores for students in grade 8, in general, score changes between 2001 and 2005 are small. The score changes for students in grade 8, however, are noticeable. For example, in 2001, the Belief in the Moral Order score stood at the 54th percentile and Community Rewards for Prosocial Involvement the 50th percentile. In 2005, Belief in the Moral Order for students in grade 8 jumped to the 61st percentile, while the Community Rewards for Prosocial Involvement score jumped to the 59th percentile. These kinds of notable changes are positive, and perhaps bode well for communities across the state as these 8th graders age and move into high school.
- Risk Factor Scores. In general, risk factor percentile scores for students in grades 6, 8, and 10 went down between 2001 and 2005. The lower scores reported by these students represent strengths schools and communities can build on. The risk factor scores for students in grade 12, however, increased between 2001 and 2005, with many of the scores moving from scores ranging in the 50th percentile band to scores ranging in the 60th percentile band. For 12th graders, the increased risk factor scores are grounds for concern, especially, the higher than average scores for Friends' Use of Drugs, Community Disorganization, Lack of Commitment to School, and Favorable Attitudes Toward ATOD use.
- Variations by Select Demographics. In general, females have better protective and risk factor scores than males, and students in the Northeast region have better scores than students elsewhere in the state.

Gambling and Symptoms of Depression

Gambling rates by young Pennsylvanians seem high, with 36 percent of the youth statewide saying they gambled for money in the past year and 19 percent saying they gambled for money in the past 30 days. Symptoms of depression rates also seem high, with 34 percent of the youth statewide saying they are depressed and 24 percent saying they feel worthless. Young Pennsylvanians who report multiple symptoms of depression are at greater risk, with higher numbers of these young people consuming greater amounts of alcohol and using drugs more often than their peers with fewer symptoms.

Data in Tables 4-4 and 4-5 show prevalence rates for gambling and symptoms of depression, respectively. Important results follow:

- **Gambling.** Starting with the 2005 PAYS, students were asked a series of five questions about their experiences with gambling. Statewide, 36 percent of Pennsylvania youth reported gambling for money in the past year, and 19 percent did so in the past 30 days. Gambling for money varies by grade, with 10th and 12th graders gambling more than 6th and 8th graders. In fact, more than 40 percent of the 10th and 12th graders, statewide, reported gambling for money in the past year, and 25 percent reported doing so in the past 30 days.
- Symptoms of Depression. In 2003, for the first time, PAYS included questions that asks students about feelings—sadness, hopelessness and worthlessness—that *can* be symptoms of depression. The same four questions were asked in 2005, and for the first time the data are being reported. These symptoms of depressions are not clinical signs or symptoms of depression or suicide; however, it is perhaps fair to use them as red flags or warning signs that not all is normal with young Pennsylvanians. Statewide, more than 30 percent of the students surveyed reported feeling depressed and worthless. Students in the 10th grade have the highest percentage of students reporting symptoms of depression, but in general, rates are fairly similar across the grades. Students with the most symptoms of depression (i.e., students reporting that they are sad, hopeless, and worthless) report higher rates of ATOD use than do students with few symptoms of depression. For example, 41.4 percent of the students with high levels of depressive symptoms reported alcohol use in the past 30-days compared to 19.4 percent of those with low levels of depressive symptoms (see Graph 1-5).
- Variations by Select Demographics. In general, males are more likely to report that they gambled for money than females, and females report higher levels of depression than males. Whites are more likely to report that they gambled for money than African Americans; however, reported levels of depression are similar across ethnic groups. Students in the Southwest regions of the state are more likely to gamble for money than students in other regions of the state, and students in both the Northeast and Southwest reported higher levels of depression than students in other regions of the state.



Implications for Prevention and Future PAYS

Binge Drinking to Excess

"Alcohol use is a leading risk factor in the three leading causes of death among youth: unintentional injuries (including motor vehicle crashes and drownings); suicides; and homicides." (CDC, Youth Risk Behavior Survey, 2001)

ATOD use data from the 2005 PAYS tell a story of two different groups of Pennsylvania youth. One group are students in grades 6, 8, and 10 who drink and smoke and generally use fewer drugs than the other. These data match almost perfectly what occurs nationally. The other group is students in grade 12 who drink, smoke, and use more drugs than their counterparts nationally. These 12th graders are also more willing to try alcohol and drugs, and to drive while under the influence of alcohol or pot—at times the numbers are frightening.

Yet the most disturbing reality for 12th graders in Pennsylvania is how much they binge drink. In 2005, the prevalence rate for binge drinking, that is, having five or more drinks in a row in the past 2 weeks, was 33.7 percent compared to 31.2 percent in 2001. And of those 12th graders that binge drink, nearly 40 percent have done so four or more times in the last 2 weeks.

Even though the binge drinking portrait for 12th graders is gloomy, the 2005 PAYS data offers prevention planners and providers with an extremely clear priority: *a renewed prevention effort, perhaps solely focused on high school seniors and their drinking habits*. Typically, high school seniors are given much more freedom than their younger peers, under the assumption that they are more mature and responsible. It may be time, however, to revisit these assumptions in Pennsylvania.

And as prevention planners and providers refocus their attention on high school seniors, they should do so with special recognition and analysis of the risk and protective factors data. Clearly, the 2005 PAYS data show that 12th graders, on average, have higher than normal favorable attitudes (scores) toward ATOD use. Some risk factor scores for 12th graders (e.g., *Favorable Attitudes Toward ATOD* and *Friends' Use of*

Drugs), increased between 2001 and 2005, worsening conditions that increase the likelihood of a young person becoming involved in drug use and delinquency. In fact, nearly 30 percent of 2005 high school seniors believe they are "cool" if they drink alcohol regularly. Alone, this is a pretty sobering statistic. But it also is a reality that clearly does not mix well with seniors who drink to excess. It is not known how so many seniors arrived at believing that drinking is cool, but altering this perception should become a prevention priority in Pennsylvania. Successfully doing so has the potential of saving teens' lives.

Prescription Drug Use

"Kids get messages about street drugs. They know smoking crack is a bad deal. This country needs to have a serious conversation about both the marketing of prescription drugs and where we draw the boundaries between illegal use and misuse." (New York Times, 2005)

For the first time, the PAYS asked respondents questions about prescription medicines and their use for nonmedical purposes. Since this is a first for PAYS, there are no time trend data. It is clear, however, that prevalence rates for 12th graders in Pennsylvania outpace MTF rates. Once again, Pennsylvania high school seniors are engaged in risky behaviors far in excess of what one would expect, and this reality is especially true for the use of narcotics. Statewide, slightly more than 5 percent of the high school seniors use narcotics for nonmedical purposes on a monthly basis, and nearly 12 percent did so in the past year.

The 2005 PAYS provides no clues or evidence about how or where teens in the state obtain the prescription drugs they use. One can only speculate – the home medicine cabinet, peers, or even Internet purchases that do not require prescriptions for online shoppers. Nonetheless, state drug prevention planners and providers, and parents, need to become more aware of what has the potential of becoming a very serious drug problem. In addition, perhaps now is the best time for drug prevention planners and providers to initiate new campaigns and messages about the dangers of using prescription drugs for nonmedical purposes. At a minimum, planner and providers, and school personnel, ought to include in current campaigns and materials specific messages about the dangers of using prescription drugs.

Finally, future administrations of the PAYS, might include additional questions about prescription drug use. One area to investigate is where young people obtain these drugs. Another area to investigate is why young people use these drugs. Is it merely to get high or is something else motivating teens to use these drugs?

Gambling for Money

"Among youth in the 14 to 15 age range, 45.3 percent report gambling on a monthly basis." (The Annenberg National Risk Survey of Youth, 2003)

Statewide, 36 percent of Pennsylvania youth reported gambling for money in the past year, and 19 percent did so in the past 30 days. Putting these rates into perspective, especially the monthly rate, however, is difficult for several reasons. First, only a limited number of researchers even ask teenagers about their gambling behaviors. Second, because so few measure the behavior, attempts to standardize the questions (the gambling behaviors) teens are asked has not yet evolved.

For youth in the 14 to 15 age range, the 2003 Annenberg National Risk Survey of Youth put its monthly gambling rate at 45 percent. The 2004 Delaware School Survey put its monthly gambling rate at 10 percent for 11th graders, and the 2005 Georgia Youth Risk Behavior Survey put its rate at 33.9 percent for students in grades 9 through 12. Clearly, the monthly gambling rate of 19 percent for Pennsylvania youth is somewhere in the middle – higher than Delaware yet lower than Georgia. Still, demographically comparing Pennsylvania youth to Delaware and Georgia is problematic.

But regardless of what is happening elsewhere, the fact that 19 percent of the youth statewide gamble monthly for money is worth monitoring. The 2005 PAYS provides no clues about what teens in the state

gamble their money on, and future PAYS administrations ought to include additional questions about gambling, specifically asking young people what they gamble on. For example, the Georgia survey asks teens questions about betting money on sports teams, playing cards, and lottery tickets. The Annenberg National Risk Survey of Youth also includes such details about how teens gamble. PAYS ought to ask similar questions. If teenager gambling grows as a problem in the state, then prevention planners and providers need much more specific information about what types on gambling teens engage in.

Section 2 Alcohol, Tobacco and Other Drug Use

This section presents data on alcohol, tobacco, and other drug (ATOD) use data from the 2005 PAYS. The ATOD use data tell a story of two different groups of Pennsylvania youth. One group are students in grades 6, 8, and 10 who drink and smoke and generally use fewer drugs than the other. These data match almost perfectly what occurs nationally. The other are students in grade 12 who drink, smoke, and use more drugs than their counterparts nationally.

In Pennsylvania, 12th graders drink more alcohol than their peers in lower grades. They also drink more frequently and to excess, consuming mostly beer and hard liquor. A number of potentially destructive consequences are explored in great detail Section 3 of this report. For example, the number of 12th graders who have driven a car while or shortly after drinking is frighteningly high, and that many impaired teens on the highways is a serious and dangerous health problem.

Even though the ATOD portrait for 12th graders is gloomy, the data in this section of the report provides prevention planners and providers with an extremely clear priority: a renewed prevention focus, perhaps solely on high school seniors. Typically, high seniors are given much more freedom than their younger peers, under the assumption that they are more mature and responsible. It may be time, however, to revisit these assumptions in Pennsylvania.

In a later section of this report, data on risk and protective factors are presented. In this section, data show that 12th graders, on average, have higher than normal favorable attitudes (scores) toward ATOD use. In fact, nearly 30 percent of the 12th graders believe they are "cool" if they drink alcohol regularly. Alone, this is a pretty sobering statistic. But it also is a reality that clearly does not mix well with seniors who drink to excess. It is not known how so many seniors arrived at believing that drinking is cool, but altering this perception should become a prevention priority in Pennsylvania. Successfully doing so does have the potential of saving teens' lives.

Key Trends and Highlights

As noted in the Introduction, Sections 2 through 5 each begins with a focused summary of key highlights. Again, readers should take note that the section below focuses on 12th graders and how they differ from other young Pennsylvanians. The highlights also are specifically intended to point out key historical trends and important 2005 subgroup differences. For more details on historical trends see tables in Appendix A and Appendix D.

Alcohol Use: 12th Graders Drinking More Frequently and to Excess

Historically, alcohol prevalence rates increase as students enter higher grades. In Pennsylvania, 12th graders drink more alcohol than their peers in lower grades; they also drink more frequently and to excess, consuming mostly beer and hard liquor while avoiding wine. These excesses are potentially destructive, both to themselves and to others around them. For example, the number of 12th graders who have driven a car while or shortly after drinking is frighteningly high – nearly 30 percent say they have done so in the past year.

For 12th graders, alcohol prevalence rates are up across the board. Lifetime and 30-day use and binge drinking are at an all-time high. In 2005, lifetime use stood at 85.0 percent, and 30-day use at 53.7 percent, compared to 83.8 percent and 48.5 percent, respectively in 2001. In 2005, the prevalence rate for binge drinking, that is, having five or more drinks in a row in the past 2 weeks, was 33.7 percent compared to 31.2 percent in 2001. And it is the binge drinking that appears to be an extremely serious problem for 12th graders.

- First, the binge drinking rate for Pennsylvania 12th graders is noticeably higher than the national rate reported in the Monitoring the Future (MTF) survey. In 2005, the MTF binge drinking rate was nearly 5 percentage points lower at 28.1 percent, and remained fairly flat from previous survey cycles.
- Second, the increase for binge drinking rate from the 10th to the 12th grade for Pennsylvania is twice the MTF increase. In Pennsylvania, the binge drinking rate of increase is slightly more than a 70 percent, moving from 19.6 percent to 33.7 percent in 2005. The MTF rate of is 33 percent, moving from 21.0 percent to 28.1 percent.
- Third, of those 12th graders in Pennsylvania who binge drink, nearly 40 percent have done so four or more times in the last 2 weeks. This latter trend represents a fairly substantial number of 12th graders who are essentially drinking at dangerous levels every weekend.

Tobacco Use: Smoking Cigarettes Remains Low, But Smokeless Tobacco Use Climbs Higher

For younger Pennsylvanians, both lifetime and 30-day use of cigarettes are at an all-time low. Moreover, the prevalence rates for students in grades 6, 8, and 10 all reflect perfect downward trends from 2001 to 2005. Such trends, however, do not hold true for 12th graders. Lifetime and 30-day prevalence rates for 12th graders are lower than 2001 rates, but both reflect slight upward movement from 2003. For example, in 2001, the 30-day smoking cigarette rate for 12th graders was 31.9 percent. In 2003, it was 25.8 percent, but in 2005, it climbed slightly higher to 28.5 percent. This rate is still much lower than what was reported in 2001, but there should be concern about the change in the direction of the trend.

There also should be concerns about 12th graders use of smokeless tobacco products. In 2005, lifetime and 30-day prevalence rates for smokeless tobacco products both increased. In 2001, 9.7 percent of the 12th graders in the state reported using smokeless tobacco. In 2003, the rate was 9.5 percent, and in 2005, it climbed slightly higher to 11.1 percent. The lifetime rate also climbed higher. Pennsylvania 12th graders also outpace their national peers when it comes to the use of smokeless tobacco. In 2005, 7.6 percent of the MTF 12th graders used smokeless tobacco, a rate that is significantly less than reported for Pennsylvania 12th graders.

Marijuana Use: Remains Low

For younger Pennsylvanians, both lifetime and 30-day use of marijuana are at an all-time low. And the prevalence rates for students in grades 6, 8, and 10 all reflect perfect downward trends from 2001 to 2005. Such trends, however, do not hold true for 12th graders. Lifetime and 30 day prevalence rates for 12th

graders are lower than 2001 rates, but both reflect slight upward movement from 2003. For example, in 2001, the 30 day marijuana prevalence rate for 12th graders was 25.6 percent. In contrast, in 2003, it was 21.4 percent, and in 2005, 22.9 percent. This rate is still lower than what was reported in 2001; nevertheless, there should be concern about the change in the direction of the trend, especially, when nearly 20 percent of all 12th graders also said they go to school high and drive a car while or shortly after smoking pot.

Prescription Drug Use: Narcotics Use is High

For the first time, the 2005 PAYS asked respondents 12 questions about prescription medicines and their use for nonmedical purposes. Since this is a first for Pennsylvania, there are no trend data. For the most part, the use of prescription drugs by Pennsylvania youth, especially those in grades 6, 8, and 10, models MTF prevalence rates, and Pennsylvania prevalence rates are lower, especially in grade 8. However, prevalence rates for 12th graders in Pennsylvania outpace MTF rates. Once again, 12th graders in the state seem to be engaged in risky behaviors and practices far in excess of what one would expect, and this reality is especially true for the use of narcotics such as opium, morphine, or OxyContin. Statewide, a fairly high percentage of students in grade 12 reported using other narcotics during the past 30 days, 12 months, and their lifetime on one or more occasions. These rates are higher than those reported for MTF 12th graders. For example, 16.6 percent of the students in Pennsylvania used other narcotics during their lifetime compared to 12.8 percent of those in the MTF sample. And 11.6 percent of the students in grade 12 used other narcotics during the past 12 months compared to 9.0 percent of the MTF 12th graders.

ATOD Use by Select Demographics

In general, males drink alcohol more than females; however, females smoke cigarettes more than males. Whites drink alcohol and smoke cigarettes more than African Americans and Hispanics, and students in the Southwest region of the state drink alcohol more than students in other regions of the state. For specific details on the various subgroup differences see tables in Appendix D.

As noted several times with in this section, binge drinking by Pennsylvania students is a serious problem, especially for older students. Binge drinkers, however, can be distinction further. Here are some key findings:

- Males binge drink more than females. Statewide, 16.1 percent of the males reported binge drinking compared to 13.8 percent of the females. These differences hold true when the grade level of the student is considered. For example, at the 12th grade, 37.7 percent of the males reported binge drinking compared to 29.5 percent of the females.
- Students who reported their grades as mostly D's and F's binge drink more than students who reported their grades as mostly A's and B's. For example, at the 12th grade, 55.0 percent of the students who reported their grades as mostly D's and F's also reported binge drinking compared to 25.7 percent of the students who reported their grades as mostly A's and B's.
- Students who reported that they almost always hate school binge drink more than students who reported that they never hate school. For example, at the 12th grade, 43.3 percent of the students who reported that they almost always hate school also reported binge drinking compared to 20.5 percent of the students who reported that they never hate school.
- Students who reported that they felt depressed or sad most days binge drink more than students who did not report feeling this way. Overall, 24.5 percent of the students who reported that they were depressed or sad most days also reported binge drinking compared to 10.5 percent of the students not feeling depressed or sad.

• Students from the Southwest and Northwest regions of the state binge drink more than students from other regions of the state. Overall, in the Southwest region, 20.2 percent of the students reported binge drinking, and 39.6 percent of the 12th graders in the region reported binge drinking. In contrast, overall, in the North Central region, 15.7 percent of the students reported binge drinking, and 25.1 percent of the 12th graders in the region reported binge drinking.

Measuring ATOD Use

Alcohol, tobacco and other drug (ATOD) use is measured in the 2005 *PAYS* by a set of 36 questions. The questions are similar to those used in the *Monitoring the Future* study, a nationwide study of drug use by middle and high school students. Consequently, national data as well as data from other similar surveys can be easily compared to data from the 2005 *PAYS*.

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

A multi-question indicator—"any illicit drug (other than marijuana)"—measures the use of one or more of the following drugs: inhalants, cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids. The purpose of this drug combination rate is to provide prevention planners with an overall gauge of so-called "hard" drug use (Johnston, O'Malley, Bachman & Schulenberg, 2005a). Individually, the usage rates of these hard drugs are so low that accurate measurement is rarely possible.

This year's survey also includes 12 new questions designed to measure nonmedical use of prescription drugs. The questions cover four general categories of nonmedical prescription drug use: amphetamines, sedatives, tranquilizers and narcotics other than heroin. In addition to lifetime and past-30-day prevalence of use periods, a question about past-12-month use is included with each prescription drug category.

Results Summary

Overall Results

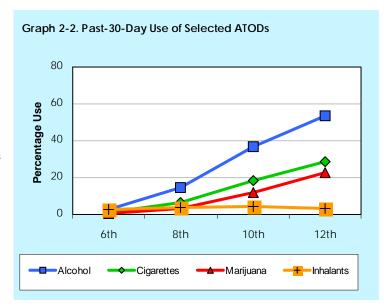
ATOD prevalence rates for the combined sample of 6th, 8th, 10th and 12th graders are presented in Graph 2-1, and in the overall results column of Tables 2-1 and 2-2. As these results show, PAYS 2005 Statewide students recorded the highest lifetime prevalence-of-use rates for alcohol (58.8%), cigarettes (29.6%) and marijuana (19.1%). Other lifetime prevalence rates ranged from 0.9% for heroin to 12.0% for smokeless tobacco. The rate of illicit drug use excluding marijuana is summarized by the indicator "any illicit drug (other than marijuana)," with 14.2% of surveyed students reporting use of these drugs in their lifetimes.

PAYS 2005 Statewide students reported the highest past-30-day prevalence-of-use rates for alcohol (26.3%), cigarettes (13.3%), marijuana (9.4%) and smokeless tobacco (5.6%). Other past-30-day prevalence rates ranged from 0.3% for heroin to 3.4% for inhalants. Overall, 5.6% of PAYS 2005 Statewide students reported the use of any illicit drug (other than marijuana) in the past 30 days.

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Grade-Level Results

ATOD prevalence rates for individual grade levels are presented in Graph 2-2 and Tables 2-1 and 2-2. Typically, prevalence rates for the use of most substances increase as students enter higher grades. In many communities, however, inhalant use provides an exception to this pattern, often peaking during the late middle school or early high school years. This may be because inhalants are relatively easy for younger students to obtain. Past-30-day alcohol use in PAYS 2005 Statewide ranges from a low of 2.6% among 6th graders to a high of 53.7% among 12th graders. Past-30-day marijuana use ranges from a low of 0.3% among 6th graders to a high of 22.9% among 12th graders. Past-30-day cigarette



use ranges from a low of 1.0% among 6^{th} graders to a high of 28.5% among 12^{th} graders. Past-30-day inhalant use ranges from a low of 2.5% among 6^{th} graders to a high of 4.1% among 10^{th} graders.

Comparisons to National Results

Comparing and contrasting findings from a county- or school-district-level survey to relevant data from a national survey provides a valuable perspective on local data. In this report, national comparisons for ATOD use will be made to the 2005 *Monitoring the Future* study. The *Monitoring the Future* survey project, which provides prevalence-of-use information for ATODs from a nationally representative sample of 8th, 10th and 12th graders, is conducted annually by the Survey Research Center of the Institute for Social Research at the University of Michigan (see www.monitoringthefuture.org). For a review of the methodology of this study, please see Johnston, O'Malley, and Bachman & Schulenberg (2005a).

In addition to a complete report of prevalence-of-use rates for each surveyed grade, Tables 2-1 and 2-2 present national results from the *Monitoring the Future* study. Across the three comparison grades (8th, 10th and 12th), students in PAYS 2005 Statewide reported a higher average level of lifetime alcohol use than their national counterparts and lower average levels of lifetime marijuana, inhalant and methamphetamine use. The largest grade-level differences in lifetime substance use were for alcohol in the 8th, 10th and 12th grades (52.9%, 74.8% and 85.0% versus 41.0%, 63.2% and 75.1% for *Monitoring the Future*).

For past-30-day ATOD use, students in PAYS 2005 Statewide reported higher average levels of alcohol and cigarette use than their national counterparts. The largest grade-level differences in past-30-day substance use were for cigarettes in the 12th grade (28.5% versus 23.2% for *Monitoring the Future*), binge drinking in the 12th grade (33.7% versus 28.1% for *Monitoring the Future*) and alcohol in the 12th grade (53.7% versus 47.0% for *Monitoring the Future*).

Table 2-1. Lifetime Use of Alcohol, Tobacco and Other Drugs

	Monitoring the Future ¹										
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %	8 th %	10 th %	12 th %
Alcohol	23.5		52.9		74.8		85.0	58.8	41.0	63.2	75.1
Cigarettes	6.3		20.4		38.8		54.5	29.6	25.9	38.9	50.0
Smokeless Tobacco	2.5		5.4		16.0		25.3	12.0	10.1	14.5	17.5
Marijuana	0.8		7.7		25.2		44.8	19.1	16.5	34.1	44.8
Inhalants	7.3		10.9		10.8		9.2	9.6	17.1	13.1	11.4
Cocaine	0.2		0.8		4.3		9.5	3.6	3.7	5.2	8.0
Crack Cocaine	0.2		1.0		2.7		3.1	1.7	2.4	2.5	3.5
Heroin	0.2		0.4		1.0		2.3	0.9	1.5	1.5	1.5
Hallucinogens	0.3		1.4		4.9		9.9	4.0	3.8	5.8	8.8
Methamphetamine	0.1		0.6		2.4		2.8	1.5	3.1	4.1	4.5
Ecstasy	0.2		1.3		4.5		6.6	3.1	2.8	4.0	5.4
Steroids	0.7		1.1		1.6		1.7	1.3	1.7	2.0	2.6
Any Illicit Drug (Other than Marijuana)	8.0		12.3		16.3		20.8	14.2			

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

1 Johnston, O'Malley, Bachman & Schulenberg (2005b).

Table 2-2. Past-30-Day Use of Alcohol, Tobacco and Other Drugs

	Monitoring the Future ¹										
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %	8 th %	10 th %	12 th %
Alcohol	2.6		14.5		36.5		53.7	26.3	17.1	33.2	47.0
Binge Drinking	1.0		6.7		19.6		33.7	14.9	10.5	21.0	28.1
Cigarettes	1.0		6.4		18.4		28.5	13.3	9.3	14.9	23.2
Smokeless Tobacco	0.5		2.4		8.7		11.1	5.6	3.3	5.6	7.6
Marijuana	0.3		3.5		12.0		22.9	9.4	6.6	15.2	19.8
Inhalants	2.5		3.9		4.1		3.1	3.4	4.2	2.2	2.0
Cocaine	0.0		0.3		1.4		2.8	1.1	1.0	1.5	2.3
Crack Cocaine	0.0		0.5		0.8		0.5	0.5	0.6	0.7	1.0
Heroin	0.1		0.2		0.3		0.6	0.3	0.5	0.5	0.5
Hallucinogens	0.1		0.4		1.8		3.7	1.4	1.1	1.5	1.9
Methamphetamine	0.0		0.3		0.6		0.7	0.4	0.7	1.1	0.9
Ecstasy	0.0		0.5		0.8		1.1	0.6	0.6	1.0	1.0
Steroids	0.2		0.3		0.4		0.6	0.4	0.5	0.6	0.9
Any Illicit Drug (Other than Marijuana)	2.7		4.7		6.9		8.5	5.6			

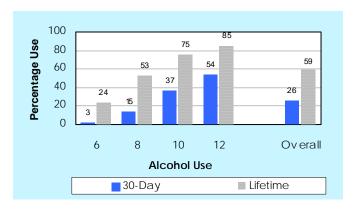
Note: The symbol "--" indicates that data are not available because students were not surveyed, the drug was not included in the survey, or a comparable aggregate calculation was not available. *Monitoring the Future* data are only available for 8th, 10th and 12th graders.

¹ Johnston et al. (2005b).

Item-Level Results

Alcohol

Alcohol, including beer, wine and hard liquor, is the drug used most often by adolescents today. Findings from the *Monitoring the Future* study highlight the pervasiveness of alcohol in middle and high schools today. In comparison, cigarette use (the second most pervasive category of ATOD use) is only about half as prevalent as alcohol use. Given the national pattern, it is not surprising that alcohol is the most used drug among students in PAYS 2005 Statewide.



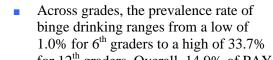
Lifetime Use:

- Lifetime prevalence of alcohol use ranges from a low of 23.5% for 6th graders to a high of 85.0% for 12th graders. Overall, 58.8% of PAYS 2005 Statewide students have used alcohol at least once in their lifetimes.
- Compared to national findings, 8th, 10th and 12th graders reported higher rates of lifetime alcohol use.

Past-30-Day Use:

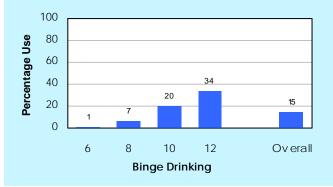
- Past-30-day prevalence of alcohol use ranges from a low of 2.6% for 6th graders to a high of 53.7% for 12th graders. Overall, 26.3% of PAYS 2005 Statewide students have used alcohol at least once in the last 30 days.
- Compared to national findings, 8th graders reported a lower rate of past-30-day alcohol use and 10th and 12th graders reported higher rates of use.

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.





episode of binge drinking in the past two weeks. 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 of use.



Tobacco

After alcohol, tobacco (including cigarettes and smokeless tobacco) is the most commonly used drug among adolescents. Nationally, tobacco use (including both cigarettes and smokeless tobacco) has declined substantially since the late 1990s (Johnston et al., 2005b).

Lifetime Cigarette Use:

 Lifetime prevalence of cigarette use ranges from a low of 6.3% for 6th graders to a high of 54.5% for 12th graders. Overall, 29.6% of PAYS 2005 Statewide students have used cigarettes at least once



18

55

in their lifetimes. Compared to national findings, 8th graders reported a lower rate of lifetime cigarette use, 10th graders reported a similar rate and 12th graders reported a higher rate of use.

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80

60

40

20

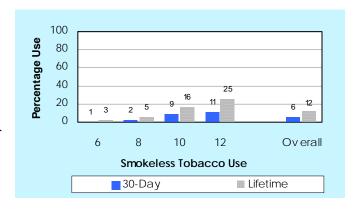
Percentage Use

Past-30-Day Cigarette Use:

- Past-30-day prevalence of cigarette use ranges from a low of 1.0% for 6th graders to a high of 28.5% for 12th graders. Overall, 13.3% of PAYS 2005 Statewide students have used cigarettes at least once in the last 30 days.
- Compared to national findings, 8th graders reported a lower rate of past-30-day cigarette use and 10th and 12th graders reported higher rates of use.

Lifetime Smokeless Tobacco Use:

- Lifetime prevalence of smokeless tobacco use ranges from a low of 2.5% for 6th graders to a high of 25.3% for 12th graders. Overall, 12.0% of PAYS 2005 Statewide students have used smokeless tobacco at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime smokeless tobacco use, 10th graders reported a similar rate and 12th graders reported a higher rate of use.

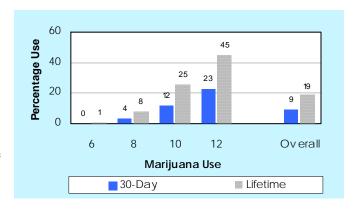


Past-30-Day Smokeless Tobacco Use:

- Past-30-day prevalence of smokeless tobacco use ranges from a low of 0.5% for 6th graders to a high of 11.1% for 12th graders. Overall, 5.6% of PAYS 2005 Statewide students have used smokeless tobacco at least once in the last 30 days.
- Compared to national findings, 8th graders reported a similar rate of past-30-day smokeless tobacco use and 10th and 12th graders reported higher rates of use.

Marijuana

During the 1990s, there were major changes in trends of marijuana use throughout the United States. Results from the *Monitoring the Future* study show dramatic increases in both lifetime and past-30-day prevalence rates through the early and mid 1990s (Johnston et al., 2005b). For 8th and 10th graders, the past-30-day rates more than doubled during this period. Since 1996 and 1997, when past-30-day marijuana use peaked, rates have declined.



Lifetime Use:

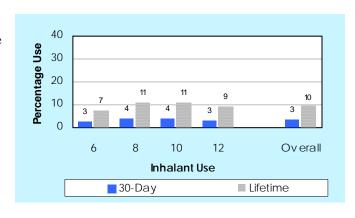
- Lifetime prevalence of marijuana use ranges from a low of 0.8% for 6th graders to a high of 44.8% for 12th graders. Overall, 19.1% of PAYS 2005 Statewide students have used marijuana at least once in their lifetimes.
- Compared to national findings, 8th and 10th graders reported lower rates of lifetime marijuana use and 12th graders reported the same rate of use.

Past-30-Day Use:

- Past-30-day prevalence of marijuana use ranges from a low of 0.3% for 6th graders to a high of 22.9% for 12th graders. Overall, 9.4% of PAYS 2005 Statewide students have used marijuana at least once in the last 30 days.
- Compared to national findings, 8th and 10th graders reported lower rates of past-30-day marijuana use and 12th graders reported a higher rate of 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.)?" Comparisons with the *Monitoring the Future* study (national results) should be made carefully because there are differences in survey questions for this class of drugs.



Lifetime Use:

- Lifetime prevalence of inhalant use ranges from a low of 7.3% for 6th graders to a high of 10.9% for 8th graders. Overall, 9.6% of PAYS 2005 Statewide students have used inhalants at least once in their lifetimes.
- Compared to national findings, 8th, 10th and 12th graders reported lower rates of lifetime inhalant use.

Past-30-Day Use:

- Past-30-day prevalence of inhalant use ranges from a low of 2.5% for 6th graders to a high of 4.1% for 10th graders. Overall, 3.4% of PAYS 2005 Statewide students have used inhalants at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day inhalant use.

Other Illicit Drugs

The 2005 *PAYS* also measures the prevalence of use for a variety of other drugs. This includes student use of the following: cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy, and steroids. The rates for prevalence of use of these other drugs are generally lower than the rates for alcohol, tobacco, marijuana and inhalants. Additionally, use of these other drugs tends to be concentrated in the upper grade levels.

Cocaine

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

Lifetime Use:

- Lifetime prevalence of cocaine use ranges from a low of 0.2% for 6th graders to a high of 9.5% for 12th graders. Overall, 3.6% of PAYS 2005 Statewide students have used cocaine at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime cocaine use and 10th and 12th graders reported similar rates of use.

Past-30-Day Use:

- Past-30-day prevalence of cocaine use ranges from a low of 0.0% for 6th graders to a high of 2.8% for 12th graders. Overall, 1.1% of PAYS 2005 Statewide students have used cocaine at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day cocaine use.

Crack Cocaine

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

Lifetime Use:

- Lifetime prevalence of crack cocaine use ranges from a low of 0.2% for 6th graders to a high of 3.1% for 12th graders. Overall, 1.7% of PAYS 2005 Statewide students have used crack cocaine at least once in their lifetimes.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of lifetime crack cocaine use.

Past-30-Day Use:

- Past-30-day prevalence of crack cocaine use ranges from a low of 0.0% for 6th graders to a high of 0.8% for 10th graders. Overall, 0.5% of PAYS 2005 Statewide students have used crack cocaine at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day crack cocaine use.

Heroin

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

Lifetime Use:

- Lifetime prevalence of heroin use ranges from a low of 0.2% for 6th graders to a high of 2.3% for 12th graders. Overall, 0.9% of PAYS 2005 Statewide students have used heroin at least once in their lifetimes.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of lifetime heroin use.

Past-30-Day Use:

- Past-30-day prevalence of heroin use ranges from a low of 0.1% for 6th graders to a high of 0.6% for 12th graders. Overall, 0.3% of PAYS 2005 Statewide students have used heroin at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day heroin use.

Hallucinogens

Hallucinogenic drugs can have short- and long-term effects on perception and mood. For instance, users of LSD, the most potent mood- and perception-altering drug, may have unpredictable experiences (known as "trips") ranging from pleasant hallucinations to terrifying thoughts and feelings. LSD can also cause physical complications, including increased blood pressure and heart rate, dizziness, loss of appetite, nausea and numbness. For the purposes of the 2005 *PAYS*, hallucinogens were defined as "hallucinogens (acid, LSD, and 'shrooms)."

Lifetime Use:

- Lifetime prevalence of hallucinogen use ranges from a low of 0.3% for 6th graders to a high of 9.9% for 12th graders. Overall, 4.0% of PAYS 2005 Statewide students have used hallucinogens at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime hallucinogen use and 10th and 12th graders reported similar rates of use.

Past-30-Day Use:

- Past-30-day prevalence of hallucinogen use ranges from a low of 0.1% for 6th graders to a high of 3.7% for 12th graders. Overall, 1.4% of PAYS 2005 Statewide students have used hallucinogens at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day hallucinogen use.

Methamphetamine

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

Lifetime Use:

- Lifetime prevalence of methamphetamine use ranges from a low of 0.1% for 6th graders to a high of 2.8% for 12th graders. Overall, 1.5% of PAYS 2005 Statewide students have used methamphetamine at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime methamphetamine use and 10th and 12th graders reported similar rates of use.

Past-30-Day Use:

- Past-30-day prevalence of methamphetamine use ranges from a low of 0.0% for 6th graders to a high of 0.7% for 12th graders. Overall, 0.4% of PAYS 2005 Statewide students have used methamphetamine at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day methamphetamine use.

Ecstasy

Ecstasy (also known as MDMA) has both stimulant and hallucinogenic effects. After showing a rapid increase in use nationwide from 1998 to 2001, use of Ecstasy appears to have declined in recent years, while the proportion of young people perceiving it as dangerous has increased (Johnston et al., 2005b).

Lifetime Use:

- Lifetime prevalence of Ecstasy use ranges from a low of 0.2% for 6th graders to a high of 6.6% for 12th graders. Overall, 3.1% of PAYS 2005 Statewide students have used Ecstasy at least once in their lifetimes.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of lifetime Ecstasy use.

Past-30-Day Use:

- Past-30-day prevalence of Ecstasy use ranges from a low of 0.0% for 6th graders to a high of 1.1% for 12th graders. Overall, 0.6% of PAYS 2005 Statewide students have used Ecstasy at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day Ecstasy use.

Steroids

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

Lifetime Use:

Lifetime prevalence of steroid use ranges from a low of 0.7% for 6th graders to a high of 1.7% for 12th graders. Overall, 1.3% of PAYS 2005 Statewide students have used steroids at least once in their lifetimes.

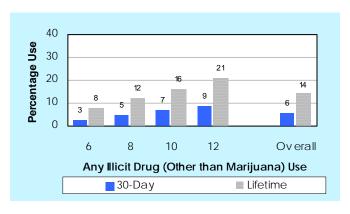
 Compared to national findings, 8th, 10th and 12th graders reported similar rates of lifetime steroid use.

Past-30-Day Use:

- Past-30-day prevalence of steroid use ranges from a low of 0.2% for 6th graders to a high of 0.6% for 12th graders. Overall, 0.4% of PAYS 2005 Statewide students have used steroids at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day steroid use.

Any Illicit Drug (Other than Marijuana)

The final ATOD indicator reports on the use of any illicit drug other than marijuana. This drug combination rate—which includes use of one or more of the following drugs: inhalants, cocaine, crack cocaine, heroin, hallucinogens, methamphetamine, Ecstasy and steroids—provides prevention planners with an overall indicator of so-called "hard" drug use. Marijuana use is excluded from this index because the higher prevalence of marijuana use tends to obscure the presence or absence of the other drugs. In other words, an indicator of



"Any Illicit Drug Use (*Including* Marijuana)" primarily measures marijuana use. Direct comparisons to *Monitoring the Future* results are not available for this measure.

Lifetime Use:

• Lifetime prevalence of any illicit drug (other than marijuana) use ranges from a low of 8.0% for 6th graders to a high of 20.8% for 12th graders. Overall, 14.2% of PAYS 2005 Statewide students have used any illicit drug (other than marijuana) at least once in their lifetimes.

Past-30-Day Use:

Past-30-day prevalence of any illicit drug (other than marijuana) use ranges from a low of 2.7% for 6th graders to a high of 8.5% for 12th graders. Overall, 5.6% of PAYS 2005 Statewide students have used any illicit drug (other than marijuana) at least once in the last 30 days.

Prescription Drugs

In recent years the nonmedical use of prescription drugs has emerged as a major public health issue. Both the *National Survey on Drug Use and Health* (Substance Abuse and Mental Health Services Administration, 2003) and the *Monitoring the Future* study (Johnston et al., 2005b), two major sources of youth drug abuse prevalence data, have reported increases in the unauthorized use of prescription drugs. This trend is particularly troubling given the adverse health consequences related to prescription drug abuse, which include addiction, physical dependence and the possibility of overdose.

Despite these concerns, the research community is still in the early stages of developing survey methods that can accurately measure the prevalence of prescription drug abuse. If anonymity is ensured, most students will honestly and accurately report their use of alcohol, tobacco, marijuana and other easily recognized categories of illicit drugs. The measurement of prescription drug use, however, is more

complex. There are many prescription medicines that are subject to abuse, making it impossible to present an exhaustive list. Also, respondents may have difficulty identifying the names of prescription drugs they have used, and they may have difficulty distinguishing between prescription and over-the-counter medications.

With these challenges in mind, the 2005 *PAYS* included 12 questions designed to measure prevalence-of-use rates across four prescription drug categories: amphetamines, sedatives, tranquilizers, and narcotics other than heroin. These results are presented in Tables 2-3, 2-4 and 2-5.

Amphetamines

Lifetime, past-12-month, and past-30-day prevalence of amphetamine use was measured using this survey question:

Amphetamines have been prescribed by doctors to help people lose weight or to give people more energy. They are sometimes called uppers, ups, speed, bennies, dexies, pep pills, and diet pills. Drugstores are not supposed to sell them without a prescription from a doctor. Amphetamines do NOT include any non-prescription drugs, such as over-the-counter diet pills (like Dexatrim[®]) or stay-awake pills (like No-Doz[®]), or any mail-order drugs. On how many occasions (if any) have you taken amphetamines on your own—that is, without a doctor telling you to take them?

Lifetime Use:

- Lifetime prevalence of amphetamine use ranges from a low of 1.6% for 6th graders to a high of 13.3% for 12th graders. Overall, 7.3% of PAYS 2005 Statewide students have used amphetamines at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime amphetamine use and 10th and 12th graders reported similar rates of use.

Past-12-Month Use:

- Past-12-month prevalence of amphetamine use ranges from a low of 0.7% for 6th graders to a high of 9.7% for 12th graders. Overall, 5.1% of PAYS 2005 Statewide students have used amphetamines at least once in the last 12 months.
- Compared to national findings, 8th graders reported a lower rate of past-12-month amphetamine use and 10th and 12th graders reported similar rates of use.

Past-30-Day Use:

- Past-30-day prevalence of amphetamine use ranges from a low of 0.3% for 6th graders to a high of 4.4% for 10th and 12th graders. Overall, 2.5% of PAYS 2005 Statewide students have used amphetamines at least once in the last 30 days.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day amphetamine use.

Sedatives

Lifetime, past-12-month, and past-30-day prevalence of sedative use was measured using this survey question:

Sedatives, including barbiturates, are sometimes prescribed by doctors to help people relax or get to sleep. They are sometimes called downs or downers, and include phenobarbital, Tuinal, Nembutal, and Seconal. On how many occasions (if any) have you taken sedatives on your own—that is, without a doctor telling you to take them?

Lifetime Use:

- Lifetime prevalence of sedative use ranges from a low of 1.9% for 6th graders to a high of 12.0% for 12th graders. Overall, 7.0% of PAYS 2005 Statewide students have used sedatives at least once in their lifetimes.
- Compared to national findings, 12th graders reported a similar rate of lifetime sedative use.

Past-12-Month Use:

- Past-12-month prevalence of sedative use ranges from a low of 0.8% for 6th graders to a high of 8.8% for 12th graders. Overall, 4.8% of PAYS 2005 Statewide students have used sedatives at least once in the last 12 months.
- Compared to national findings, 12th graders reported a similar rate of past-12-month sedative use.

Past-30-Day Use:

- Past-30-day prevalence of sedative use ranges from a low of 0.4% for 6th graders to a high of 4.2% for 10th and 12th graders. Overall, 2.6% of PAYS 2005 Statewide students have used sedatives at least once in the last 30 days.
- Compared to national findings, 12th graders reported a similar rate of past-30-day sedative use.

Tranquilizers

Lifetime, past-12-month, and past-30-day prevalence of tranquilizer use was measured using this survey question:

Tranquilizers are sometimes prescribed by doctors to calm people down, quiet their nerves, or relax their muscles. Librium, Valium, and Xanax are all tranquilizers. On how many occasions (if any) have you taken tranquilizers on your own—that is, without a doctor telling you to take them?

Lifetime Use:

- Lifetime prevalence of tranquilizer use ranges from a low of 1.1% for 6th graders to a high of 11.2% for 12th graders. Overall, 5.3% of PAYS 2005 Statewide students have used tranquilizers at least once in their lifetimes.
- Compared to national findings, 8th graders reported a lower rate of lifetime tranquilizer use and 10th and 12th graders reported similar rates of use.

Past-12-Month Use:

- Past-12-month prevalence of tranquilizer use ranges from a low of 0.4% for 6th graders to a high of 8.2% for 12th graders. Overall, 3.5% of PAYS 2005 Statewide students have used tranquilizers at least once in the last 12 months.
- Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-12-month tranquilizer use.

Past-30-Day Use:

• Past-30-day prevalence of tranquilizer use ranges from a low of 0.2% for 6th graders to a high of 3.7% for 12th graders. Overall, 1.7% of PAYS 2005 Statewide students have used tranquilizers at least once in the last 30 days.

Compared to national findings, 8th, 10th and 12th graders reported similar rates of past-30-day tranquilizer use.

Narcotics Other Than Heroin

Lifetime, past-12-month, and past-30-day prevalence of use of narcotics other than heroin was measured using this survey question:

There are a number of narcotics other than heroin, such as methadone, opium, morphine, codeine, Demerol, Vicodin, OxyContin, and Percocet. These are sometimes prescribed by doctors. On how many occasions (if any) have you taken narcotics other than heroin on your own—that is, without a doctor telling you to take them?

Lifetime Use:

- Lifetime prevalence of other narcotic use ranges from a low of 0.5% for 6th graders to a high of 16.6% for 12th graders. Overall, 6.8% of PAYS 2005 Statewide students have used other narcotics at least once in their lifetimes.
- Compared to national findings, 12th graders reported a higher rate of lifetime other narcotic use.

Past-12-Month Use:

- Past-12-month prevalence of other narcotic use ranges from a low of 0.2% for 6th graders to a high of 11.6% for 12th graders. Overall, 4.8% of PAYS 2005 Statewide students have used other narcotics at least once in the last 12 months.
- Compared to national findings, 12th graders reported a higher rate of past-12-month other narcotic use.

Past-30-Day Use:

- Past-30-day prevalence of other narcotic use ranges from a low of 0.1% for 6th graders to a high of 5.4% for 12th graders. Overall, 2.3% of PAYS 2005 Statewide students have used other narcotics at least once in the last 30 days.
- Compared to national findings, 12th graders reported a similar rate of past-30-day other narcotic use.

Table 2-3. Lifetime Nonmedical Prescription Drug Use

PAYS 2005 Statewide											the
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %	8 th %	10 th %	12 th %
Amphetamines	1.6		3.5		10.8		13.3	7.3	7.4	11.1	13.1
Sedatives	1.9		4.8		9.2		12.0	7.0			10.5
Tranquilizers	1.1		2.0		6.9		11.2	5.3	4.1	7.1	9.9
Other Narcotics	0.5		1.7		9.0		16.6	6.8			12.8

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

1 Johnston et al., (2005b).

Table 2-4. Past-12-Month Nonmedical Prescription Drug Use

	Monitoring the Future ¹										
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %	8 th %	10 th %	12 th %
Amphetamines	0.7		2.3		7.6		9.7	5.1	4.9	7.8	8.6
Sedatives	0.8		2.3		7.3		8.8	4.8			7.2
Tranquilizers	0.4		1.2		4.4		8.2	3.5	2.8	4.8	6.8
Other Narcotics	0.2		0.9		6.9		11.6	4.8			9.0

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

¹ Johnston et al. (2005b).

Table 2-5. Past-30-Day Nonmedical Prescription Drug Use

PAYS 2005 Statewide										Monitoring the Future ¹		
6 th 7 th 8 th 9 th 10 th 11 th 12 th Overall % % % % % % %										10 th %	12 th %	
Amphetamines	0.3		1.0		4.4		4.4	2.5	2.3	3.7	3.9	
Sedatives	0.4		1.3		4.2		4.2	2.6			3.3	
Tranquilizers	0.2		0.4		2.4		3.7	1.7	1.3	2.3	2.9	
Other Narcotics	0.1		0.4		3.5		5.4	2.3			3.9	

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

1 Johnston et al. (2005b).

Section 3 Age of Onset, Willingness to Try ATODs, and Driving Under the Influence

This section of the report presents data on the age of onset, willingness to try ATODs, and driving while impaired. In Pennsylvania, many 12th graders are willing to try ATODs, and a sizable percentage, more than 20 percent, are driving under the influence of either alcohol or marijuana. As pointed in the previous section of this report, this many young people driving the streets and highways of Pennsylvania is a serious health problem. These drivers not only run the risk of harming themselves, but also run the risk of harming their friends, family members, and other citizens. Part of the risk being taken by these young people seems directly related to how many of them are also willing to try alcohol and drugs. Changing this reality should be high on every state prevention coordinator.

Key Trends and Highlights

The section that follows mostly focuses on 12th graders and how they are much more willing to try alcohol and drugs, and to drive while under the influence. The highlights also are specifically intended to point out historical trends and important 2005 subgroup differences. For more details on historical trends see tables in Appendix A and Appendix D.

Age of Onset Means Hold Steady

In general, age of onset means are moving in a positive direction, with young people trying ATODs at much older ages. For the most part, the 2005 age of onset ATODs numbers changed very little when compared to the 2001 and 2003 rates. Take, for example, alcohol use. In 2005, Pennsylvania youth, on average, reported having their first use of alcohol (having more than a sip or two of alcohol) at age 12.8, while the average age of first regular use of alcohol (drinking alcoholic beverages regularly, or at least once or twice a month) was at age 14.5, approximately a year and a half later. In 2001, Pennsylvania youth, on average, reported having their first use of alcohol at age 12.5, while the average age of first regular use of alcohol was at age 14.4.

12th Graders' Willingness to Try ATODs Increases

With the exception of 10th graders willing to try inhalants, younger students in Pennsylvania – grades 6, 8 and 10 – report that they are less likely to try alcohol, marijuana, cocaine, hallucinogens, or inhalants than are their peers from previous PAYS. Many of the prevalence willingness rates are at an all-time low for these younger students. Just the opposite is true for 12th graders in the state, and in many situations, most of their rates are at an all-time high. Take, for example, the willingness to try alcohol or cocaine. In 2005,

77.5 percent of the 12th graders said they were willing to try alcohol compared to 73.4 percent in 2001. In 2005, 8.0 percent of the 12th graders said they were willing to try cocaine compared to 6.8 percent in 2001. In the previous section of this report, a great deal of attention was paid to how much alcohol 12th graders consumed. The willingness to try alcohol or a drug like cocaine does not automatically lead to the use of that substance; however, it is a contributing factor and a factor worth paying closer attention to.

12th Graders' Driving Under the Influence Remains a Serious Problem

In reality, driving while under the influence of either alcohol or marijuana should only be a problem for 12th graders. Students in the other grades surveyed – grades 6, 8, and 10 – are too young legally to drive. Statewide, slightly more than one-fifth of the 12th graders surveys reported driving under the influence in 2005. Driving after marijuana use is worst than it was in 2003 yet better than 2001. In 2005, 22.9 percent of the 12th graders reported driving after marijuana compared to 24.1 percent in 2001. But driving after alcohol use is worse than it was in both 2003 and 2001. In 2005, 23.9 percent of the 12th graders reported driving after alcohol use compared to 21.5 in 2001.

Variations by Select Demographics

In general, males are more willing to try ATODs and to drive under the influence than females. Whites are more willing to try ATODs and to drive under the influence than African Americans, and students in the Southwest are more willing to try ATODs and to drive under the influence than students in other regions of the state. For specific details on the various subgroup differences see tables in Appendix D.

Since binge drinking by Pennsylvania students is a serious problem, especially for older students, it is important to further distinctions between students who are willing to drive under the influence from those who are not. Here are some key findings:

- Student drivers who reported their grades as mostly D's and F's are more willing to drive under the influence than are student drivers who reported their grades as mostly A's and B's. For example, at the 12th grade, 62.3 percent of the student drivers with D's and F's reported driving under the influence of marijuana compared to 17.1 percent of the student drivers with A's and B's.
- Student drivers who skip school are more willing to drive under the influence than are student drivers who do not skip school. For example, 53.1 percent of the student drivers who reported skipping school 6 or more times also reported driving under the influence of alcohol compared to 16.7 percent of the student drivers who reported never skipping school.
- Student drivers in the Southeast and Southwest regions of the state are more willing to drive under the influence of marijuana and alcohol than are student drivers in the Northwest or North Central regions. For example, at the 12th grade, 33.6 percent of the student drivers in the Southeast region reported driving under the influence of alcohol compared to 26.4 percent of the student drivers in the North Central region.
- Student drivers who reported that they almost always hate school are more willing to drive under the influence of alcohol than are student drivers who reported that they never hate school. For example, at the 12th grade, 46.6 percent of the student drivers who reported that they almost always hate school reported that they drive while under the influence of alcohol compared to 12.2 percent of the student drivers who reported that they never hate school.

Age of Onset of ATOD Use and Other Antisocial Behavior

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

PAYS 2005 Statewide students were asked 10 questions about the age at which they first used ATODs and participated in other antisocial behaviors. The topics covered include: trying alcohol ("more than a sip or two"), drinking alcohol regularly ("at least once or twice a month"), smoking cigarettes, smoking marijuana, being suspended from school, being arrested, carrying a handgun, attacking someone with intent to harm, belonging to a gang, and gambling. The first eight of these questions form the risk factor scale *Early Initiation (of Drug Use and Antisocial Behavior)*. Results for PAYS 2005 Statewide students are presented in Table 3-1.

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

Table 3-1. Average Age of Onset of ATOD Use and Other Antisocial Behaviors, PAYS 2005
Statewide

	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
Trying Alcohol	10.5		11.6		12.8		13.9	12.8
Drinking Alcohol Regularly	10.9		12.4		13.9		15.4	14.5
Smoking Cigarettes	10.5		11.5		12.4		13.4	12.5
Smoking Marijuana	10.9		12.3		13.4		14.6	13.9
Being Suspended from School	10.6		11.6		12.8		13.8	12.6
Being Arrested	10.8		12.3		13.4		14.8	13.7
Carrying a Handgun	10.8		12.0		13.2		14.3	13.1
Attacking Someone with Intent to Harm	10.8		11.7		13.0		13.4	12.6
Belonging to a Gang	10.8		12.1		12.9		13.9	12.5
Gambling (betting money or something of value)	10.5		11.4		12.3		13.4	12.1

Willingness to Try or Use ATODs

Along with perceptions of risk and level of disapproval (Bachman et al., 1988), willingness to try or use ATODs may be viewed as one of the attitudinal constructs that facilitates drug use. Pennsylvania students were questioned regarding their willingness to try or use alcohol, marijuana, cocaine, hallucinogens and inhalants. Results for PAYS 2005 Statewide students are presented in Table 3-2.

Table 3-2. Percentage of Youth Reporting Willingness to Try Selected ATODs, PAYS 2005 Statewide

- Clare III ac	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
	%	%	%	%	%	%	%	%
Alcohol	15.6		35.7		63.6		77.5	48.6
Marijuana	1.3		9.8		25.1		35.7	18.2
Cocaine	0.8		2.2		6.0		8.0	4.3
Hallucinogens	0.6		2.9		8.2		13.3	6.3
Inhalants	1.0		3.7		5.4		4.0	3.6

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

Driving After Alcohol or Marijuana Use

Driving a car requires clear thinking and good hand-eye coordination. Operating a vehicle after using alcohol or marijuana may impair driving skills, making the driver a hazard on any roadway. The impact of ATOD usage on automobile safety is assessed with two items: (1) "How often have you driven a car while or shortly after drinking?" and (2) "How often have you driven a car while or shortly after smoking pot?" Results for PAYS 2005 Statewide students are presented in Table 3-3.

Table 3-3. Percentage of Youth Reporting Any Occasion of Driving Under the Influence, PAYS 2005 Statewide

	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %
Driving after Alcohol Use	0.4		1.5		4.8		23.9	7.2
Driving after Marijuana Use	0.1		1.1		4.5		22.9	6.8

Section 4 Antisocial Behaviors and Symptoms of Depression

This section of the report presents data on antisocial behaviors, students reporting being attacked or threatened on school property, gang membership, gambling, and symptoms of depression. In Pennsylvania, 6th and 8th graders engage in some antisocial behaviors such as selling illegal drugs or being arrested, but in general, these younger students avoid such behaviors. On the other hand, 10th and 12th graders are much more likely to engage in risky and dangerous antisocial behaviors. While the percentage of students taking a weapon to school is small, around 2 percent, those working in schools ought to be concerned about this behavior. Specifically, that concern might focus on male students since they are much likely to engage in this behavior.

Key Trends and Highlights

The section that follows highlights key historical trends and important 2005 subgroup differences. For more details on historical trends, see tables in Appendix A and Appendix D.

Antisocial Behaviors for Younger Students Decrease

Overall, prevalence rates for younger Pennsylvanians students in grades 6 and 8 dropped in 2005. Some prevalence rates have fallen below 2001 rates. In 2005, for example, 1.7 percent of the students in grade 8 reported attempting to steal a vehicle compared to 1.9 percent in 2003. In 2005, 4.5 percent of the students in grade 8 reported being drunk or high at school compared to 6.0 in 2001. Two significant problems stand out for 8th graders: getting suspended and attacking someone with intent to harm. In 2005, for example, the rate for getting suspended climbed slightly higher to 11.1 percent. In 2003, the rate was 9.5 percent and in 2003 it was 10.2 percent. The increase in this behavior, as well as attacking someone with the intent to harm, however, is driven mostly by how male students behave. For both behaviors, the male prevalence rates are twice as large as the female rates.

Antisocial Behaviors for Older Students Increase

While younger students improved many of their of social skills, older students, those in grades 10 and 12, have not, and with a few exceptions, 2005 prevalence rates increased compared to 2001 rates. Older students being arrested – both 10th and 12th graders, for example, increased from 2001 to 2005. In 2001, 7.0 percent of the 12th graders reported being arrested, and in 2005, the prevalence rate increased to 8.3 percent. In 2001, 7.5 percent of the 10th graders reported selling drugs, and in 2005, the prevalence rate

increased to 8.3 percent. The rate for 12th graders for the same behavior stands at 11.2 percent in 2005. In 2001, the rate was similar – 11.1 percent. Like their younger peers, most antisocial behavior by older students is driven greatly by how male students misbehave, and clearly, as a group they misbehave more frequently than do female students. For example, in 2005, 24.6 percent of the male 12th graders reported being drunk or high at school compared to 15.4 percent of the female 12th graders. And 15.8 percent of the male 12th graders reported selling drugs compared to 6.3 percent of the female 12th graders.

Rates for Students Being Threatened With a Weapon At School Hold Steady

Rates for students being threatened or attacked with a weapon on school property are unchanged from 2003. PAYS did not ask these questions prior to 2003. In both 2003 and 2005, 8th graders reported being threatened with a weapon more than any other group of students. In 2003, 6.2 percent of the 8th graders said they were threatened with a weapon on school property compared to 6.0 percent in 2005. These students also are more likely to say they were attacked with a weapon. In 2003, 2.7 percent of the 8th graders said they were attacked with a weapon on school property compared to 2.9 percent in 2005.

Rates for Gang Membership Are Up for Older Students

Statewide, gang membership is down for 6th and 8th graders yet increased for 10th and 12th graders. In 2005, roughly 8 percent of the 10th graders reported being a member of a gang compared to 4.6 percent in 2001 and 5.9 percent in 2003. And roughly 6 percent of the 2005 12th graders reported being a member of a gang compared to 4.6 percent in 2001 and 4.5 percent in 2003. In 2005, statewide, 7 percent of the students surveyed reported being in a gang.

Rates for Gambling Are Higher for Older Students

Starting with the 2005 PAYS, students were asked a series of five questions about their experiences with gambling. Statewide, 36 percent of Pennsylvania youth reported gambling for money in the past year, and 19 percent did so in the past 30 days. Gambling for money varies by grade, with 10th and 12th graders gambling more than 6th and 8th graders. In fact, more than 40 percent of the 10th and 12th graders, statewide, reported gambling for money in the past year, and 25 percent reported doing so in the past 30 days.

Symptoms of Depression Warrant Concern

In 2003, for the first time, PAYS included questions that asks students about feelings—sadness, hopelessness and worthlessness—that *can* be symptoms of depression. The same four questions were asked in 2005, and for the first time the data are being reported. These symptoms of depressions are not clinical signs or symptoms of depression or suicide; however, it is perhaps fair to use them as red flags or warning signs that not all is normal with young Pennsylvanians. Statewide, more than 30 percent of the students surveyed reported feeling depressed and worthless. Students in the 10th grade have the highest percentage of students reporting symptoms of depression, but in general, rates are fairly similar across the grades. Students with the most symptoms of depression (i.e., students reporting that they are sad, hopeless, and worthless) report higher rates of ATOD use than do students with few symptoms of depression. For example, 41.4 percent of the students with high levels of depressive symptoms reported alcohol use in the past 30-days compared to 19.4 percent of those with low levels of depressive symptoms.

Variations by Select Demographics

In general, males are more likely to report that they are engaged in antisocial behaviors than females; however, across the various antisocial behaviors, there are numerous subgroup differences. For specific details on the various subgroup differences see tables in Appendix D. Here are some key variations by select demographics:

- Male students are much more likely to engage in antisocial behaviors than females; however, at the 12th grade, some females still come to school drunk or high and a few even sell drugs. For example, at the 12th grade, 15.5 percent of the females reported that they went to school drunk or high at least once in the past year compared to 24.6 percent of the males. At the 12th grade, 6.3 percent of the females reported selling drugs at school in the past year compared to 15.8 percent of the males.
- Students who sell drugs at school, come to school drunk or high, or bring weapons to school are much more likely to report that they have belonged to a gang. Overall, 25.7 percent of the students reporting gang membership reported being drunk or high at school compared to 8.1 percent of the students who never reported gang membership. Non-gang members rarely reported bringing a weapon to school. Overall, 1.5 percent of the students who reported never belonging to a gang reported bringing a weapon to school compared to 13.6 percent of the students who reported gang membership.
- Students who reported their grades as mostly D's and F's are more willing to engage in antisocial behaviors than are students who reported their grades as mostly A's and B's. For example, 32.2 percent of the students who reported their grades as mostly D's and F's reported being drunk or high at school compared to 3.7 percent of the students with mostly A's and B's. And students with mostly A's and B's rarely reported selling drugs. Overall, 1.7 percent of the students with grades of A's and B's reported selling drugs compared to 20.8 percent of the students with mostly D's and F's.
- Males are more likely to report that they gambled for money than females. Overall, 29.8 percent of the males reported having gambled for money in the past 30 days compared to 8.4 percent of the females.
- Students in the Northwest region of the state are more likely to report that they gambled for money than students in other regions of the state. Twenty percent of the students in the Northwest region reported gambling for money in the past 30 days compared to 14.7 percent in the Southwest and 14.2 percent in the Northeast.
- Females are more likely to report more symptoms of depression than males. Statewide, for example, 41.0 percent of the females reported that they are sad or depressed most days compared to 27.6 percent of the males. And 17.5 percent of the females reported that they are a failure compared to 12.7 percent of the males.

Other Antisocial Behaviors

The 2005 *PAYS* also measures a series of seven other problem, or antisocial, behaviors—that is, behaviors that run counter to established norms of good behavior.

- Attacking Someone with Intent to Harm
- Attempting to Steal a Vehicle
- Being Arrested
- Being Drunk or High at School

- Getting Suspended
- Selling Drugs
- Bringing a Weapon (Such as a Gun, Knife or Club) to School

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

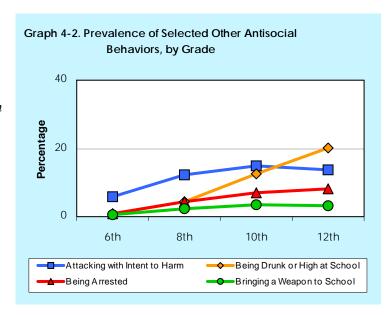
Overall Results

Other antisocial behavior prevalence rates for the combined sample of 6th, 8th, 10th and 12th graders are presented in Graph 4-1, and in the overall results column of Table 4-1. Across all grades, 11.7% of students reported *Attacking Someone with Intent to Harm* in the past year, making it the most prevalent of the seven behaviors in PAYS 2005 Statewide. *Getting Suspended* is the second most prevalent antisocial behavior, with 9.6% of PAYS 2005 Statewide students reporting having been suspended in the past year. Students in PAYS 2005 Statewide reported very low levels of participation in *Bringing a Weapon to School* and *Attempting to Steal a Vehicle*.

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Grade-Level Results

Other antisocial behavior prevalence rates within individual grades are presented in Graph 4-2 and Table 4-1. In many communities, these behaviors reveal a complex pattern of changes across grades. Typically, reports of Being Drunk or High at School and Selling Drugs follow the ATOD model, with prevalence rates increasing through the upper grade levels. In contrast, reports of Attacking Someone with Intent to Harm, Getting Suspended and Being Arrested often peak in the late middle school or early high school years. Prevalence rates for Attempting to Steal a Vehicle and Bringing a Weapon (Such as a Gun, Knife or Club) to School are generally too low to allow meaningful

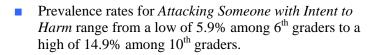


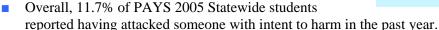
comparisons across grade levels. Prevention planners in PAYS 2005 Statewide should review the other antisocial behavior profiles within individual grades, with special attention toward behaviors that show a marked deviation from these patterns.

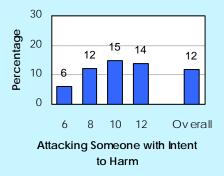
Table 4-1. Prevalence of Other Antisocial Behaviors, PAYS 2005 Statewide									
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %	
Attacking Someone with Intent to Harm	5.9		12.2		14.9		13.7	11.7	
Attempting to Steal a Vehicle	0.5		1.7		3.2		2.8	2.1	
Being Arrested	1.0		4.4		6.9		8.3	5.1	
Being Drunk or High at School	0.8		4.5		12.6		20.1	9.3	
Getting Suspended	5.3		11.1		9.7		12.4	9.6	
Selling Drugs	0.3		2.3		8.3		11.2	5.5	
Bringing a Weapon to School	0.5		2.3		3.4		3.3	2.4	
Average	2.0		5.5		8.4		10.3	6.5	

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.



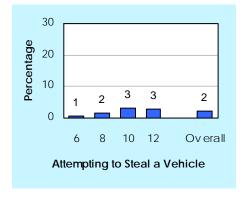




Attempting to Steal a Vehicle

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

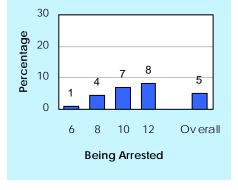
- Prevalence rates for *Attempting to Steal a Vehicle* range from a low of 0.5% among 6th graders to a high of 3.2% among 10th graders.
- Overall, 2.1% of PAYS 2005 Statewide students reported having attempted to steal a vehicle in the past year.



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 1.0% among 6th graders to a high of 8.3% among 12th graders.

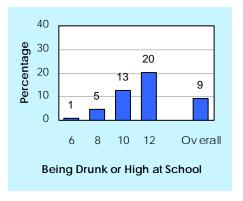


• Overall, 5.1% of PAYS 2005 Statewide students reported having been arrested in the past year.

Being Drunk or High at School

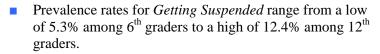
Having been drunk or high at school is measured by the question "How many times in the past year (12 months) have you been drunk or high at school?"

- Prevalence rates for *Being Drunk or High at School* range from a low of 0.8% among 6th graders to a high of 20.1% among 12th graders.
- Overall, 9.3% of PAYS 2005 Statewide students reported having been drunk or high at school in the past year.



Getting Suspended

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



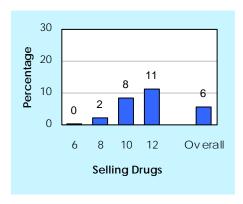


• Overall, 9.6% of PAYS 2005 Statewide students reported having been suspended in the past year.

Selling Drugs

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

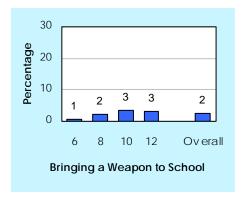
- Prevalence rates for Selling Drugs range from a low of 0.3% among 6th graders to a high of 11.2% among 12th graders.
- Overall, 5.5% of PAYS 2005 Statewide students reported having sold drugs in the past year.



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

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

- Prevalence rates for *Bringing a Weapon to School* range from a low of 0.5% among 6th graders to a high of 3.4% among 10th graders.
- Overall, 2.4% of PAYS 2005 Statewide students reported having brought a weapon to school in the past 30 days.



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. Results for PAYS 2005 Statewide students are presented in Table 4-2.

Table 4-2. Percentage of Youth Reporting That They Have Been Threatened or Attacked on School Property in the Past Year, PAYS 2005 Statewide

	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %
Threatened to Be Hit or Beaten Up	21.5		27.2		29.2		21.8	25.2
Attacked or Beaten Up	10.2		11.1		8.8		7.5	9.4
Threatened with a Weapon	3.7		6.0		5.2		4.4	4.9
Attacked with a Weapon	1.0		2.9		2.1		2.2	2.1

Gang Involvement

Gangs have long been associated with crime, violence and other antisocial behaviors. Evidence suggests that gangs contribute to antisocial behavior beyond simple association with delinquent peers. Table 4-3 presents the percentage of surveyed youth indicating gang involvement.

Table 4-3. Percentage of Youth Who Indicated Gang Involvement

	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %
Ever Belonged to a Gang	5.5		8.7		7.6		6.2	7.0
Belonged to a Gang with a Name	3.7		7.5		6.0		5.3	5.7

Gambling

Starting in 2005, the *PAYS* asked students a series of five questions about their experiences with gambling. These include past-12-month prevalence measures for: gambling for "money or anything of value," "thinking about gambling or planning to gamble," spending "more than you meant to on gambling," and gambling leading to "lies to your family." A question about gambling for "money or anything of value" in the last 30 days is also asked. Results for PAYS 2005 Statewide students are presented in Table 4-4.

Table 4-4. Percentage of Youth Reporting Gambling or Gambling-Related Problems, PAYS 2005 Statewide									
	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall	
	%	%	%	%	%	%	%	%	
Gambled for money in past year	21.4		31.7		43.0		44.5	35.7	
Gambled for money in last 30 days	9.6		16.4		24.5		25.4	19.3	
Often thought about gambling in past year	12.3		19.8		22.4		23.5	19.8	
Spent more than meant on gambling in past year	4.6		6.0		10.0		12.5	8.4	
Gambling led to lies to your family in past year	2.5		3.5		5.8		4.1	4.1	

Symptoms of Depression

A number of scientific studies have identified a link between mental health problems, such as depression, and the use of alcohol, tobacco and other drugs during adolescence. The *PAYS* includes four questions that asks students about feelings—sadness, hopelessness and worthlessness—that can be symptoms of depression. Results for PAYS 2005 Statewide students are presented in Table 4-5.

Table 4-5. Percentage of Youth Reporting Symptoms of Depression, PAYS 2005 Statewide									
	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall	
	%	%	%	%	%	%	%	%	
In the past year, felt depressed or sad most days	31.8		33.1		37.4		33.9	34.1	
Sometimes I think that life is not worth it	17.0		24.2		28.5		25.9	24.0	
At times I think I am no good at all	28.7		29.9		35.7		31.7	31.5	
All in all, I am inclined to think that I am a failure	11.8		13.4		18.5		16.4	15.1	

Note: The numbers reported in this table represent the percentage of students who answered either "yes" or "Yes!" to each question.

Section 5 Risk and Protective Factors

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

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

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

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

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

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

selecting targeted tested-effective prevention programming shown to address those elevated factors and consequently provide the greatest likelihood for success.

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

Statewide, in general, score changes between 2001 and 2005 remained stable. The one noteworthy finding is the increased risk factor scores for 12th graders. The increased scores are grounds for concern, and may help explain why higher percentages of 12th graders reported, for example, consuming alcohol in excess (binge drinking). Clearly, the higher risk scores reported by 12th graders represent important prevention areas on which schools and communities need to refocus attention.

Key Trends and Highlights

The section that follows highlights key historical trends and important 2005 subgroup differences. For more details on historical trends see tables in Appendix A and Appendix D.

Protective Factor Scores Remain Stable

With the exception of the percentile scores for students in grade 8, in general, score changes between 2001 and 2005 are small. The score changes for students in grade 8, however, are noticeable. For example, in 2001, the *Belief in the Moral Order* score stood at the 54th percentile and *Community Rewards for Prosocial Involvement* the 50th percentile. In 2005, *Belief in the Moral Order* for students in grade 8 jumped to the 61st percentile, while the *Community Rewards for Prosocial Involvement* score jumped to the 59th percentile. These kinds of notable changes are positive, and perhaps bode well for communities across the state as these 8th graders age and move into the high school.

Risk Factor Scores Remain Stable

In general, risk factor percentile scores for students in grades 6, 8, and 10 went down between 2001 and 2005. The lower scores reported by these students represent strengths schools and communities can build on. The risk factor scores for students in grade 12, however, increased between 2001 and 2005, with many of the scores moving from scores ranging in the 50th percentile band to scores ranging in the 60th percentile band. For 12th graders, the increased risk factor scores are grounds for concern, especially, the higher than average scores for *Friends' Use of Drugs, Community Disorganization, Lack of Commitment to School*, and *Favorable Attitudes Toward ATOD*. To a certain extent these negative changes, offer some explanations for the excessive alcohol consumption reported by 12th graders in Section 2.

Variations by Select Demographics

In general, females have better protective and risk factor scores than males but the differences are small. Whites have better protective and risk factor than African Americans and Hispanics. Students in the Northeast region have better scores than students elsewhere in the state. For specific details on the various subgroup differences see tables in Appendix D.

Perhaps the most noticeable subgroup differences on the protective and risk factor scores are those that exist across ethnic groups. For example, there are noticeable differences in the risk factor scores for *Low Neighborhood Attachment, Friends' Delinquent Behavior*, and *Community Disorganization*. Both African American and Hispanic students' scores on these three risk factors exceed the 50th percentile. Scores for Whites are well below the 50th percentile.

PAYS 2005 Statewide Report

2005 Pennsylvania Youth Survey

Measuring Risk and Protection

The *Communities That Care Youth Survey*, the survey upon which the 2005 *PAYS* was based, provides the most comprehensive measurement of risk and protective factors currently available for 6th to 12th graders. Risk and protective factors are measured by sets of survey items called scales. 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, 15 risk factors are measured by 21 risk factor scales, while each of the eight protective factors is measured by a single protective factor scale. Please note that the protective factor *Social Skills* was removed from this year's survey because the questions used to measure it were deemed too difficult for younger students. Also note that some school districts elected to administer a secondary version of the 2005 *PAYS* that excluded questions measuring risk and protective factors within the family. In these cases, scale scores for the Family Domain risk and protective factors are not available.

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

Overall risk and protective factor scale scores are presented in Graphs 5-1 and 5-2. These results provide a general description of the prevention needs of PAYS 2005 Statewide 6th, 8th, 10th and 12th graders as a whole.

As Graph 5-1 shows, overall percentile scores across the eight protective factor scales range from a low of 48 to a high of 58, with an average score of 54, which is four points higher than the normative average of 50. The three lowest overall scores were for the following protective factor scales: *Community Rewards for Prosocial Involvement* (48), *School Rewards for Prosocial Involvement* (50) and *Religiosity* (51). While policies that target any protective factor could potentially be an important resource for students in PAYS 2005 Statewide, focusing prevention planning in these areas could be especially beneficial. PAYS 2005 Statewide students reported the three highest overall scores for the following protective factor scales: *Belief in the Moral Order* (58), *School Opportunities for Prosocial Involvement* (57) and *Family Rewards for Prosocial Involvement* (56). The higher scores reported by students in these areas represent strengths that PAYS 2005 Statewide can build on.

As Graph 5-2 shows, overall scores across the 21 risk factor scales range from a low of 35 to a high of 55, with an average score of 45, which is five points lower than the normative average of 50. The three highest risk factor scales are *Community Disorganization* (55), *Personal Transitions and Mobility* (53) and *Laws and Norms Favorable to Drug Use and Handguns* (50). Once again, while policies that target any risk factor could potentially be an important resource for students in PAYS 2005 Statewide, directing prevention programming in these areas is likely to be especially beneficial. The three lowest risk factor scales are *Low Perceived Risks of Drug Use* (35), *Perceived Availability of Drugs and Handguns* (37) and *Early Initiation (of Drug Use and Antisocial Behavior)* (40). The lower scores reported by students in these areas represent strengths that PAYS 2005 Statewide can build on.

Grade-Level Results

While overall scores provide a general picture of the risk and protective factor profile for PAYS 2005 Statewide, they can mask problems within individual grades. Tables 5-1 and 5-2 present individual-grade data for risk and protective factor scale scores. This detailed information provides prevention planners with a snapshot revealing which risk and protective factor scales are of greatest concern by grade. It allows those prevention planners to focus on the most appropriate points in youth development for preventive intervention action—and to target their prevention efforts as precisely as possible.

For example, younger students tend to report different factors than older students as being the most elevated or suppressed. PAYS 2005 Statewide 6th graders reported their five highest levels of risk for *Personal Transitions and Mobility* (61), *Community Disorganization* (47), *Poor Academic Performance* (44), *Parental Attitudes Favorable toward Antisocial Behavior* (40) and *Friends' Delinquent Behavior* (40). PAYS 2005 Statewide 12th graders reported their four highest levels of risk for *Laws and Norms Favorable to Drug Use and Handguns* (68), *Friends' Use of Drugs* (66), *Parental Attitudes Favorable toward ATOD Use* (62) and *Favorable Attitudes toward ATOD Use* (61).

Please remember as you view the following tables that lower risk factor scores and higher protective factor scores are the goal.

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		6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overa
Community									
Domain	Community Rewards for Prosocial Involvement	59		50		44		40	48
amily	Family Attachment	67		56		45		47	55
omain	Family Opportunities for Prosocial Involvement	68		56		46		46	55
_	Family Rewards for Prosocial Involvement	69		59		48		46	56
chool	School Opportunities for Prosocial Involvement	63		58		55		50	57
omain	School Rewards for Prosocial Involvement	64		52		43		40	50
eer and	Religiosity	55		53		49		47	51
ndividual omain	Belief in the Moral Order	75		61		50		46	58
Average		65		56		48		45	54
able 5-2.	Risk Factor Scale Scores, PAYS 2005 Statew	/ide							
		6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overa
community	Low Neighborhood Attachment	38		46		53		59	49
omain	Community Disorganization	47		55		60		60	55
	Personal Transitions and Mobility	61		52		51		49	53
	Laws and Norms Favorable to Drug Use and Handguns	27		43		61		68	50
	Perceived Availability of Drugs and Handguns	16		29		45		58	37
amily	Poor Family Supervision	29		41		54		59	46
omain	Poor Family Discipline	27		36		49		59	42
	Family History of Antisocial Behavior	27		39		50		56	42
	Parental Attitudes Favorable toward ATOD Use	35		41		53		62	47
	Parental Attitudes Favorable toward Antisocial Behavior	40		48		54		55	49
chool	Poor Academic Performance	44		47		50		50	48
omain	Lack of Commitment to School	32		43		52		60	47
eer and	Rebelliousness	31		45		53		56	46
ndividual Iomain	Friends' Delinquent Behavior	40		47		49		54	47
	Friends' Use of Drugs	22		34		53		66	44
	Peer Rewards for Antisocial Behavior	30		42		56		58	47
	Favorable Attitudes toward Antisocial Behavior	29		42		51		56	44
	Favorable Attitudes toward ATOD Use	22		33		50		61	41
	Low Perceived Risks of Drug Use	28		28		38		46	35
	Early Initiation (of Drug Use and Antisocial Behavior)	25		37		47		50	40
	Sensation Seeking	31		41		51		56	45
Average		32		41		51		57	45

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.

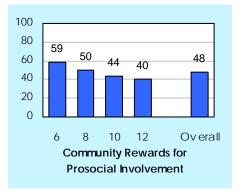
The Social Development Strategy organizes the research on protective factors. Protective factors can buffer young people from risks and promote positive youth development. To develop these healthy positive behaviors, young people must be immersed in environments that consistently communicate healthy 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 2005 *PAYS* 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 PAYS 2005 Statewide 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.

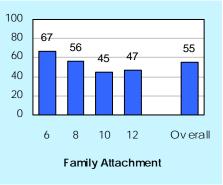
The protective factor **Community Rewards for Prosocial Involvement** is measured by a single scale using survey items such as "There are people in my neighborhood who are proud of me when I do something well."



- Overall, PAYS 2005 Statewide students received a percentile score of 48 on the *Community Rewards for Prosocial Involvement* scale, two points lower than the normative average of 50.
- Across grade levels, percentile scores for *Community Rewards for Prosocial Involvement* range from a low of 40 among 12th graders to a high of 59 among 6th graders.

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?"

- Overall, PAYS 2005 Statewide students received a percentile score of 55 on the *Family Attachment* scale, five points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Attachment* range from a low of 45 among 10th graders to a high of 67 among 6th graders.

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 that they are 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."

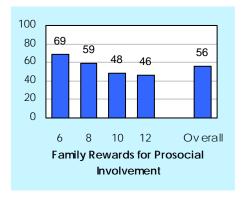


- Overall, PAYS 2005 Statewide students received a percentile score of 55 on the *Family Opportunities for Prosocial Involvement* scale, five points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Opportunities for Prosocial Involvement* range from a low of 46 among 10th and 12th graders to a high of 68 among 6th graders.

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?"

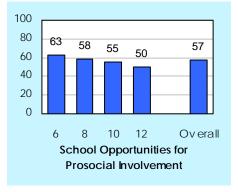


- Overall, PAYS 2005 Statewide students received a percentile score of 56 on the *Family Rewards for Prosocial Involvement* scale, six points higher than the normative average of 50.
- Across grade levels, percentile scores for *Family Rewards for Prosocial Involvement* range from a low of 46 among 12th graders to a high of 69 among 6th graders.

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."

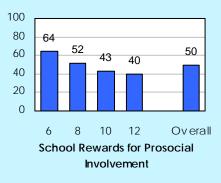


- Overall, PAYS 2005 Statewide students received a percentile score of 57 on the School
 Opportunities for Prosocial Involvement scale, seven points higher than the normative
 average of 50.
- Across grade levels, percentile scores for *School Opportunities for Prosocial Involvement* range from a low of 50 among 12th graders to a high of 63 among 6th graders.

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."

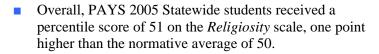


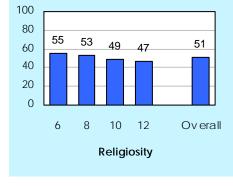
- Overall, PAYS 2005 Statewide students received a percentile score of 50 on the School Rewards for Prosocial Involvement scale, equaling the normative average of 50.
- Across grade levels, percentile scores for *School Rewards for Prosocial Involvement* range from a low of 40 among 12th graders to a high of 64 among 6th graders.

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?"



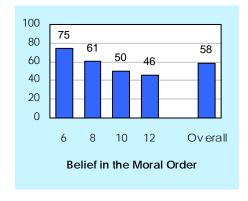


Across grade levels, percentile scores for *Religiosity* range from a low of 47 among 12th graders to a high of 55 among 6th graders.

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."



- Overall, PAYS 2005 Statewide students received a percentile score of 58 on the *Belief in the Moral Order* scale, eight points higher than the normative average of 50.
- Across grade levels, percentile scores for *Belief in the Moral Order* range from a low of 46 among 12th graders to a high of 75 among 6th graders.

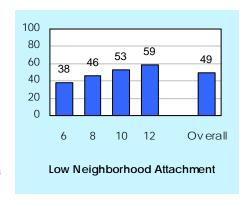
Risk Factors

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

The 2005 *PAYS* 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 PAYS 2005 Statewide 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 each other's lives. If the key players in a 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.



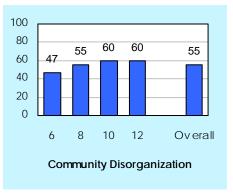
The Low Neighborhood Attachment scale was developed to measure a component of the risk factor Low Neighborhood Attachment and Community Disorganization. This scale is measured by survey items such as "I'd like to get out of my neighborhood" and "If I had to move, I would miss the neighborhood I now live in."

- Overall, PAYS 2005 Statewide students received a percentile score of 49 on the *Low Neighborhood Attachment* scale, one point lower than the normative average of 50.
- Across grade levels, percentile scores for *Low Neighborhood Attachment* range from a low of 38 among 6th graders to a high of 59 among 12th graders.

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."



- Overall, PAYS 2005 Statewide students received a percentile score of 55 on the *Community Disorganization* scale, five points higher than the normative average of 50.
- Across grade levels, percentile scores for *Community Disorganization* range from a low of 47 among 6th graders to a high of 60 among 10th and 12th graders.

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.

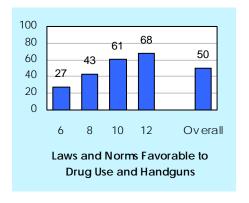


The *Personal Transitions and Mobility* scale was developed to measure a component of the risk factor **Transitions and Mobility**. This scale is measured by survey items such as "How many times have you changed schools since kindergarten?" and "How many times have you changed homes since kindergarten?"

- Overall, PAYS 2005 Statewide students received a percentile score of 53 on the *Personal Transitions and Mobility* scale, three points higher than the normative average of 50.
- Across grade levels, percentile scores for *Personal Transitions and Mobility* range from a low of 49 among 12th graders to a high of 61 among 6th graders.

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 & 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.

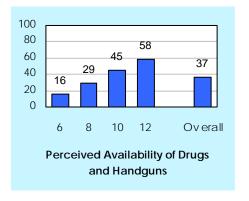
The Laws and Norms Favorable to Drug Use and Handguns scale was developed to measure a component of the risk factor Community Laws and Norms Favorable toward Drug Use, Firearms and Crime. This scale is measured by survey items such as "How wrong would most adults in your neighborhood think it was for kids your age to drink alcohol?" and "If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?"

- Overall, PAYS 2005 Statewide students received a percentile score of 50 on the *Laws and Norms Favorable to Drug Use and Handguns* scale, equaling the normative average of 50.
- Across grade levels, percentile 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.

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?"



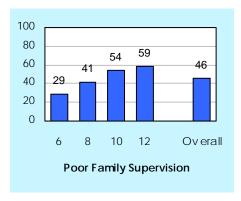
Elevation of this risk factor scale score may indicate the need to make alcohol, tobacco and other drugs more difficult for students to acquire. For instance, a number of policy changes have been shown to reduce the availability of alcohol and cigarettes. Minimum-age requirements, taxation and responsible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

- Overall, PAYS 2005 Statewide students received a percentile score of 37 on the *Perceived Availability of Drugs and Handguns* scale, 13 points lower than the normative average of 50.
- Across grade levels, percentile scores for *Perceived Availability of Drugs and Handguns* range from a low of 16 among 6th graders to a high of 58 among 12th graders.

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?" and "My family has clear rules about alcohol and drug use."



- Overall, PAYS 2005 Statewide students received a percentile score of 46 on the *Poor Family Supervision* scale, four points lower than the normative average of 50.
- Across grade levels, percentile scores for *Poor Family Supervision* range from a low of 29 among 6th graders to a high of 59 among 12th graders.

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.

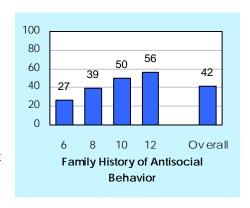
The *Poor Family Discipline* scale was developed to measure a component of the risk factor **Family Management Problems**. This scale is measured by survey items such as "If you skipped school, would you be caught by your parents?"



- Overall, PAYS 2005 Statewide students received a percentile score of 42 on the *Poor Family Discipline* scale, eight points lower than the normative average of 50.
- Across grade levels, percentile scores for *Poor Family Discipline* range from a low of 27 among 6th graders to a high of 59 among 12th graders.

Family History of Antisocial Behavior

If children are raised in a family where a history of addiction to alcohol or other drugs exists, the risk of their having alcohol or other drug problems themselves increases. If children are born or raised in a family where criminal activity 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 (Hawkins, Catalano & Miller, 1992).



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?"

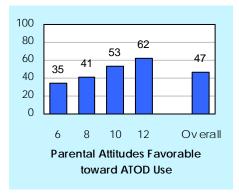
- Overall, PAYS 2005 Statewide students received a percentile score of 42 on the *Family History of Antisocial Behavior* scale, eight points lower than the normative average of 50.
- Across grade levels, percentile scores for *Family History of Antisocial Behavior* range from a low of 27 among 6th graders to a high of 56 among 12th graders.

2005 Pennsylvania Youth Survey

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?"

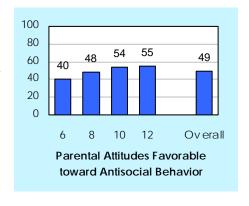


- Overall, PAYS 2005 Statewide students received a percentile score of 47 on the *Parental Attitudes Favorable toward ATOD Use* scale, three points lower than the normative average of 50
- Across grade levels, percentile scores for *Parental Attitudes Favorable toward ATOD Use* range from a low of 35 among 6th graders to a high of 62 among 12th graders.

Parental Attitudes Favorable toward Antisocial Behavior

Students' perceptions of their parents' opinions about antisocial behavior are also an important risk factor. Parental attitudes and behavior regarding crime and violence influence the attitudes and behavior of children. If parents approve of or excuse their children for breaking the law, then the children are more likely to develop problems with juvenile delinquency.

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?"

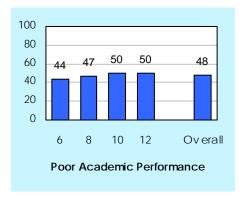


- Overall, PAYS 2005 Statewide students received a percentile score of 49 on the *Parental Attitudes Favorable toward Antisocial Behavior* scale, one point lower than the normative average of 50.
- Across grade levels, percentile scores for *Parental Attitudes Favorable toward Antisocial Behavior* range from a low of 40 among 6^{th} graders to a high of 55 among 12^{th} graders.

Poor Academic Performance

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

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



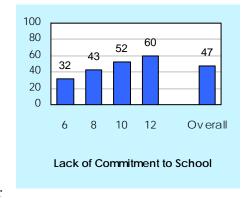
suggest that not only do students believe that they have lower grades than they might expect to get, but also that they perceive that compared to their peers they have below-average grades.

- Overall, PAYS 2005 Statewide students received a percentile score of 48 on the *Poor Academic Performance* scale, two points lower than the normative average of 50.
- Across grade levels, percentile scores for *Poor Academic Performance* range from a low of 44 among 6th graders to a high of 50 among 10th and 12th graders.

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



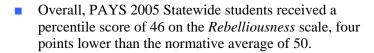
later life?" and "Now, thinking back over the past year in school, how often did you enjoy being in school?"

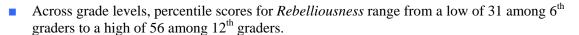
- Overall, PAYS 2005 Statewide students received a percentile score of 47 on the *Lack of Commitment to School* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Lack of Commitment to School* range from a low of 32 among 6th graders to a high of 60 among 12th graders.

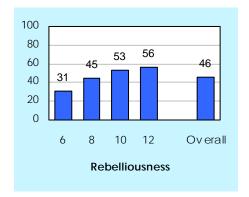
Rebelliousness

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."



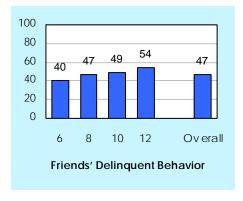




Friends' Delinquent Behavior

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



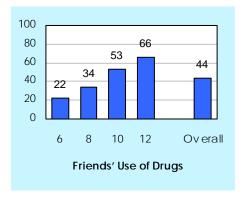
been suspended from school?" Elevated scores can indicate that students are interacting with more antisocial peers than average. Low scores can suggest that students' delinquent behavior is not strongly influenced by their peers.

- Overall, PAYS 2005 Statewide students received a percentile score of 47 on the *Friends' Delinquent Behavior* scale, three points lower than the normative average of 50.
- Across grade levels, percentile scores for *Friends' Delinquent Behavior* range from a low of 40 among 6th graders to a high of 54 among 12th graders.

Friends' Use of Drugs

Young people who associate with peers who engage in substance use are much more likely to engage in it themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who use drugs greatly increases a youth's risk of becoming involved in such behavior.

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?"



- Overall, PAYS 2005 Statewide students received a percentile score of 44 on the *Friends' Use of Drugs* scale, six points lower than the normative average of 50.
- Across grade levels, percentile scores for *Friends' Use of Drugs* range from a low of 22 among 6th graders to a high of 66 among 12th graders.

Peer Rewards for Antisocial Behavior

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behavior. 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?"

80 60 40 20 0 6 8 10 12 Overall Peer Rewards for Antisocial Behavior

100

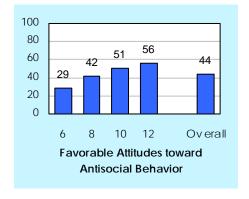
- Overall, PAYS 2005 Statewide students received a percentile score of 47 on the Peer
- Across grade levels, percentile scores for *Peer Rewards for Antisocial Behavior* range from a low of 30 among 6th graders to a high of 58 among 12th graders.

Rewards for Antisocial Behavior scale, three points lower than the normative average of 50.

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?"

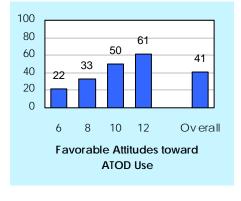


- Overall, PAYS 2005 Statewide students received a percentile score of 44 on the *Favorable Attitudes toward Antisocial Behavior* scale, six points lower than the normative average of 50.
- Across grade levels, percentile scores for *Favorable Attitudes toward Antisocial Behavior* range from a low of 29 among 6th graders to a high of 56 among 12th graders.

Favorable Attitudes toward ATOD Use

During the elementary school years, children usually express antidrug 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



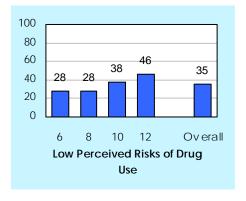
items such as "How wrong do you think it is for someone your age to drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?" An elevated score for this risk factor can indicate that students see little wrong with using drugs.

- Overall, PAYS 2005 Statewide students received a percentile score of 41 on the *Favorable Attitudes toward ATOD Use* scale, nine points lower than the normative average of 50.
- Across grade levels, percentile scores for *Favorable Attitudes toward ATOD Use* range from a low of 22 among 6th graders to a high of 61 among 12th graders.

Low Perceived Risks of Drug Use

The perception of harm from drug use is related to both experimentation and regular use. The less harm that an adolescent perceives as the result of drug use, the more likely it is that he or she will use drugs.

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.

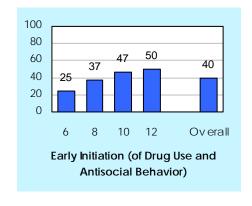


- Overall, PAYS 2005 Statewide students received a percentile score of 35 on the *Low Perceived Risks of Drug Use* scale, 15 points lower than the normative average of 50.
- Across grade levels, percentile scores for *Low Perceived Risks of Drug Use* range from a low of 28 among 6th and 8th graders to a high of 46 among 12th graders.

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



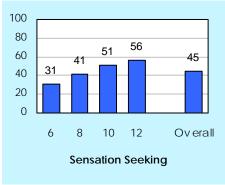
antisocial behaviors began. The earlier that drug experimentation begins, the more likely it is that experimentation will become consistent, regular use. The delinquent behaviors that are measured on the survey include getting suspended from school, getting arrested, carrying a handgun and attacking somebody with the intent to harm.

- Overall, PAYS 2005 Statewide students received a percentile score of 40 on the Early Initiation (of Drug Use and Antisocial Behavior) scale, 10 points lower than the normative average of 50.
- Across grade levels, percentile scores for *Early Initiation* (of *Drug Use and Antisocial Behavior*) range from a low of 25 among 6th graders to a high of 50 among 12th graders.

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?"

- Overall, PAYS 2005 Statewide students received a percentile score of 45 on the *Sensation Seeking* scale, five points lower than the normative average of 50.
- Across grade levels, percentile scores for *Sensation Seeking* range from a low of 31 among 6th graders to a high of 56 among 12th graders.

Section 6 Additional Prevention Planning Data

Introduction

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

Risk of Harm

Perception of risk is an important determinant in the decision-making process young people go through when deciding whether or not to use alcohol, tobacco or other drugs (Bachman, Johnston, O'Malley & Humphrey, 1988). Data analysis across a range of *Communities That Care Youth Survey* communities shows a consistent negative correlation between perception of risk and the level of reported ATOD use. That is, generally when the perceived risk of harm is high, reported frequency of use is low. Evidence also suggests that perceptions of the risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns in a community (Bachman, Johnston, O'Malley & Humphrey, 1986). Table A-1 presents prevalence rates for surveyed youth assigning "great risk" of harm to four drug use behaviors: regular use of alcohol (one or two drinks nearly every day), regular use of cigarettes (a pack or more daily), trying marijuana once or twice, and regular use of marijuana. These four survey items form the risk factor scale *Low Perceived Risks of Drug Use*.

Table 6-1. Percentage of Youth Who Reported Perception of "Great Risk" of Harm											
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %			
Drinking Alcohol Regularly	50.7		48.8		38.2		33.0	42.8			
Smoking Cigarettes Regularly	71.7		73.0		69.1		67.1	70.3			
Trying Marijuana Once or Twice	47.2		41.5		28.1		16.8	33.6			
Smoking Marijuana Regularly	81.0		80.5		64.2		47.3	68.6			

Disapproval of Drug Use

Personal approval or disapproval is another key attitudinal construct that influences drug use behavior (Bachman et al., 1988). Like risk of harm, disapproval is negatively correlated with the level of reported ATOD use across a range of *Communities That Care Youth Survey* communities. Personal disapproval was measured by asking surveyed youth how wrong it would be for someone their age to drink alcohol regularly, smoke cigarettes, smoke marijuana, or use other illicit drugs ("LSD, cocaine, amphetamines or another illegal drug"). The rates presented in Table 6-2 represent the percentages of surveyed youth who thought it would be "wrong" or "very wrong" to use each drug. These four survey items form the risk factor scale *Favorable Attitudes toward ATOD Use*.

Table 6-2. Percentage of Youth Who Indicated Personal Disapproval of Drug Use											
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %			
Drinking Alcohol Regularly	96.9		87.4		61.0		48.3	73.8			
Smoking Cigarettes	97.5		89.7		72.0		57.7	79.6			
Smoking Marijuana	99.1		92.6		78.5		65.6	84.2			
Using Other Illicit Drugs	99.5		97.6		94.0		90.9	95.6			

Social Norms

In addition to students' own attitudes, social norms—the written and unwritten rules and expectations about what constitutes desirable behavior—shape drug use choices. Since drug-related attitudes and behaviors are often acquired through peer group interactions, expectations of how one's peer group might react have an especially strong impact on whether or not young people choose to use drugs. The data presented in Table 6-3 show the percentage of surveyed youth who said that there is a "pretty good" or "very good" chance that they would be seen as cool if they smoked cigarettes, drank alcohol regularly (once or twice a month) or smoked marijuana. These three survey items form part of the risk factor scale *Peer Rewards for Antisocial Behavior*.

Table 6-3. Percentage of Youth Who Indicated Peer Approval of Drug Use										
	6 th	7 th %	8 th	9 th	10 th %	11 th %	12 th %	Overall %		
Drinking Alcohol Regularly					22.4	70	28.6	14.6		
3 3	1.8		6.4		22.4		28.0	14.0		
Smoking Cigarettes	2.4		5.6		8.7		7.9	6.2		
Smoking Marijuana	1.5		6.1		14.5		15.4	9.4		

In addition to peer attitudes, social norms toward drug use were measured by asking how most neighborhood adults would view student alcohol, cigarette and marijuana use. Table A-4 presents the percentage of surveyed youth who thought other adults would feel it was "wrong" or "very wrong" to use each drug. These three survey items form part of the risk factor scale *Laws and Norms Favorable to Drug Use and Handguns*.

Table 6-4. Percentage of Youth Who Indicated "Other Adults" Disapprove of Drug Use										
	6 th	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %		
Drinking Alcohol	94.2		87.1		72.6		62.9	79.4		
Smoking Cigarettes	94.7		88.4		73.7		56.5	78.7		
Smoking Marijuana	98.0		94.8		88.9		84.1	91.6		

Frequency of Drug Use

While the prevalence rates presented in Section 2 are useful for determining how many kids are currently using or have experimented with a drug, they give no indication of the frequency or intensity of use. A respondent who reports 1 or 2 occasions of use in the past 30 days is counted the same as one who reports 40 or more occasions of use, even though the level of use is drastically different. Tables 6-5 through 6-8 present the past-30-day frequency of use reported by surveyed youth for the following drugs: alcohol, cigarettes, marijuana or hashish, and inhalants.

Table 6-5. Past-30-Day Frequency of Alcohol Use 6th 8th **9**th 10th 11th 12th Overall % % % % % % % % 0 occasions 97.4 85.5 63.5 46.3 73.7 1 or 2 occasions 2.0 10.4 20.2 22.6 13.7 3 to 5 occasions 0.4 2.4 8.0 15.4 6.4 6 to 9 occasions 0.1 0.9 3.2 8.1 3.0

10 to 19 occasions 0.1 0.4 2.9 4.3 1.9 20 to 39 occasions 0.0 0.2 1.4 1.8 8.0 40 or more occasions 0.0 0.2 0.7 1.5 0.6

Note: Rounding on the above table can produce totals that do not equal 100%.

lable 6-6.	Past-30-Day	Frequency of	Cigarette Use

	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %
Not at all	99.0		93.6		81.6		71.5	86.7
Less than one cigarette per day	0.7		3.6		7.4		10.0	5.3
One to five cigarettes per day	0.3		1.5		4.5		6.4	3.1
About one-half pack per day	0.0		0.7		3.4		6.8	2.6
About one pack per day	0.0		0.3		1.9		3.4	1.4
About one and one-half packs per day	0.0		0.1		0.9		1.3	0.6
Two packs or more per day	0.0		0.1		0.3		0.6	0.2

Note: Rounding on the above table can produce totals that do not equal 100%.

Table 6-7. Past-30-Day Frequency of Marijuana or Hashish Use

•	•							
	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
	%	%	%	%	%	%	%	%
0 occasions	99.7		96.5		88.0		77.1	90.6
1 or 2 occasions	0.2		1.6		4.3		7.5	3.3
3 to 5 occasions	0.1		0.7		1.3		3.4	1.3
6 to 9 occasions	0.0		0.3		0.8		2.4	0.9
10 to 19 occasions	0.0		0.3		2.2		3.0	1.3
20 to 39 occasions	0.0		0.3		2.2		2.5	1.2
40 or more occasions	0.0		0.3		1.2		4.1	1.3

Note: Rounding on the above table can produce totals that do not equal 100%.

Table 6-8. Past-30-Day Frequency of Inhalant Use

	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %
0 occasions	97.5		96.1		95.9		96.9	96.6
1 or 2 occasions	2.0		2.7		2.2		2.4	2.3
3 to 5 occasions	0.1		0.6		0.6		0.4	0.4
6 to 9 occasions	0.2		0.4		0.6		0.1	0.3
10 to 19 occasions	0.1		0.1		0.7		0.1	0.2
20 to 39 occasions	0.0		0.0		0.0		0.1	0.0
40 or more occasions	0.0		0.1		0.1		0.1	0.1

Note: Rounding on the above table can produce totals that do not equal 100%.

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

Table 6-9 presents the past-30-day frequency of bringing a weapon (such as a gun, knife or club) to school, reported by surveyed youth.

Table 6-9. Past-30-Day Frequency of Bringing a Weapon to School											
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %			
Never	99.5		97.7		96.6		96.7	97.6			
1 or 2 times	0.4		1.6		1.9		1.5	1.4			
3 to 5 times	0.0		0.2		0.8		0.6	0.4			
6 to 9 times	0.0		0.1		0.1		0.3	0.1			
10 to 19 times	0.0		0.1		0.1		0.1	0.1			
20 to 29 times	0.0		0.0		0.1		0.2	0.1			
30 to 39 times	0.0		0.1		0.0		0.1	0.0			
40+ times	0.0		0.2		0.4		0.5	0.3			

Note: Rounding on the above table can produce totals that do not equal 100%.

Appendix A Historical Data

Introduction

In addition to the current survey effort, the State of Pennsylvania administered the *PAYS* in the fall of 2001 and 2003. This section of the report presents results from these two previous survey efforts. Caution should be exercised when comparing overall results across survey administrations. This is because differences in the distribution of the sample across grade levels can impact overall results.

Demographic Trends

The survey measures a variety of demographic characteristics. Table A-1 shows selected characteristics of surveyed State College Area School District youth for 2001, 2003 and 2005.

	N	umber of Stude	nts	Perd	centage of Stud	lents
	2001	2003	2005	2001	2003	2005
Overall Valid Surveys	43,889	42,623	14,348	100.0%	100.0%	100.0%
Sex						
Male	20,895	20,890	7,129	47.6%	49.0%	49.7%
Female	21,640	21,457	7,155	49.3%	50.3%	49.9%
Did not respond	1,354	276	64	3.1%	0.6%	0.4%
Ethnicity						
White	34,936	36,784	8,621	79.6%	86.3%	80.0%
African American	2,861	1,536	607	6.5%	3.6%	4.6%
Latino	1,392	795	384	3.2%	1.9%	3.0%
American Indian	364	360	106	0.8%	0.8%	0.7%
Asian	902	639	259	2.1%	1.5%	1.9%
Other/Multiple	2,683	2,122	3,660	6.1%	5.0%	9.2%
Did not respond	751	387	711	1.7%	0.9%	0.8%
Grade Level						
6 th	11,508	10,678	4,978	26.2%	25.1%	34.7%
7 th	0	0	0	0.0%	0.0%	0.0%
8 th	12,168	12,230	4,228	27.7%	28.7%	29.5%
9 th	0	0	0	0.0%	0.0%	0.0%
10 th	11,265	11,727	3,106	25.7%	27.5%	21.6%
11 th	0	0	0	0.0%	0.0%	0.0%
12 th	8,948	7,988	2,036	20.4%	18.7%	14.2%

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

ATOD Results, 2001 and 2003

Table A-2. Lifetime Use of Alcohol, Tobacco and Other Drugs, PAYS Statewide 2001

	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
	%	%	%	%	%	%	%	%
Alcohol	32.3		57.4		75.8		83.8	61.3
Cigarettes	8.9		27.1		43.8		57.0	32.9
Smokeless Tobacco								
Marijuana	1.3		10.9		30.9		47.1	21.1
Inhalants	2.3		5.8		7.5		12.5	6.7
Cocaine	0.4		1.0		3.0		6.0	2.4
Crack Cocaine	0.4		0.9		1.7		2.3	1.3
Heroin	0.2		0.5		0.9		1.7	0.8
Hallucinogens	0.2		1.8		6.3		12.7	4.9
Methamphetamine	0.6		1.8		3.3		4.4	2.5
Ecstasy								
Steroids	0.9		2.1		2.8		2.5	2.1

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

Table A-3. Past-30-Day Use of Alcohol, Tobacco and Other Drugs, PAYS Statewide 2001

	6 th %	7 th %	8 th	9 th	10 th %	11 th %	12 th %	Overall %
Alcohol	4.8		17.4		36.4		48.5	25.6
Binge Drinking	2.4		8.6	 	20.9		31.2	14.9
Cigarettes	2.4		10.6		20.7		31.9	15.4
Smokeless Tobacco	1.5		4.1		7.0		9.7	
								5.4
Marijuana	0.6		5.3		17.0		25.6	11.4
Inhalants	0.7		1.9		2.1		3.0	1.9
Cocaine	0.2		0.4		1.0		1.9	0.8
Crack Cocaine	0.1		0.4		0.5		0.6	0.4
Heroin	0.1		0.2		0.4		0.5	0.3
Hallucinogens	0.1		8.0		2.2		3.6	1.6
Methamphetamine	0.3		0.6		1.0		0.9	0.7
Ecstasy								
Steroids	0.3		0.6		0.9		1.0	0.7

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

Table A-4. Lifetime Use of Alcohol, Tobacco and Other Drugs, PAYS Statewide 2003 6th 7th 8th 9th 10th 11th 12th Overall % % % % % % % % Alcohol 28.7 56.7 76.4 83.6 60.6 Cigarettes 8.9 27.8 40.4 52.4 31.6 --**Smokeless Tobacco** 2.7 7.9 15.0 21.0 11.3 Marijuana 1.3 10.8 27.5 42.8 19.8 Inhalants 7.3 10.5 9.1 9.8 12.3 Cocaine 0.4 1.8 3.9 7.4 3.2 **Crack Cocaine** 0.4 1.8 1.9 2.5 1.6 Heroin 0.2 1.0 1.4 2.9 1.3 Hallucinogens 0.3 2.9 6.1 10.9 4.9 Methamphetamine 0.2 1.1 2.3 3.0 1.6 **Ecstasy** 0.2 2.7 4.8 8.7 4.0 **Steroids** 1.2 2.5 2.8 2.3 2.2 Any Illicit Drug (Other 8.0 15.8 17.5 20.9 15.4 than Marijuana)

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

	6 th %	7 th %	8 th	9 th %	10 th %	11 th %	12 th %	Overall %
Alcohol	4.1		17.0		37.9		49.2	26.2
Binge Drinking	1.5		8.8		21.5		31.4	15.3
Cigarettes	2.1		10.9		19.0		25.8	14.1
Smokeless Tobacco	1.0		3.1		7.1		9.5	5.0
Marijuana	0.5		5.2		14.5		21.4	10.0
Inhalants	2.8		5.0		2.9		2.0	3.2
Cocaine	0.1		0.7		1.3		2.4	1.1
Crack Cocaine	0.1		0.7		0.7		0.7	0.6
Heroin	0.1		0.4		0.7		1.3	0.6
Hallucinogens	0.1		1.3		2.3		3.4	1.7
Methamphetamine	0.0		0.5		0.7		0.9	0.5
Ecstasy	0.0		0.9		1.3		1.5	0.9

Table A-5. Past-30-Day Use of Alcohol, Tobacco and Other Drugs, PAYS Statewide 2003

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

0.3

3.1

Steroids

Any Illicit Drug (Other

than Marijuana)

0.9

7.9

8.0

6.1

8.0

6.7

1.2

6.8

Other Antisocial Behavior Results, 2001 and 2003

Table A-6. Prevalence of Other Antisocial Behaviors, PAYS Statewide 2001 6th 7th 9th 10th 11th 12th Overall % % Attacking Someone with Intent to Harm 6.0 10.5 11.6 10.3 9.6 Attempting to Steal a Vehicle 0.7 1.9 3.2 2.7 2.1 **Being Arrested** 1.5 5.9 7.0 4.5 4.1 Being Drunk or High at School 21.2 1.0 6.0 15.3 10.2 **Getting Suspended** 9.5 9.7 6.3 10.8 9.0 **Selling Drugs** 0.3 7.5 4.9 2.4 11.1 Average 2.6 5.7 8.9 10.5 6.7

Table A-7. Prevalence of Other Antisocial Behaviors, PAYS Statewide 2003													
	6 th %	7 th %	8 th %	9 th %	10 th %	11 th %	12 th %	Overall %					
Attacking Someone with Intent to Harm	6.6		12.7		13.2		12.2	11.2					
Attempting to Steal a Vehicle	0.7		2.2		2.8		2.2	2.0					
Being Arrested	1.4		5.2		5.7		6.3	4.6					
Being Drunk or High at School	0.9		6.0		13.0		17.8	9.1					
Getting Suspended	5.9		10.2		9.2		9.3	8.6					
Selling Drugs	0.3		2.8		7.1		9.6	4.8					
Bringing a Weapon to School	0.9		2.1		2.4		2.4	1.9					
Average	2.4		5.9		7.6		8.5	6.0					

Risk and Protective Results, 2001 and 2003

	Protective Factor Scale Scores, PAYS State	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overa
Community		_							
Domain	Community Rewards for Prosocial Involvement	59		50		46		44	50
amily	Family Attachment	68		55		48		47	55
Domain	Family Opportunities for Prosocial Involvement	68		55		48		46	54
	Family Rewards for Prosocial Involvement	70		57		48		46	55
School	School Opportunities for Prosocial Involvement	64		57		54		53	57
Domain 	School Rewards for Prosocial Involvement	62		48		41		42	49
Peer and	Religiosity	59		58		55		49	56
ndividual Domain	Belief in the Moral Order	73		54		44		42	5.
Average		65		54		48		46	54
able A-9.	Risk Factor Scale Scores, PAYS Statewide	2001							
		6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overa
Community	Low Neighborhood Attachment	39		47		53		57	49
Domain	Community Disorganization	43		48		49		49	47
	Personal Transitions and Mobility	47		40		41		39	42
	Laws and Norms Favorable to Drug Use and Handguns	28		45		59		66	49
	Perceived Availability of Drugs and Handguns	17		30		47		57	3
amily	Poor Family Supervision	34		47		55		61	4
Domain	Poor Family Discipline	28		41		52		62	4!
	Family History of Antisocial Behavior	26		37		47		55	4
	Parental Attitudes Favorable toward ATOD Use	36		43		51		61	4
	Parental Attitudes Favorable toward Antisocial Behavior	42		48		53		53	49
School	Poor Academic Performance	46		50		51		51	40
Domain	Lack of Commitment to School	32		47		54		58	4
eer and	Rebelliousness	36		49		53		55	48
ndividual Domain	Friends' Delinquent Behavior	40		46		49		54	47
	Friends' Use of Drugs	23		38		56		66	44
	Peer Rewards for Antisocial Behavior	31		45		54		53	45
	Favorable Attitudes toward Antisocial Behavior	37		53		60		60	52
	Favorable Attitudes toward ATOD Use	25		41		58		67	46
	Low Perceived Risks of Drug Use	27		31		41		47	36
	Early Initiation (of Drug Use and Antisocial								
	Behavior)	28		40		49		52	42

Table A-10.	Protective Factor Scale Scores, PAYS Sta								
		6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
Community Domain	Community Rewards for Prosocial Involvement	59		48		43		41	48
Family	Family Attachment	66		53		47		46	54
Domain	Family Opportunities for Prosocial Involvement	67		54		48		46	54
	Family Rewards for Prosocial Involvement	70		55		48		46	56
School	School Opportunities for Prosocial Involvement	65		56		54		52	57
Domain	School Rewards for Prosocial Involvement	65		48		41		42	49
Peer and	Religiosity	56		55		53		49	53
Individual Domain	Belief in the Moral Order	75		58		51		50	59
Average		65		53		48		47	54
Table A-11.	Risk Factor Scale Scores, PAYS Statewide	2003							
		6 th	7 th	8 th	9 th	10 th	11 th	12 th	Overall
Community	Low Neighborhood Attachment	37		48		55		57	49
Domain	Community Disorganization	47		55		58		56	54
	Personal Transitions and Mobility	56		50		51		47	51
	Laws and Norms Favorable to Drug Use and Handguns	27		47		59		68	50
	Perceived Availability of Drugs and Handguns	17		31		46		56	37
Family	Poor Family Supervision	31		45		54		60	46
Domain	Poor Family Discipline	27		41		51		59	43
	Family History of Antisocial Behavior	30		41		49		56	43
	Parental Attitudes Favorable toward ATOD Use	35		44		53		59	43
	Parental Attitudes Favorable toward Antisocial Behavior	42		50		53		52	49
School	Poor Academic Performance	45		50		50		48	49
Domain	Lack of Commitment to School								
Peer and	Rebelliousness	30		48		54		58	47
Individual	Friends' Delinquent Behavior	30		46		50		51	44
Domain	Friends' Use of Drugs	40		47		50		51	47
	Peer Rewards for Antisocial Behavior	23		39		55		64	45
	Favorable Attitudes toward Antisocial Behavior	32		47		56		56	48
	Favorable Attitudes toward ATOD Use	31		47		53		56	47
	Low Perceived Risks of Drug Use	23		38 32		52		59	42
	Early Initiation (of Drug Use and Antisocial Behavior)	26 27		40		38 47		44	35 40
	Sensation Seeking	33		44		52		55	45
		.5.5		44		:1/		:::	40

Appendix B New Risk and Protective Factor Scoring

Introduction

Starting in 2007, the *PAYS* will adopt a new risk and protective factor measurement and scoring model. While this new model uses the same survey data as the current model, it introduces a number of enhancements to the percentile scoring process. These enhancements create a more complete risk and protective factor profile for communities, allowing planners to more accurately identify problem areas in need of prevention intervention.

Tables B-1 and B-2 present 2005 risk and protective factor results for PAYS 2005 Statewide using the new scoring model. This enables communities to review the new methodology prior to its formal introduction in 2007. It also provides an opportunity to compare differences between the old and new models. This is important because scores generated with the new measurement and scoring model are not directly comparable to scores generated with the previous model. To address lack of comparability, future *PAYS* reports will recalculate historical risk and protective factor data with the new scoring model so communities can track changes over time.

The enhancements incorporated into the new risk and protective factor measurement and scoring model fall into three categories: (1) updates to several risk and protective factor scales, (2) the introduction of a new normative database, and (3) changes to grade-level scoring.

New Risk and Protective Factor Scales

- 1. The risk factor scale *Perceived Availability of Drugs and Handguns* has been divided into two independent scales: *Perceived Availability of Drugs* and *Perceived Availability of Handguns*. This change improves the utility of prevention data by creating separate measures for two distinct risk factors.
- 2. The risk factor scale *Laws and Norms Favorable to Drug Use and Handguns* has also been divided into two independent scales: *Laws and Norms Favorable to Drug Use* and *Laws and Norms Favorable to Handguns*. This change improves the utility of prevention data by creating separate measures for two distinct risk factors.
- 3. The other antisocial behavior components of the risk factor scale *Early Initiation (of Drug Use and Antisocial Behavior)* have been removed, and the scale has been renamed *Early Initiation of Drug Use*. This change improves both the reliability of the measure and its utility for prevention planning.
- 4. The risk factor scales *Poor Family Supervision* and *Poor Family Discipline* have been combined into a single scale called *Poor Family Management*. Analysis of *Communities That Care Youth Survey* data showed that the items that constitute the two scales are highly correlated across scales. This indicates that the items are more effective at representing a single dimension of family life.

- 5. The risk factor scale *Personal Transitions and Mobility* has been renamed *Transitions and Mobility*. The survey items constituting this scale remain unchanged.
- 6. The risk factor scale *Family Conflict* has been added.
- 7. The protective factor scale *Community Opportunities for Prosocial Involvement* has been added.

New Normative Data

As discussed in Section 5 of this report, percentile scores for each risk and protective factor scale are calculated by comparing survey responses to data in the *Communities That Care* normative database. The new scoring model utilizes the updated the *Communities That Care* normative database. This enhanced normative archive, which contains survey responses from over 280,000 students in grades 6 through 12, was compiled by combining the results of selected *Communities That Care Youth Survey* efforts conducted in 2000, 2001 and 2002. To enhance representativeness, statistical weights were applied to adjust the sample to exactly match the population of U.S. public school students on four key demographic variables: ethnicity, sex, socioeconomic status and urbanicity. Information on the U.S. public school student population was obtained from the Common Core of Data program at the U.S. Department of Education's National Center for Education Statistics.

Grade-Level Scoring

In previous *PAYS* efforts, risk and protective factor scale scores were calculated by comparing all respondents against a combined normative sample of students in grades 6, 8, 10, and 12. Because it contains a large number of respondents within each grade level, the new *Communities That Care* normative database allows the comparisons to be done on a grade-by-grade basis. This means that 6th graders who take the *PAYS* will only be compared with 6th grade responses in the normative database, 8th graders will only be compared with 8th grade responses, and so on. Grade-level comparisons improve the accuracy of norm-referenced scores.

Overall percentile scores for risk and protective factor scales are created by weighting the *Communities That Care* normative database to match the grade-level distribution of each survey sample.

	New Protective Factor Scale Scores, PAYS 2	6 th	7th	8th	9 th	10 th	11 th	12 th	Over
			,	O	7	10		12	Over
Community	Community Opportunities for Prosocial Involvement	59		63		63		59	61
Domain	Community Rewards for Prosocial Involvement	55		54		53		49	53
Family	Family Attachment	56		57		50		54	55
Domain	Family Opportunities for Prosocial Involvement	56		56		50		52	54
	Family Rewards for Prosocial Involvement	54		58		53		52	54
School	School Opportunities for Prosocial Involvement	56		58		56		48	55
Domain	School Rewards for Prosocial Involvement								
		58		58		56		48	55
Peer and Individual	Religiosity	49		48		46		49	48
Domain	Belief in the Moral Order	63		65		59		53	60
Average		56		57		54		52	55
Table B-2	New Risk Factor Scale Scores, PAYS 2005 Sta	atewi	de 2	005					
Table B 2.	New Risk Factor Scale Science, 17415 2555 St.	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Ove
Community Domain	Low Neighborhood Attachment	41		44		45		48	44
- Ca	Community Disorganization	46		49		55		58	52
	Transitions and Mobility	55		53		49		49	52
	Laws and Norms Favorable to Drug Use	45		45		53		54	49
	Laws and Norms Favorable to Handguns	43		43		50		49	46
	Perceived Availability of Drugs	43		42		46		51	45
	Perceived Availability of Handguns	50		49		51		52	51
Family	Poor Family Management	43		39		44		46	43
Domain	Family Conflict	46		52		51		50	50
	Family History of Antisocial Behavior	45		44		45		45	45
	Parental Attitudes Favorable toward ATOD Use	45		45		51		53	49
	Parental Attitudes Favorable toward Antisocial	45		43		51		55	47
	Behavior	43		44		49		52	47
School	Poor Academic Performance	44		42		44		47	44
Domain	Lack of Commitment to School	46		42		45		53	46
Peer and	Rebelliousness	39		42		50		54	46
Individual	Friends' Delinquent Behavior								
Domain	Friends' Use of Drugs	42 42		44 38		45 44		50 51	45 44
	Peer Rewards for Antisocial Behavior								
	Favorable Attitudes toward Antisocial Behavior	43 36		45 37		55 42		60 47	51 40
	Favorable Attitudes toward ATOD Use	36 40		37		42		47	40
	Low Perceived Risks of Drug Use	40		37 41		43		46 51	42
	Early Initiation of Drug Use			39					43
	Sensation Seeking	40				45		47	
	Sensation Seeking	41		40		44		47	43

Appendix C Survey Methodology

This section describes how the 2005 Pennsylvania Youth Survey (PAYS) was conducted – the survey instrument used, how the statewide sample was selected, and the procedures used to ensure that valid survey responses were reported.

Survey Questionnaire

Based on The Communities That Care (CTC) Youth Survey, the 2005 PAYS questionnaire consists of more than 200 single survey items. The CTC Youth Survey is designed to identify the levels of risk factors related to problem behaviors such as Alcohol, Tobacco and Other Drug (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 CTC Youth Survey also measures the actual prevalence of drug use, violence and other antisocial behaviors among surveyed students. In total, 15 risk factors are measured by 21 risk factor scales, while each of the eight protective factors is measured by a single protective factor scale. The protective factor *Social Skills* was removed from the 2005 PAYS because the questions used to measure it were deemed too difficult for younger students. The eight protective scales and 21 risk factors scales are listed in Tables C-1 and C-2.

Table C-1. CTC Protective Factor Scales

- 1. Community Rewards for Prosocial Involvement
- 2. Family Attachment
- 3. Family Opportunity for Prosocial Involvement
- 4. Family Rewards for Prosocial Involvement
- 5. School Opportunities for Prosocial Involvement
- 6. School Rewards for Prosocial Involvement
- 7. Religiosity
- 8. Belief in the Moral Order

Table C-2. CTC Risk Factor Scales

- 1. Low Neighborhood Attachment
- 2. Community Disorganization
- 3. Personal Transitions and Mobility
- 4. Laws and Norms Favorable to Drug Use and Handguns
- 5. Perceived Availability of Drugs and Handguns
- 6. Poor Family Supervision
- 7. Poor Family Discipline
- 8. Family History of Antisocial Behavior
- 9. Parental Attitudes Favorable toward ATOD Use
- 10. Parental Attitudes Favorable toward Antisocial Behavior
- 11. Poor Academic Performance
- 12. Lack of Commitment to School
- 13. Rebelliousness
- 14. Friends' Delinquent Behavior
- 15. Friends' Use of Drugs
- 16. Peer Rewards for Antisocial Behavior
- 17. Favorable Attitudes toward Antisocial Behavior
- 18. Favorable Attitudes toward ATOD Use
- 19. Low Perceived Risks of Drug Use
- 20. Early Initiation (of Drug Use and Antisocial Behavior)
- 21. Sensation Seeking

Survey Sample

Respondents were grouped into two statewide samples—the representative random sample, and the volunteer sample. Unless otherwise noted, however, survey results presented in this report are based only on the results from the statewide representative random sample, and discussion that follows regarding sample design and selection pertains only to the statewide random sample. Statewide, more than 100,000 young people in grades 6, 8, 10, and 12 participated in the 2005 PAYS; however, the random sample consisted of only 14, 348 students.

Sample Design

The 2005 PAYS sample design was a two-stage stratified probability design. The first stage was the selection of schools. In the first sampling stage, schools were stratified and selected by region and grade, resulting in a total of 24 sampling strata. The second stage of sampling was the random selection of classes within the sampled schools and grades. The sample was designed to yield precise state level and regional level estimates by grade.

Westat used its own specialized sampling software, PCSample, to select the 2005 PAYS sample. PCSample selects representative samples of schools and classes. The software is designed primarily for stratified systematic sampling with random starts. Schools are selected with probability proportional to size. The sample is designed to yield a self-weighting sample so that every eligible student has an equal chance of selection. Self-weighting sample is desirable because it tends to improve the precision of the estimates.

Sampling Frame

A frame of public schools offering grades 6, 8, 10, or 12 was constructed from existing sampling frames used during the administration of the 2003 PAYS. Those frames were edited to remove schools that had closed, add new schools that are eligible for the PAYS, and update enrollment for target grades. The final

frame contained the school name, address, grade span, region, and enrollment in each of grades 6, 8, 10, and 12. In addition, the final frame included other useful variables such as district name, race/ethnicity distribution, and population density. When run against the PCSample software, the final statewide frame produced a statewide sample of 232 randomly selected schools.

Sample Response Rates

Statewide, 92 out of the 232 randomly selected schools participated in the survey, for an overall school response of 40 percent. The 92 participating schools yielded 14,348 completed surveys from a population of 16,676 students, or an overall student response rate of 75 percent. After data editing and eliminating 1,919 surveys, 12,429 surveys remained for weighting and analysis. Most (60 percent) surveys were eliminated because the respondents reported an invalid grade. Other surveys were eliminated because student responses were deemed not truthful or students failed to complete parts of the surveys (see Survey Validation section for additional information on validity criteria used to eliminate dishonest survey responses).

Demographic Profile of Surveyed Youth

Table C-3 shows selected characteristics of surveyed youth: sex, ethnicity and the primary language spoken at home. The primary language spoken at home refers to the primary language the student speaks at home (rather than what the parents speak at home). Nearly all of the surveyed students (95.1 percent) reported English as the language they most often speak at home.

A higher percentage of surveyed PAYS 2005 Statewide students were female (49.9 percent female versus 49.7 percent male). A majority of students identified themselves as White (80.0 percent). The largest minority group is African American (4.6 percent), followed by Latino (3.0 percent), Asian (1.9 percent) and American Indian (0.7 percent). Note that while the "Other/Multiple" category listed on all tables includes students who selected "Other" as their primary ethnicity, this category also includes those students who selected multiple ethnicities. Therefore, for example, students who reported both African American and Latino ethnicity would be classified in the "Other/Multiple" category for the purposes of this report.

Weighting the Statewide Sample

The objective of weighting the statewide sample is to develop sample weights so that the weighted sample estimates accurately represent the entire public school student population in grades 6, 8, 10, and 12 in Pennsylvania. Every eligible sampled student is assigned a base weight, which is equal to the inverse of the probability of selection for the student. This weight can be thought of as the number of students in the population that are represented by each sampled student. The base weight for each sampled student is computed as the product of the school base weight and the within-school base weight. The school base weight is computed as the inverse of the probability of selection for the school. The within-school base weight is equal to the inverse of the conditional probability that the class is selected given the school is selected.

Adjustments are made to the base weights to remove bias from the estimates and reduce the variability of the estimate. Two adjustments are made to account for nonresponse in the sample. The first adjustment accounts for nonparticipating schools that were sampled. This adjustment is made at the school level and accounts for entire schools that are sampled but are unable, or refuse, to participate. For this adjustment, schools are grouped into three categories based on school enrollment: large schools, medium schools, and small schools. The groups are constructed so that each group has approximately the same total enrollment. Within each category, weights of refusing schools are distributed to the participating schools.

The second adjustment is made at the student-level and accounts for eligible students enrolled in sampled classes who fail to participate (e.g., students who are absent on the day the survey is administered, students who do not receive parental permission, or students who refuse to participate). Weights of these nonresponding students in sampled schools are given to responding students in the same school.

	Number of Students	Percentage of Students
Overall Valid Surveys	14,348	100.0%
Sex		
Male	7,129	49.7%
Female	7,155	49.9%
Did not respond	64	0.4%
Ethnicity		
White	8,621	80.0%
African American	607	4.6%
Latino	384	3.0%
American Indian	106	0.7%
Asian	259	1.9%
Other/Multiple	3,660	9.2%
Did not respond	711	0.8%
Primary Language Spoken at Home		
English	13,647	95.1%
Spanish	233	1.6%
Other Language	326	2.3%
Did not respond	142	1.0%

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

Survey Administration

The 2005 PAYS was administered in the classroom and required approximately one class period to complete. Each teacher received an appropriate number of surveys and survey collection envelopes. 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. In some schools, some or all of the student respondents completed the survey in a computer lab using an internet-based survey administration system. The internet survey administration was managed by SmartTrack, Inc., a Westat subcontractor. All schools administering the internet survey received formal training prior to the student survey administration.

When completing the PAYS questionnaire, 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. 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 the surveys. 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.

1. In the first strategy, surveys from students who reported an average of four or more daily uses of the following drugs—inhalants, cocaine, hallucinogens, Ecstasy, methamphetamine and heroin—were

eliminated from the survey data set. This strategy removes from the survey any student who did not take it seriously.

- 2. The second strategy supplements the drug use exaggeration test by examining the frequency of four other antisocial behaviors: Attacking Someone with Intent to Harm, Attempting to Steal a Vehicle, Being Arrested, and Getting Suspended. Respondents who reported an unrealistically high frequency of these behaviors—more than 80 instances within the past year—were removed from the analysis.
- 3. 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.
- 4. 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/hashish; 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.

Overall statewide, the vast majority of participating students were cooperative — all but 460 students (3.1 percent) completed valid surveys. Of the 460 surveys identified and eliminated by one or more of the four strategies described above, 220 exaggerated drug use (strategy 1), 167 exaggerated other antisocial behavior (strategy 2), 349 reported the use of the fictitious drug (strategy 3) and 167 responded in a logically inconsistent way (strategy 4). The elimination total produced by these four strategies equals more than 460 because some surveys were identified by more than one strategy.

Survey Margin of Error

The survey results from a random probability sample can be generalized to the entire target population. How well the sample generalizes to the population is measured by two important statistics – the survey's margin of error and confidence level. For example, a survey's margin of error of \pm 2 percent at a 95 percent level of confidence means that if the survey were conducted 100 times, the "true" percentage in the entire population would be within 2 percentage points above or below the survey's percentage reported in 95 of the 100 surveys.

The margin of error is a function of the population size, the sample size, the estimated percent, and the design effect. At a 95 percent level of confidence, the margin of error is computed as:

$$d = 1.96\sqrt{\frac{p(1-p)(N-n)D}{n(N-1)}}$$

where p = percentage of a PAYS characteristic

N = number of eligible students in the PAYS population

n = number of PAYS usable questionnaires

D = design effect, which is the ratio of the variance of the estimate obtained from a complex sample design to the variance of the estimated obtained from a simple random sample of the same size.

For the 2005 PAYS, the margin of error, which indicates the level of precision of the survey estimate, is 1.9 percent. The corresponding 95 percent confidence intervals for the population proportion is the sample proportion \pm margin of error. Hence, the 95% confidence interval is between 38.1 percent and 41.9

	percent for a prevalence rate of 40 percent. That is, with 95 percent confidence, the true population percentage can be expected to fall between 38.1 percent and 41.9 percent.
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Appendix D Detailed Tables

Table D-1. 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					2005				2005	
	6 th	8 th	10 th	12 th	All	6 th	8 th	10 th	12 th	All	6 th	8 th	10 th	12 th	All	8 th	10 th	12 th
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Alcohol	32.3	57.4	75.8	83.8	61.3	28.7	56.7	76.4	83.6	60.6	23.5	52.9	74.8	85.0	58.8	41.0	63.2	75.1
Cigarettes	8.9	27.1	43.8	57.0	32.9	8.9	27.8	40.4	52.4	31.6	6.3	20.4	38.8	54.5	29.6	25.9	38.9	50.0
Smokeless Tobacco						2.7	7.9	15.0	21.0	11.3	2.5	5.4	16.0	25.3	12.0	10.1	14.5	17.5
Marijuana	1.3	10.9	30.9	47.1	21.1	1.3	10.8	27.5	42.8	19.8	0.8	7.7	25.2	44.8	19.1	16.5	34.1	44.8
Inhalants	2.3	5.8	7.5	12.5	6.7	7.3	12.3	10.5	9.1	9.8	7.3	10.9	10.8	9.2	9.6	17.1	13.1	11.4
Cocaine	0.4	1.0	3.0	6.0	2.4	0.4	1.8	3.9	7.4	3.2	0.2	0.8	4.3	9.5	3.6	3.7	5.2	8.0
Crack Cocaine	0.4	0.9	1.7	2.3	1.3	0.4	1.8	1.9	2.5	1.6	0.2	1.0	2.7	3.1	1.7	2.4	2.5	3.5
Heroin	0.2	0.5	0.9	1.7	0.8	0.2	1.0	1.4	2.9	1.3	0.2	0.4	1.0	2.3	0.9	1.5	1.5	1.5
Hallucinogens	0.2	1.8	6.3	12.7	4.9	0.3	2.9	6.1	10.9	4.9	0.3	1.4	4.9	9.9	4.0	3.8	5.8	8.8
Methamphetamines	0.6	1.8	3.3	4.4	2.5	0.2	1.1	2.3	3.0	1.6	0.1	0.6	2.4	2.8	1.5	3.1	4.1	4.5
Ecstasy						0.2	2.7	4.8	8.7	4.0	0.2	1.3	4.5	6.6	3.1	2.8	4.0	5.4
Steroids	0.9	2.1	2.8	2.5	2.1	1.2	2.5	2.8	2.3	2.2	0.7	1.1	1.6	1.7	1.3	1.7	2.0	2.6
Any Illicit Drug Other Than Marijuana						8.0	15.8	17.5	20.9	15.4	8.0	12.3	16.3	20.8	14.2			

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

¹Johnston, O'Malley, Bachman & Schulenberg (2005b).

Table D-2. Past-30-Day Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth Compared to the Monitoring the Future Study

						F	ennsylva	nia State	ewide	-			<u> </u>			Monitoring the Future ¹			
			2001					2003					2005				2005		
	6 th	8 th	10 th	12 th	All	6 th	8 th	10 th	12 th	All	6 th	8 th	10 th	12 th	All	8 th	10 th	12 th	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Alcohol	4.8	17.4	36.4	48.5	25.6	4.1	17.0	37.9	49.2	26.2	2.6	14.5	36.5	53.7	26.3	17.1	33.2	47.0	
Binge Drinking	2.4	8.6	20.9	31.2	14.9	1.5	8.8	21.5	31.4	15.3	1.0	6.7	19.6	33.7	14.9	10.5	21.0	28.1	
Cigarettes	2.2	10.6	20.2	31.9	15.4	2.1	10.9	19.0	25.8	14.1	1.0	6.4	18.4	28.5	13.3	9.3	14.9	23.2	
Smokeless Tobacco	1.5	4.1	7.0	9.7	5.4	1.0	3.1	7.1	9.5	5.0	0.5	2.4	8.7	11.1	5.6	3.3	5.6	7.6	
Marijuana	0.6	5.3	17.0	25.6	11.4	0.5	5.2	14.5	21.4	10.0	0.3	3.5	12.0	22.9	9.4	6.6	15.2	19.8	
Inhalants	0.7	1.9	2.1	3.0	1.9	2.8	5.0	2.9	2.0	3.2	2.5	3.9	4.1	3.1	3.4	4.2	2.2	2.0	
Cocaine	0.2	0.4	1.0	1.9	0.8	0.1	0.7	1.3	2.4	1.1	0.0	0.3	1.4	2.8	1.1	1.0	1.5	2.3	
Crack Cocaine	0.1	0.4	0.5	0.6	0.4	0.1	0.7	0.7	0.7	0.6	0.0	0.5	0.8	0.5	0.5	0.6	0.7	1.0	
Heroin	0.1	0.2	0.4	0.5	0.3	0.1	0.4	0.7	1.3	0.6	0.1	0.2	0.3	0.6	0.3	0.5	0.5	0.5	
Hallucinogens	0.1	0.8	2.2	3.6	1.6	0.1	1.3	2.3	3.4	1.7	0.1	0.4	1.8	3.7	1.4	1.1	1.5	1.9	
Methamphetamines	0.3	0.6	1.0	0.9	0.7	0.0	0.5	0.7	0.9	0.5	0.0	0.3	0.6	0.7	0.4	0.7	1.1	0.9	
Ecstasy						0.0	0.9	1.3	1.5	0.9	0.0	0.5	8.0	1.1	0.6	0.6	1.0	1.0	
Steroids	0.3	0.6	0.9	1.0	0.7	0.3	0.8	1.2	0.9	0.8	0.2	0.3	0.4	0.6	0.4	0.5	0.6	0.9	
Any Illicit Drug Other Than Marijuana						3.1	6.7	6.8	7.9	6.1	2.7	4.7	6.9	8.5	5.6	-1			

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.

1 Johnston, O'Malley, Bachman & Schulenberg (2005b).

Table D-3. Summary of Past-30-Day Prevalence for ATOD Use in Pennsylvania, Historical Trends

				6 th G	rade							12 th (Grade			
	1989	1991	1993	1995	1997	2001	2003	2005	1989	1991	1993	1995	1997	2001	2003	2005
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Alcohol	7.8	8.3	6.6	8.3	6.7	4.8	4.1	2.6	48.9	47.2	47.9	48.8	50.7	48.5	49.2	53.7
Cigarettes	6.7	6.6	6.4	9.4	7.4	2.2	2.1	1.0	30.8	30.4	32.7	37.5	40.4	31.9	25.8	28.5
Smokeless Tobacco	3.2	3.1	2.2	2.4	1.4	1.5	1.0	0.5	12.4	11.8	12.4	11.3	10.7	9.7	9.5	11.1
Marijuana	0.6	0.4	0.6	1.6	1.5	0.6	0.5	0.3	13.9	10.9	15.0	21.1	21.8	25.6	21.4	22.9
Inhalants	0.8	0.5	0.9	1.0	1.1	0.7	2.8	2.5	2.1	1.5	2.7	4.3	3.7	3.0	2.0	3.1
Cocaine	0.2	0.2	0.2	0.3	0.4	0.2	0.1	0.0	2.4	1.2	1.1	2.0	2.6	1.9	2.4	2.8
Crack Cocaine		0.1	0.1	0.2	0.2	0.1	0.1	0.0		0.3	0.5	0.6	0.7	0.6	0.7	0.5
Heroin	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.5	0.6	0.5	1.3	0.6
Hallucinogens	0.1	0.2	0.1	0.3	0.4	0.1	0.1	0.1	1.4	1.9	2.5	5.4	5.0	3.6	3.4	3.1
Methamphetamines			0.3	0.4	0.4	0.3	0.0	0.0			0.2	0.6	1.0	0.9	0.9	0.7
Steroids		0.5	0.5	0.7	0.7	0.3	0.3	0.2		0.6	0.6	0.7	0.9	1.0	0.9	0.6

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

Table D-4. Prevalence of Alcohol Use, by Selected Demographic Characteristics

		Lifetime			Past-30-Day		Binge Drinking			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	
Grade										
6 th	32.3	28.7	23.5	4.8	4.1	2.6	2.4	1.5	1.0	
8 th	57.4	56.7	52.9	17.4	17.0	14.5	8.6	8.8	6.7	
10 th	75.8	76.4	74.8	36.4	37.9	36.5	20.9	21.5	19.6	
12 th	83.8	83.6	85.0	48.5	49.2	53.7	31.2	31.4	33.7	
All Grades	61.3	60.6	58.8	25.6	26.2	26.3	14.9	15.3	14.9	
Gender										
Female	61.6	60.9	58.6	25.3	26.0	25.6	13.5	14.6	13.7	
Male	61.5	60.4	59.1	26.3	26.4	27.1	16.6	16.1	16.0	
Ethnicity										
African American	46.9	48.7	41.4	17.2	16.9	14.4	11.3	11.5	8.7	
White	63.2	61.4	60.1	26.9	26.7	27.1	15.4	15.5	15.4	
Region										
1 - NW	64.7	62.3	62.6	29.1	26.7	27.3	18.5	16.3		
2 - NC	57.7	61.7	59.5	25.0	25.8	27.1	12.6	14.9		
3 - NE	63.7	62.0	52.7	27.8	28.5	19.5	17.5	17.0		
4 - SW	69.7	63.3	67.7	30.3	29.7	35.5	18.7	18.5		
5 - SC	61.8	58.1	54.6	23.9	22.7	20.4	13.4	13.5		
6 - SE	58.3	58.9	57.8	23.8	24.6	27.5	13.6	13.5		

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

Table D-5. Prevalence of Tobacco Use, by Selected Demographic Characteristics

			Cigarette	S			Smokeless Tobacco							
		Lifetime			Past-30-Day			Lifetime			Past-30-Day			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	8.9	8.9	6.3	2.2	2.1	1.0		2.7	2.5	1.5	1.0	0.5		
8 th	27.1	27.8	20.4	10.6	10.9	6.4		7.9	5.4	4.1	3.1	2.4		
10 th	43.8	40.4	38.8	20.2	19.0	18.4		15.0	16.0	7.0	7.1	8.7		
12 th	57.0	52.4	54.5	31.9	25.8	28.5		21.0	25.3	9.7	9.5	11.1		
All Grades	32.9	31.6	29.6	15.4	14.1	13.3		11.3	12.0	5.4	5.0	5.6		
Gender														
Female	33.9	32.6	30.7	16.0	14.9	14.3		4.7	5.4	2.2	1.7	1.9		
Male	32.3	30.5	28.6	14.9	13.1	12.4		18.1	18.3	8.7	8.5	9.1		
Ethnicity														
African American	29.8	31.3	27.0	9.0	9.1	7.0		7.0	5.0	4.0	3.7	2.4		
White	33.3	31.3	29.5	16.1	14.1	13.8		11.6	12.7	5.5	5.1	5.9		
Region														
1 - NW	39.7	36.1	33.8	18.9	15.8	14.1		17.2	18.6	9.9	7.9	8.7		
2 - NC	28.2	35.1	32.1	12.4	16.3	14.3		17.1	16.4	5.0	8.0	7.8		
3 - NE	35.5	35.9	25.5	18.8	17.3	8.3		13.1	7.5	7.2	6.6	2.7		
4 - SW	39.3	33.9	38.6	19.6	14.8	17.5		13.4	22.2	8.5	6.3	11.3		
5 - SC	33.8	33.9	29.7	16.1	15.8	14.3		13.9	14.8	5.7	6.2	7.7		
6 - SE	29.6	26.6	25.6	13.0	11.2	12.3		6.4	5.4	3.0	2.3	2.4		

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

Table D-6. Prevalence of Marijuana and Inhalant Use, by Selected Demographic Characteristics

			Marij	uana			Inhalants							
		Lifetime			Past-30-Day			Lifetime			Past-30-Day			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	1.3	1.3	0.8	0.6	0.5	0.3	2.3	7.3	7.3	0.7	2.8	2.5		
8 th	10.9	10.8	7.7	5.3	5.2	3.5	5.8	12.3	10.9	1.9	5.0	3.9		
10 th	30.9	27.5	25.2	17.0	14.5	12.0	7.5	10.5	10.8	2.1	2.9	4.1		
12 th	47.1	42.8	44.8	25.6	21.4	22.9	12.5	9.1	9.2	3.0	2.0	3.1		
All Grades	21.1	19.8	19.1	11.4	10.0	9.4	6.7	9.8	9.6	1.9	3.2	3.4		
Gender														
Female	19.6	18.7	17.7	10.2	9.1	8.0	5.9	9.1	9.3	1.5	3.1	3.4		
Male	23.3	21.0	20.5	12.9	10.9	10.7	7.7	10.6	9.8	2.3	3.4	3.4		
Ethnicity														
African American	21.5	22.5	19.4	11.2	10.2	9.7	3.7	8.8	4.4	1.5	2.7	1.9		
White	21.5	19.5	18.8	11.6	9.8	9.0	7.1	9.6	9.4	1.9	3.1	3.2		
Region														
1 - NW	22.6	20.9	17.7	12.4	10.0	8.5	7.7	10.6	11.1	1.9	3.4	3.5		
2 - NC	15.6	20.0	17.8	8.4	9.7	7.9	5.0	10.7	10.9	1.2	3.6	3.9		
3 - NE	22.8	23.1	13.1	12.9	13.1	4.8	7.7	11.7	10.0	2.2	4.1	2.9		
4 - SW	24.3	20.2	22.0	13.3	10.0	10.8	7.0	9.2	11.4	2.1	2.8	4.1		
5 - SC	19.8	18.3	17.9	9.9	7.8	7.4	6.5	10.7	10.5	2.0	3.5	4.2		
6 - SE	21.2	18.8	20.9	11.5	9.8	10.8	6.7	9.0	7.6	1.9	3.0	3.0		

Table D-7. Prevalence of Cocaine Use, by Selected Demographic Characteristics

			Coca	aine			Crack Cocaine							
		Lifetime			Past-30-Day			Lifetime			Past-30-Day			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	0.4	0.4	0.2	0.2	0.1	0.0	0.4	0.4	0.2	0.1	0.1	0.0		
8 th	1.0	1.8	0.8	0.4	0.7	0.3	0.9	1.8	1.0	0.4	0.7	0.5		
10 th	3.0	3.9	4.3	1.0	1.3	1.4	1.7	1.9	2.7	0.5	0.7	0.8		
12 th	6.0	7.4	9.5	1.9	2.4	2.8	2.3	2.5	3.1	0.6	0.7	0.5		
All Grades	2.4	3.2	3.6	0.8	1.1	1.1	1.3	1.6	1.7	0.4	0.6	0.5		
Gender														
Female	2.1	2.8	2.9	0.7	0.9	0.7	1.2	1.4	1.5	0.3	0.5	0.5		
Male	2.9	3.7	4.2	1.0	1.3	1.5	1.4	1.8	2.0	0.5	0.6	0.4		
Ethnicity														
African American	1.2	2.4	1.1	0.6	1.1	0.1	0.8	1.7	1.1	0.4	1.3	0.2		
White	2.5	3.2	3.2	0.9	1.0	1.2	1.3	1.5	1.6	0.4	0.5	0.5		
Region														
1 - NW	2.8	3.3	3.0	1.1	1.1	0.8	1.4	1.6	1.2	0.4	0.6	0.3		
2 - NC	2.0	3.4	3.0	0.7	1.1	1.0	1.0	2.2	1.9	0.3	0.6	0.7		
3 - NE	2.6	3.1	0.6	0.7	0.9	0.1	1.8	1.9	0.6	0.6	0.6	0.2		
4 - SW	4.3	3.5	4.3	1.5	1.2	1.8	1.7	1.6	2.7	0.4	0.7	1.3		
5 - SC	2.2	2.9	3.6	0.9	1.0	0.9	1.7	1.5	3.0	0.5	0.5	0.6		
6 - SE	2.0	3.2	3.7	0.6	1.2	1.0	1.0	1.5	1.2	0.3	0.5	0.1		

Table D-8. Prevalence of Heroin and Hallucinogen Use, by Selected Demographic Characteristics

			Her	oin			Hallucinogens							
		Lifetime			Past-30-Day			Lifetime			Past-30-Day			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.1		
8 th	0.5	1.0	0.4	0.2	0.4	0.2	1.8	2.9	1.4	0.8	1.3	0.4		
10 th	0.9	1.4	1.0	0.4	0.7	0.3	6.3	6.1	4.9	2.2	2.3	1.8		
12 th	1.7	2.9	2.3	0.5	1.3	0.6	12.7	10.9	9.9	3.6	3.4	3.7		
All Grades	0.8	1.3	0.9	0.3	0.6	0.3	4.9	4.9	4.0	1.6	1.7	1.4		
Gender														
Female	0.7	1.1	0.7	0.2	0.4	0.2	4.1	4.0	2.8	1.1	1.2	0.8		
Male	0.9	1.5	1.2	0.3	0.8	0.3	5.8	5.7	5.1	2.1	2.2	2.0		
Ethnicity														
African American	0.6	1.0	0.0	0.4	0.7	0.0	1.8	2.9	0.4	0.7	1.5	0.3		
White	8.0	1.3	0.8	0.3	0.5	0.2	5.2	4.8	4.1	1.6	1.6	1.4		
Region														
1 - NW	0.9	1.2	0.9	0.2	0.6	0.2	5.4	4.6	3.2	1.5	1.7	1.5		
2 - NC	0.7	1.4	1.3	0.2	0.4	0.4	4.0	4.7	4.4	1.0	1.4	1.4		
3 - NE	0.8	1.2	0.3	0.2	0.4	0.2	6.2	5.6	0.6	2.2	2.0	0.1		
4 - SW	1.4	1.2	1.5	0.5	0.6	0.5	6.4	4.9	5.0	2.0	1.6	3.0		
5 - SC	0.9	1.4	0.7	0.4	0.5	0.1	4.3	4.6	3.8	1.5	1.5	0.7		
6 - SE	0.5	1.4	0.5	0.2	0.7	0.1	4.5	4.8	4.2	1.5	1.8	1.3		

Table D-9. Prevalence of Methamphetamine and Ecstasy Use, by Selected Demographic Characteristics

			Methampl	netamines			Ecstasy							
		Lifetime			Past-30-Day			Lifetime			Past-30-Day			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	0.6	0.2	0.1	0.3	0.0	0.0		0.2	0.2		0.0	0.0		
8 th	1.8	1.1	0.6	0.6	0.5	0.3		2.7	1.3		0.9	0.5		
10 th	3.3	2.3	2.4	1.0	0.7	0.6		4.8	4.5		1.3	0.8		
12 th	4.4	3.0	2.8	0.9	0.9	0.7		8.7	6.6		1.5	1.1		
All Grades	2.5	1.6	1.5	0.7	0.5	0.4		4.0	3.1		0.9	0.6		
Gender														
Female	2.4	1.4	1.2	0.6	0.4	0.3		4.1	3.0		0.8	0.4		
Male	2.6	1.8	1.7	0.8	0.6	0.5		3.8	3.2		1.0	0.7		
Ethnicity														
African American	1.2	1.3	0.3	0.7	0.9	0.2		3.2	1.5		1.3	0.5		
White	2.5	1.5	1.3	0.6	0.4	0.2		3.8	2.9		0.8	0.5		
Region														
1 - NW	3.2	1.6	1.7	0.8	0.4	0.6		3.0	3.1		0.7	0.8		
2 - NC	2.3	2.0	2.4	0.5	0.7	0.7		3.2	2.5		0.8	1.0		
3 - NE	2.5	2.1	0.2	0.6	0.6	0.1		4.8	1.0		1.1	0.3		
4 - SW	4.1	1.6	0.6	1.1	0.5	0.4		3.4	3.6		0.4	0.2		
5 - SC	2.6	1.1	1.8	0.9	0.3	0.4		3.9	3.3		1.1	0.6		
6 - SE	1.8	1.6	1.0	0.5	0.5	0.1		4.4	3.6		1.2	0.3		

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 D-10. Prevalence of Steroid Use and Any Illicit Drug (Other Than Marijuana), by Selected Demographic Characteristics

			Ster	oids			Any Illicit Drug (Other Than Marijuana)							
		Lifetime			Past-30-Day			Lifetime		Past-30-Day				
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade														
6 th	0.9	1.2	0.7	0.3	0.3	0.2		8.0	8.0		3.1	2.7		
8 th	2.1	2.5	1.1	0.6	0.8	0.3		15.8	12.3		6.7	4.7		
10 th	2.8	2.8	1.6	0.9	1.2	0.4		17.5	16.3		6.8	6.9		
12 th	2.5	2.3	1.7	1.0	0.9	0.6		20.9	20.8		7.9	8.5		
All Grades	2.1	2.2	1.3	0.7	0.8	0.4		15.4	14.2		6.1	5.6		
Gender														
Female	1.4	1.8	0.9	0.3	0.6	0.3		14.0	13.7		5.2	5.2		
Male	2.8	2.5	1.6	1.1	1.0	0.5		16.7	14.8		6.9	6.1		
Ethnicity														
African American	1.2	2.7	0.0	0.6	0.8	0.0		13.0	5.8		5.6	2.6		
White	2.1	2.1	1.3	0.6	0.8	0.3		15.1	14.0		5.8	5.4		
Region														
1 - NW	2.7	2.8	1.9	1.0	1.1	0.4		15.9	15.2		6.3	5.9		
2 - NC	1.8	2.3	2.0	0.5	0.9	0.4		15.7	15.5		6.2	6.2		
3 - NE	2.1	2.6	1.6	0.6	0.7	0.3		17.6	12.3		6.9	3.7		
4 - SW	2.7	2.2	2.3	1.0	0.9	0.9		14.8	18.1		5.7	8.7		
5 - SC	2.0	2.2	0.8	0.7	1.0	0.3		16.2	15.6		6.2	6.3		
6 - SE	1.8	1.9	0.7	0.6	0.7	0.1		14.5	11.9		5.9	4.5		

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 D-11. Prevalence of Other Antisocial Behaviors in the Past Year, by Selected Demographic Characteristics

	Attacking	Attacking Someone with Intent to Harm		Attemp	Attempting to Steal a Vehicle			Being Arrested			Being Drunk or High at School		
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	
Grade													
6 th	6.0	6.6	5.9	0.7	0.7	0.5	1.5	1.4	1.0	1.0	0.9	0.8	
8 th	10.5	12.7	12.2	1.9	2.2	1.7	4.1	5.2	4.4	6.0	6.0	4.5	
10 th	11.6	13.2	14.9	3.2	2.8	3.2	5.9	5.7	6.9	15.3	13.0	12.6	
12 th	10.3	12.2	13.7	2.7	2.2	2.8	7.0	6.3	8.3	21.2	17.8	20.1	
All Grades	9.6	11.2	11.7	2.1	2.0	2.1	4.5	4.6	5.1	10.2	9.1	9.3	
Gender													
Female	6.3	8.0	8.2	1.2	1.5	1.2	2.4	3.0	3.0	8.9	8.3	8.3	
Male	12.9	14.4	15.0	2.9	2.5	2.9	6.7	6.3	7.1	11.9	9.9	10.3	
Ethnicity													
African American	17.6	20.4	20.2	4.5	4.3	4.4	9.6	9.1	10.4	9.4	9.7	7.7	
White	8.4	9.9	10.2	1.8	1.6	1.6	3.9	4.1	4.3	10.3	8.8	9.0	
Region													
1 - NW	9.8	10.8	10.3	2.4	2.0	2.0	4.7	4.1	4.4	11.4	9.7	8.8	
2 - NC	7.9	10.8	11.2	1.7	2.1	1.7	3.2	4.6	5.4	7.9	10.0	8.7	
3 - NE	11.0	12.8	12.9	2.4	2.5	2.4	4.5	4.8	6.6	12.3	12.3	5.5	
4 - SW	12.9	12.0	12.7	2.8	2.2	1.9	5.4	5.2	3.0	12.0	9.4	9.5	
5 - SC	9.0	10.6	12.2	1.7	1.7	3.1	3.3	3.2	5.2	9.7	8.6	10.4	
6 - SE	9.1	10.5	12.7	2.0	1.7	1.8	5.0	4.8	5.8	9.7	7.9	10.4	

Table D-12. Prevalence of Other Antisocial Behaviors in the Past Year, by Selected Demographic Characteristics

	Ge	etting Suspend	led	Selling Drugs						
	2001	2003	2005	2001	2003	2005				
Grade										
6 th	6.3	5.9	5.3	0.3	0.3	0.3				
8 th	9.5	10.2	11.1	2.4	2.8	2.3				
10 th	9.7	9.2	9.7	7.5	7.1	8.3				
12 th	10.8	9.3	12.4	11.1	9.6	11.2				
All Grades	9.0	8.6	9.6	4.9	4.8	5.5				
Gender										
Female	5.4	5.0	5.6	2.9	3.1	3.1				
Male	12.7	12.3	13.4	7.2	6.4	7.6				
Ethnicity										
African American	27.1	25.1	22.8	6.0	7.4	8.1				
White	6.7	7.3	7.4	4.9	4.4	5.1				
Region										
1 - NW	9.4	8.5	8.3	5.1	4.8	4.2				
2 - NC	6.9	7.4	6.9	3.7	4.6	3.9				
3 - NE	6.7	10.5	18.4	5.7	5.9	2.9				
4 - SW	9.2	10.9	12.7	5.5	4.5	5.9				
5 - SC	6.1	6.2	8.5	4.2	4.0	5.2				
6 - SE	10.8	7.8	9.2	5.1	4.9	7.1				

Table D-13. Frequency of Bringing a Weapon to School in the Past 30 Days, by Selected Demographic Characteristics

	2001	2003					2005				
	Any Occasion	Any Occasion	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	0.5	99.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
8 th		2.1	2.3	97.7	1.6	0.2	0.1	0.1	0.0	0.1	0.2
10 th		2.4	3.4	96.6	1.9	0.8	0.1	0.1	0.1	0.0	0.4
12 th		2.4	3.3	96.7	1.5	0.6	0.3	0.1	0.2	0.1	0.5
All Grades		1.9	2.4	97.6	1.4	0.4	0.1	0.1	0.1	0.0	0.3
Gender											
Female		1.1	0.9	99.1	0.7	0.1	0.0	0.0	0.0	0.0	0.1
Male		2.8	3.8	96.2	2.0	0.7	0.3	0.1	0.1	0.1	0.5
Ethnicity											
African American		2.9	2.1	97.9	1.5	0.0	0.0	0.0	0.1	0.0	0.5
White		1.6	2.1	97.9	1.2	0.4	0.1	0.1	0.1	0.0	0.3
Region											
1 - NW		1.9	2.8	97.2	1.7	0.6	0.1	0.0	0.0	0.1	0.4
2 - NC		2.2	2.6	97.4	1.1	0.4	0.2	0.2	0.1	0.1	0.6
3 - NE		2.4	4.2	95.8	2.7	0.8	0.0	0.3	0.1	0.1	0.3
4 - SW		2.0	3.0	97.0	1.3	0.5	0.4	0.2	0.0	0.0	0.0
5 - SC		1.8	2.6	97.4	1.4	0.2	0.3	0.2	0.1	0.1	0.4
6 - SE		1.7	2.0	98.0	1.3	0.4	0.1	0.0	0.1	0.0	0.2

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 D-14. Average Age of Onset, by Selected Demographic Characteristics

		Trying Alcohol		Drin	king Alcohol Regu	ılarly	Smoking Cigarettes				
	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade											
6 th	10.4	10.5	10.5	11.0	10.8	10.9	10.5	10.5	10.5		
8 th	11.5	11.5	11.6	12.5	12.3	12.4	11.5	11.4	11.5		
10 th	12.8	12.9	12.8	14.2	14.2	13.9	12.4	12.4	12.4		
12 th	13.8	13.9	13.9	15.4	15.4	15.4	13.1	13.2	13.4		
All Grades	12.5	12.7	12.8	14.4	14.4	14.5	12.3	12.3	12.5		
Gender											
Female	12.8	12.9	13.0	14.6	14.4	14.4	12.4	12.4	12.7		
Male	12.3	12.5	12.6	14.4	14.3	14.5	12.2	12.2	12.4		
Ethnicity											
African American	12.3	12.3	12.5	13.9	13.8	14.3	12.0	11.8	11.9		
White	12.6	12.7	12.9	14.5	14.5	14.6	12.4	12.4	12.7		
Region											
1 - NW	12.6	12.8	12.7	14.4	14.4	14.3	12.2	12.2	12.3		
2 - NC	12.6	12.6	12.7	14.7	14.4	14.4	12.4	12.2	12.2		
3 - NE	12.7	12.6	12.1	14.4	14.2	13.4	12.5	12.3	11.8		
4 - SW	12.5	12.6	13.1	14.3	14.4	14.7	12.1	12.2	12.6		
5 - SC	12.5	12.7	12.7	14.4	14.5	14.1	12.3	12.2	12.4		
6 - SE	12.5	12.7	12.9	14.5	14.4	14.6	12.4	12.4	12.8		

Table D-15. Average Age of Onset, by Selected Demographic Characteristics

		Smoking Marijuana	a	Gettin	g Suspended from	School	Being Arrested				
	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade											
6 th	11.2	10.9	10.9	10.5	10.6	10.6	10.9	11.0	10.8		
8 th	12.4	12.2	12.3	11.7	11.7	11.6	12.2	12.2	12.3		
10 th	13.6	13.6	13.4	12.8	12.8	12.8	13.7	13.5	13.4		
12 th	14.5	14.5	14.6	13.9	13.8	13.8	14.9	14.8	14.8		
All Grades	13.8	13.8	13.9	12.5	12.5	12.6	13.6	13.5	13.7		
Gender											
Female	14.0	14.0	14.1	13.0	12.9	12.9	13.9	13.6	13.5		
Male	13.6	13.6	13.7	12.3	12.3	12.4	13.6	13.4	13.7		
Ethnicity											
African American	13.4	13.2	13.4	11.7	11.7	11.4	13.2	12.9	12.7		
White	13.9	13.9	14.2	12.8	12.6	12.9	13.8	13.6	13.9		
Region											
1 - NW	13.8	13.7	13.9	12.8	12.7	12.5	13.7	13.6	13.6		
2 - NC	14.1	13.8	12.7	12.5	12.7	12.9	13.4	13.4	13.6		
3 - NE	13.9	13.7	12.9	13.0	12.3	12.0	14.0	13.5	12.7		
4 - SW	13.4	13.6	14.2	12.5	12.6	13.3	13.5	13.7	14.2		
5 - SC	13.8	13.9	13.7	12.5	12.6	12.2	13.6	13.4	13.0		
6 - SE	13.8	13.8	13.9	12.4	12.4	12.4	13.7	13.3	13.8		

Table D-16. Average Age of Onset, by Selected Demographic Characteristics

	(Carrying a Handgu	n	Attacking	Someone with Inte	ent to Harm	Belonging to a Gang				
	2001	2003	2005	2001	2003	2005	2001	2003	2005		
Grade											
6 th	10.8	10.8	10.8	10.7	10.7	10.8	10.8	10.7	10.8		
8 th	12.0	11.9	12.0	11.9	11.8	11.7	12.1	12.1	12.1		
10 th	13.0	13.0	13.2	12.9	12.9	13.0	13.0	13.1	12.9		
12 th	13.6	14.1	14.3	13.6	13.5	13.4	13.4	13.6	13.9		
All Grades	12.5	12.6	13.1	12.5	12.5	12.6	12.2	12.2	12.5		
Gender											
Female	12.4	12.5	13.0	12.7	12.8	13.0	12.0	12.0	12.5		
Male	12.6	12.6	13.1	12.4	12.3	12.3	12.3	12.3	12.4		
Ethnicity											
African American	13.1	13.1	14.1	12.1	12.0	12.0	12.1	12.0	12.1		
White	12.4	12.6	13.1	12.6	12.6	12.8	12.3	12.3	12.7		
Region											
1 - NW	12.5	12.7	12.9	12.7	12.6	12.5	12.3	12.4	12.3		
2 - NC	12.2	12.4	12.3	12.1	12.6	12.4	12.2	12.3	12.2		
3 - NE	12.8	13.2	12.3	12.8	12.4	12.0	12.7	12.5	11.5		
4 - SW	12.9	12.4	12.8	12.7	12.5	12.9	12.3	12.2	12.2		
5 - SC	12.3	12.4	13.1	12.5	12.8	12.4	12.2	12.1	12.1		
6 - SE	12.6	12.6	13.9	12.3	12.3	12.6	12.1	12.1	12.0		

Table D-17. Percentage of Students Reporting Any Occasion of Driving Under the Influence, by Selected Demographic Characteristics

	Dri	iving after Alcohol	Use	Driving after Marijuana Use						
	2001	2003	2005	2001	2003	2005				
Grade										
6 th	0.5	0.4	0.4	0.3	0.2	0.1				
8 th	1.5	1.8	1.5	1.3	1.5	1.1				
10 th	3.8	4.1	4.8	4.8	4.3	4.5				
12 th	21.5	21.4	23.9	24.1	20.3	22.9				
All Grades	6.1	6.4	7.2	6.8	6.1	6.8				
Gender										
Female	4.8	5.2	5.9	5.3	4.8	5.5				
Male	7.7	7.6	8.5	8.5	7.4	7.9				
Ethnicity										
African American	4.4	3.3	3.9	5.2	4.7	4.4				
White	6.4	6.6	7.5	7.0	6.2	6.9				
Region										
1 - NW	8.3	7.5	9.3	8.0	6.0	6.4				
2 - NC	5.1	7.4	8.0	5.8	6.8	6.6				
3 - NE	6.3	6.0	1.6	7.8	6.7	1.3				
4 - SW	7.0	7.1	10.4	6.9	5.9	8.8				
5 - SC	5.9	7.0	7.4	6.5	6.2	8.0				
6 - SE	5.4	5.5	6.1	6.5	5.8	6.8				

Table D-18. Percentage of Students Reporting Willingness to Try Selected ATODs, by Selected Demographic Characteristics

	<u> </u>	<u> </u>	<u> </u>		<u>. , , , , , , , , , , , , , , , , , , ,</u>	3-1						
		Alcohol			Marijuana		Cocaine					
	2001	2003	2005	2001	2003	2005	2001	2003	2005			
Grade												
6 th	17.5	17.7	15.6	2.2	2.0	1.3	1.1	1.1	0.8			
8 th	40.5	42.7	35.7	13.8	13.2	9.8	3.5	4.3	2.2			
10 th	63.9	64.4	63.6	32.1	27.5	25.1	5.5	6.1	6.0			
12 th	73.4	73.3	77.5	40.5	34.6	35.7	6.8	7.5	8.0			
All Grades	48.7	49.0	48.6	21.9	18.9	18.2	4.2	4.7	4.3			
Gender												
Female	50.2	50.7	50.1	21.2	18.4	17.3	4.3	4.4	4.0			
Male	47.8	47.1	47.1	23.2	19.4	19.0	4.1	4.9	4.5			
Ethnicity												
African American	31.2	32.9	35.1	18.7	18.5	17.8	1.8	3.9	2.0			
White	51.2	50.1	50.2	22.6	18.8	18.1	4.4	4.6	4.1			
Region												
1 - NW	52.2	48.3	51.4	21.0	18.3	16.4	5.1	4.8	4.2			
2 - NC	44.9	50.3	48.1	18.7	19.1	16.3	3.4	5.3	4.7			
3 - NE	51.6	50.6	41.3	24.8	21.5	14.0	4.6	5.0	2.7			
4 - SW	55.3	49.7	58.4	23.3	18.4	19.8	5.7	4.9	5.9			
5 - SC	48.4	46.8	45.5	21.0	17.4	17.0	4.1	4.3	6.0			
6 - SE	46.2	48.7	47.8	22.4	19.1	20.5	3.7	4.4	3.5			

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 D-19. Percentage of Students Reporting Willingness to Try Selected ATODs, by Selected Demographic Characteristics

		Hallucinogens		Inhalants							
	2001	2003	2005	2001	2003	2005					
Grade											
6 th	1.0	0.8	0.6	1.4	1.2	1.0					
8 th	4.4	5.1	2.9	4.2	5.1	3.7					
10 th	10.4	9.8	8.2	5.3	5.6	5.4					
12 th	14.3	12.8	13.3	7.5	5.3	4.0					
All Grades	7.4	7.0	6.3	4.6	4.3	3.6					
Gender											
Female	6.8	6.2	4.8	4.5	4.1	3.7					
Male	8.2	7.7	7.6	4.8	4.5	3.5					
Ethnicity											
African American	3.3	5.1	1.7	2.1	3.5	2.7					
White	7.8	7.0	6.2	4.7	4.2	3.5					
Region											
1 - NW	7.4	6.3	5.3	4.7	4.2	3.8					
2 - NC	6.4	6.9	6.5	3.7	4.6	4.8					
3 - NE	9.3	8.6	3.7	5.7	6.1	3.1					
4 - SW	8.5	6.6	8.1	4.7	3.8	5.4					
5 - SC	7.0	6.4	6.1	4.5	4.2	4.7					
6 - SE	7.2	7.0	6.9	4.5	4.0	2.7					

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 D-20. Percentage of Students Reporting That They Have Been Threatened or Attacked on School Property in the Past Year, by Selected Demographic Characteristics

	Threatened to Be Hit or Beaten Up			Attacked or Beaten Up			Threat	ened with a W	/eapon	Attacked with a Weapon			
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	
Grade													
6 th		21.9	21.5		10.0	10.2		3.5	3.7		1.5	1.0	
8 th		30.5	27.2		11.9	11.1		6.2	6.0		2.7	2.9	
10 th		27.2	29.2		9.2	8.8		5.3	5.2		2.6	2.1	
12 th		17.9	21.8		6.0	7.5		3.9	4.4		2.0	2.2	
All Grades		24.7	25.2		9.4	9.4		4.8	4.9		2.2	2.1	
Gender													
Female		17.6	18.9		5.1	4.9		3.0	2.8		1.2	1.0	
Male		32.2	31.3		14.1	13.7		6.7	6.8		3.3	3.1	
Ethnicity													
African American		23.2	19.8		9.0	8.8		6.8	4.9		3.7	1.9	
White		24.1	24.7		9.0	8.8		4.3	4.6		1.9	1.7	
Region													
1 - NW		25.4	28.4		9.0	10.5		4.8	5.5		2.2	1.8	
2 - NC		27.0	24.0		10.2	11.3		4.9	6.0		2.2	2.8	
3 - NE		26.3	24.5		10.3	9.1		5.4	4.9		2.5	2.2	
4 - SW		24.6	26.3		9.6	9.8		5.4	6.9		2.8	2.3	
5 - SC		24.9	24.9		9.7	10.1		4.4	5.3		2.0	3.3	
6 - SE		23.6	24.6		8.9	8.6		4.3	4.4		1.8	1.4	

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

Table D-21. Percentage of 12th Grade Students Reporting Driving Under the Influence, Historical Trends

	1989	1991	1993	1995	1997	2001	2003	2005
Driving after Alcohol Use	14.5	9.4	10.6	11.1	11.9	6.7	6.2	8.1
Driving after Marijuana Use	7.5	4.7	7.2	10.7	12.2	16.0	12.7	14.9

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 D-22. Percentage of Students Reporting Willingness to Try Selected ATODs, Historical Trends

		<u> </u>	,					
	1989	1991	1993	1995	1997	2001	2003	2005
6 th Grade								
Alcohol	60.2	39.3	28.0	28.7	30.4	17.5	17.7	15.6
Marijuana	2.1	1.7	2.9	5.5	6.2	2.2	2.0	1.3
Cocaine	1.0	1.1	1.4	2.1	2.9	1.2	1.1	0.8
Hallucinogens	0.8	1.2		2.5	2.9	1.0	0.8	0.6
Inhalants	2.3	2.5		4.2	3.9	1.4	1.2	1.0
12 th Grade								
Alcohol	90.5	82.8	72.7	70.0	73.6	73.4	73.3	77.5
Marijuana	26.0	21.6	29.7	33.6	36.4	40.5	34.6	35.7
Cocaine	6.8	5.1	5.2	7.0	8.7	6.8	7.5	8.0
Hallucinogens	7.8	10.2		17.3	19.1	14.3	12.8	13.3
Inhalants	10.7	7.8		12.4	11.3	7.5	5.3	4.0

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 D-23. Highest and Lowest Protective Factor Scale Scores, 2005 Pennsylvania Statewide by Grade

	Lowest Scale Scores		Highest Scale Scores	
	Scale Name	Score	Scale Name	Score
Grade				
6 th	Religiosity	55	Belief in the Moral Order	75
	Community Rewards for Prosocial Involvement	59	Family Rewards for Prosocial Involvement	69
	School Opportunities for Prosocial Involvement	63	Family Opportunities for Prosocial Involvement	68
8 th	Community Rewards for Prosocial Involvement	50	Belief in the Moral Order	61
	School Rewards for Prosocial Involvement	52	Family Rewards for Prosocial Involvement	59
	Religiosity	53	School Opportunities for Prosocial Involvement	58
10 th	School Rewards for Prosocial Involvement	43	School Opportunities for Prosocial Involvement	55
	Community Rewards for Prosocial Involvement	44	Belief in the Moral Order	50
	Family Attachment	45	Religiosity	49
12 th	Community Rewards for Prosocial Involvement	40	School Opportunities for Prosocial Involvement	50
	School Rewards for Prosocial Involvement	40	Family Attachment	47
			Religiosity	47
All Grades	Community Rewards for Prosocial Involvement	48	Belief in the Moral Order	58
	School Rewards for Prosocial Involvement	50	School Opportunities for Prosocial Involvement	57
	Religiosity	51	Family Rewards for Prosocial Involvement	46

Table D-24. Highest and Lowest Risk Factor Scale Scores, 2005 Pennsylvania Statewide by Grade

	Lowest Scale Scores		Highest Scale Scores	
	Scale Name	Score	Scale Name	Score
Grade				
6 th	Perceived Availability of Drugs and Handguns	16	Personal Transitions and Mobility	61
	Friends' Use of Drugs	22	Community Disorganization	47
	Favorable Attitudes toward ATOD Use	22	Poor Academic Performance	44
8 th	Low Perceived Risks of Drug Use	28	Community Disorganization	55
	Perceived Availability of Drugs and Handguns	29	Personal Transitions and Mobility	52
	Favorable Attitudes toward ATOD Use	33	Parental Attitudes Favorable toward Antisocial Behavior	45
10 th	Low Perceived Risks of Drug Use	38	Laws and Norms Favorable to Drug Use and Handguns	61
	Perceived Availability of Drugs and Handguns	45	Community Disorganization	60
	Early Initiation (of Drug Use and Antisocial Behavior)	47	Peer Rewards for Antisocial Behavior	56
12 th	Low Perceived Risks of Drug Use	46	Laws and Norms Favorable to Drug Use and Handguns	68
	Personal Transitions and Mobility	49	Friends' Use of Drugs	66
	Poor Academic Performance	50	Parental Attitudes Favorable toward ATOD Use	62
	Early Initiation (of Drug Use and Antisocial Behavior)	50		
All Grades	Low Perceived Risks of Drug Use	35	Community Disorganization	55
	Perceived Availability of Drugs and Handguns	37	Personal Transitions and Mobility	53
	Early Initiation (of Drug Use and Antisocial Behavior)	40	Laws and Norms Favorable to Drug Use and Handguns	50

Table D-25. 6th Grade Protective Factor Scale Scores, Regional Estimates

		1 - NW		2 - NC		3 - NE		4 - SW		5 - SC		6 - SE						
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Community Rewards for Prosocial Involvement	60	62	54	56	60	60	60	60	62	59	56	58	56	59	57	60	60	59
Family Domain																		
Family Attachment	66	65	45	62	63	68	65	63	66	67	67	68	66	67	70	72	68	70
Family Opportunities for Prosocial Involvement	67	67	68	63	63	66	64	64	67	71	68	66	65	67	70	70	68	70
Family Rewards for Prosocial Involvement	69	70	43	64	67	70	66	66	70	70	69	69	67	71	72	73	72	71
School Domain																		
School Opportunities for Prosocial Involvement	62	67	67	66	66	66	61	62	63	60	61	56	63	67	64	65	67	64
School Rewards for Prosocial Involvement	62	67	68	64	66	66	63	63	68	61	66	61	60	68	64	62	64	63
Peer and Individual Domain																		
Religiosity	61	57	54	59	53	53	59	55	52	64	54	54	59	55	57	58	57	55
Belief in the Moral Order	73	77	76	74	75	76	73	74	75	68	73	73	73	76	74	73	76	75
Averages	65	67	60	64	65	66	64	64	65	65	64	63	64	67	66	67	67	66

Table D-26. 6th Grade Risk Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Low Neighborhood Attachment	39	38	46	41	39	36	37	39	41	40	41	39	40	40	39	39	34	37
Community Disorganization	47	48	56	41	49	43	43	49	55	43	52	54	42	50	49	42	41	43
Personal Transitions and Mobility	50	55	57	54	63	58	40	51	67	37	62	59	41	53	61	50	55	62
Laws and Norms Favorable to Drug Use and Handguns	28	27	25	28	28	29	28	29	25	30	28	36	29	28	29	27	25	28
Perceived Availability of Drugs and Handguns	20	17	17	17	19	18	18	18	16	18	18	20	18	18	17	16	16	15
Family Domain																		
Poor Family Supervision	34	29	29	36	32	31	37	35	30	37	32	29	35	29	29	31	29	30
Poor Family Discipline	29	27	55	31	29	26	32	30	23	32	28	25	29	26	26	25	26	25
Family History of Antisocial Behavior	33	33	43	31	31	26	28	31	30	28	30	30	26	28	26	22	31	23
Parental Attitudes Favorable toward ATOD Use	36	36	36	37	36	35	38	36	35	37	36	37	36	35	34	35	35	34
Parental Attitudes Fav. toward Antisocial Behavior	44	42	42	44	42	40	42	42	42	45	43	41	42	40	39	40	43	40
School Domain																		
Poor Academic Performance	49	47	43	46	47	39	45	48	49	45	47	51	48	45	40	44	43	41
Lack of Commitment to School	31	28	31	32	30	31	34	32	29	35	33	41	33	29	32	31	29	30
Peer and Individual Domain																		
Rebelliousness	36	30	33	37	31	32	35	31	34	38	32	32	39	31	33	34	29	31
Friends' Delinquent Behavior	42	39	39	39	41	37	37	41	44	39	44	44	39	39	41	40	39	39
Friends' Use of Drugs	25	24	23	22	24	23	24	25	21	24	25	26	23	24	23	22	22	22
Peer Rewards for Antisocial Behavior	32	30	29	31	33	30	32	32	29	33	33	32	32	32	29	30	33	31
Favorable Attitudes toward Antisocial Behavior	37	29	27	36	30	30	37	31	30	40	32	32	38	29	28	36	31	28
Favorable Attitudes toward ATOD Use	26	23	22	25	24	22	26	24	23	26	24	25	26	23	23	24	23	21
Low Perceived Risks of Drug Use	29	26	26	27	26	26	26	28	27	25	28	30	25	26	36	27	25	27
Early Initiation (of Drug Use and Antisocial Behavior)	29	27	26	29	28	26	27	28	27	30	29	29	28	27	25	28	25	24
Sensation Seeking	39	32	31	38	32	32	39	34	31	41	32	36	39	33	29	36	33	29
Averages	35	33	35	35	35	32	34	35	34	35	35	35	34	33	33	33	32	31

Table D-27. 8th Grade Protective Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Community Rewards for Prosocial Involvement	50	49	54	50	49	49	52	46	41	50	47		50	49	51	50	48	50
Family Domain																		
Family Attachment	53	51	55	49	50	53	54	51		54	54		56	53		57	53	57
Family Opportunities for Prosocial Involvement	54	54	56	52	50	54	52	54		52	55		56	54		56	52	56
Family Rewards for Prosocial Involvement	56	55	57	53	53	55	55	53		54	57		57	56		58	55	60
School Domain																		
School Opportunities for Prosocial Involvement	54	57	57	58	57	58	58	56	52	56	55		56	58	57	58	56	60
School Rewards for Prosocial Involvement	45	48	50	51	49	51	51	44	44	46	48		47	50	48	48	47	55
Peer and Individual Domain																		
Religiosity	59	57	55	59	53	52	60	52	44	60	55		57	58	58	57	56	54
Belief in the Moral Order	52	60	62	55	61	62	56	56	52	50	55		55	62	61	54	59	63
Averages	53	54	56	54	53	54	55	52	47	53	53		54	55	55	55	54	57

Note: The symbol "--" indicates that data are not available because there were too few respondents in the cell.

Table D-28. 8th Grade Risk Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Low Neighborhood Attachment	48	48	46	50	49	36	44	50	41	48	48	39	46	48	39	47	46	37
Community Disorganization	50	57	56	45	56	43	49	60	55	51	61	54	47	57	49	47	50	43
Personal Transitions and Mobility	41	52	57	44	52	58	37	53	67	36	47	59	38	51	61	41	51	62
Laws and Norms Favorable to Drug Use and Handguns	48	49	25	40	47	29	43	49	25	47	48	36	48	48	29	44	44	25
Perceived Availability of Drugs and Handguns	33	33	17	27	32	18	28	33	16	34	33	20	31	31	17	30	29	15
Family Domain																		
Poor Family Supervision	46	46	29	47	46	31	52	47	30	50	45	29	44	43	29	48	45	30
Poor Family Discipline	42	40	55	42	41	26	43	43	23	42	42	25	38	38	26	41	42	27
Family History of Antisocial Behavior	44	47	43	42	42	26	36	42	30	37	41	30	36	39	26	35	39	28
Parental Attitudes Favorable toward ATOD Use	45	44	36	44	45	35	42	47	35	43	43	37	42	44	34	42	43	34
Parental Attitudes Fav. toward Antisocial Behavior	51	51	42	50	50	40	50	52	42	48	51	41	48	49	39	47	49	40
School Domain																		
Poor Academic Performance	53	51	43	48	51	39	48	54	49	50	49	51	52	51	40	49	49	41
Lack of Commitment to School	48	45	31	46	47	31	45	49	29	51	51	41	49	46	32	46	47	30
Peer and Individual Domain																		
Rebelliousness	50	45	55	48	45	32	47	46	34	51	48	32	50	45	33	47	45	31
Friends' Delinquent Behavior	47	48	39	42	46	37	42	51	44	47	48	44	44	45	41	47	47	39
Friends' Use of Drugs	43	42	23	33	38	23	36	42	21	41	41	26	37	37	23	37	37	22
Peer Rewards for Antisocial Behavior	46	47	29	38	45	30	42	49	29	50	49	32	44	46	29	45	45	31
Favorable Attitudes toward Antisocial Behavior	53	46	27	52	46	30	53	49	30	57	51	32	52	45	28	52	45	28
Favorable Attitudes toward ATOD Use	44	38	22	39	38	22	39	42	23	44	39	25	40	37	23	40	35	21
Low Perceived Risks of Drug Use	33	31	26	29	31	26	30	36	27	32	32	30	30	31	36	31	30	27
Early Initiation (of Drug Use and Antisocial Behavior)	45	42	26	38	40	26	36	43	27	43	42	29	39	39	25	39	38	24
Sensation Seeking	49	44	31	48	43	32	48	43	31	52	45	36	50	43	29	47	43	29
Averages	46	45	35	43	44	32	44	50	34	45	46	36	43	44	33	43	43	31

Table D-29. 10th Grade Protective Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Community Rewards for Prosocial Involvement	47	45	47	48	44	42	44	42	47	48	43	47	47	45	49	46	42	39
Family Domain																		
Family Attachment	46	49	42	48	45	47	41	42	48	44	47		47	48	51	49	49	47
Family Opportunities for Prosocial Involvement	47	50	43	48	46	47	39	44	47	44	48		48	48	46	48	47	61
Family Rewards for Prosocial Involvement	48	52	45	50	46	47	39	42	48	45	49		48	49	52	48	47	69
School Domain																		
School Opportunities for Prosocial Involvement	52	52	54	54	53	51	55	55	52	54	52	53	55	54	51	54	55	56
School Rewards for Prosocial Involvement	41	41	43	45	41	44	40	38	42	44	43	52	41	42	43	40	40	41
Peer and Individual Domain																		
Religiosity	57	54	48	55	50	47	53	48	49	56	54	45	56	55	56	54	53	48
Belief in the Moral Order	45	52	53	48	52	50	42	46	52	41	50	45	46	55	56	43	52	41
Averages	48	49	47	50	47	47	44	44	48	47	48	48	48	50	50	48	48	51

Note: The symbol "--" indicates that data are not available because there were too few respondents in the cell.

Table D-30. 10th Grade Risk Factor Scale Scores, Statewide and Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Low Neighborhood Attachment	53	55	46	52	55	36	53	56	41	52	57	39	53	53	39	53	53	37
Community Disorganization	49	58	56	40	59	43	53	63	55	58	61	54	49	58	49	48	53	43
Personal Transitions and Mobility	40	51	57	42	52	58	41	51	67	38	47	59	38	53	61	42	53	62
Laws and Norms Favorable to Drug Use and Handguns	59	61	25	54	61	29	61	62	25	63	62	36	60	60	29	57	56	25
Perceived Availability of Drugs and Handguns	49	47	17	42	46	18	50	49	16	51	48	20	47	44	17	46	44	15
Family Domain																		
Poor Family Supervision	55	53	29	54	54	31	62	62	30	59	53	29	53	52	29	55	56	30
Poor Family Discipline	51	53	55	52	52	26	59	61	23	52	51	25	51	49	26	53	51	25
Family History of Antisocial Behavior	51	52	43	35	50	26	57	54	30	55	49	30	48	47	26	46	50	23
Parental Attitudes Favorable toward ATOD Use	54	54	36	48	54	35	56	55	35	54	52	37	52	51	34	50	54	34
Parental Attitudes Fav. toward Antisocial Behavior	54	54	42	48	52	40	60	56	42	59	53	41	55	52	39	52	53	40
School Domain																		
Poor Academic Performance	53	52	43	47	51	39	49	51	49	50	48	51	53	51	40	52	50	41
Lack of Commitment to School	55	55	31	53	55	31	55	54	29	57	55	41	54	53	32	54	54	30
Peer and Individual Domain																		
Rebelliousness	53	50	33	50	51	32	55	55	34	56	51	32	54	50	33	52	49	31
Friends' Delinquent Behavior	49	51	39	43	49	37	50	55	44	52	50	44	47	48	41	51	48	39
Friends' Use of Drugs	58	58	23	49	54	23	61	62	21	61	57	26	56	53	23	54	52	22
Peer Rewards for Antisocial Behavior	55	56	29	51	55	30	59	58	29	56	59	32	55	55	29	53	55	31
Favorable Attitudes toward Antisocial Behavior	59	52	27	57	52	30	63	56	30	63	56	32	58	51	28	59	53	28
Favorable Attitudes toward ATOD Use	58	52	22	53	51	22	62	55	23	61	53	35	57	49	23	57	51	21
Low Perceived Risks of Drug Use	40	39	26	38	39	26	43	44	27	42	39	30	41	37	36	41	37	27
Early Initiation (of Drug Use and Antisocial Behavior)	50	50	26	41	47	26	51	52	27	54	49	29	48	45	25	48	44	24
Sensation Seeking	58	52	31	55	50	32	60	56	31	59	52	36	58	50	29	57	50	29
Averages	52	52	35	48	52	32	55	55	34	54	52	36	51	50	33	51	50	31

Table D-31. 12th Grade Protective Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Community Rewards for Prosocial Involvement	44	43	43	44	42	46	43	41		47	42	43	46	42	36	42	38	36
Family Domain																		
Family Attachment	47	48	48	47	45	49	40	46		46	48	45	49	45	49	47	46	46
Family Opportunities for Prosocial Involvement	45	48	46	45	45	47	38	46		44	45	44	48	45	47	46	46	45
Family Rewards for Prosocial Involvement	45	47	45	48	46	50	40	48		47	49	44	48	44	48	45	47	44
School Domain																		
School Opportunities for Prosocial Involvement	48	52	49	57	52	56	50	52		54	48	46	54	49	49	53	55	49
School Rewards for Prosocial Involvement	40	43	41	47	43	49	41	42		43	42	37	43	40	38	42	43	38
Peer and Individual Domain																		
Religiosity	52	51	50	51	47	46	43	44		53	53	47	52	50	48	48	47	45
Belief in the Moral Order	42	55	49	44	52	53	38	49		43	49	43	45	52	52	41	49	38
Averages	45	48	46	48	46	50	41	46		47	47	44	48	46	46	45	46	43

Note: The symbol "--" indicates that data are not available because there were too few respondents in the cell.

Table D-32. 12th Grade Risk Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Low Neighborhood Attachment	57	57	46	57	59	36	62	59	41	58	58	39	56	57	39	57	56	37
Community Disorganization	49	57	56	43	59	43	59	60	55	57	60	54	47	59	49	48	52	43
Personal Transitions and Mobility	41	48	57	41	50	58	37	50	67	37	45	59	36	45	61	40	49	62
Laws and Norms Favorable to Drug Use and Handguns	67	67	25	64	68	29	72	70	25	67	70	36	65	69	29	65	66	25
Perceived Availability of Drugs and Handguns	58	56	17	55	57	18	60	56	16	59	57	20	57	56	17	57	55	15
Family Domain																		
Poor Family Supervision	61	56	29	62	60	31	68	63	30	61	60	29	57	60	29	61	58	30
Poor Family Discipline	60	58	55	63	61	26	65	63	23	61	59	25	58	59	26	63	60	25
Family History of Antisocial Behavior	58	57	43	51	57	26	60	61	30	59	53	30	53	56	26	54	54	23
Parental Attitudes Favorable toward ATOD Use	63	58	36	59	62	35	64	63	35	58	57	37	60	60	34	62	55	34
Parental Attitudes Fav. toward Antisocial Behavior	53	50	42	51	53	40	61	53	42	56	55	41	52	54	39	52	47	40
School Domain																		
Poor Academic Performance	49	49	43	47	48	39	52	48	49	50	47	51	51	51	40	52	48	41
Lack of Commitment to School	60	57	31	59	56	31	63	58	29	57	61	41	56	60	32	56	55	30
Peer and Individual Domain																		
Rebelliousness	54	47	33	54	51	32	58	50	34	57	53	32	53	52	33	54	51	31
Friends' Delinquent Behavior	53	47	39	50	51	37	60	54	44	54	52	44	50	50	41	54	51	39
Friends' Use of Drugs	66	61	23	64	64	23	72	66	21	65	63	26	67	64	23	65	64	22
Peer Rewards for Antisocial Behavior	51	56	29	56	57	30	54	53	29	53	57	32	54	58	29	52	56	31
Favorable Attitudes toward Antisocial Behavior	57	51	27	61	55	30	65	57	30	59	59	32	60	56	28	60	56	28
Favorable Attitudes toward ATOD Use	66	56	22	69	60	22	71	59	23	64	60	25	67	60	23	67	59	21
Low Perceived Risks of Drug Use	45	41	26	50	45	26	51	46	27	45	44	30	46	45	36	46	43	27
Early Initiation (of Drug Use and Antisocial Behavior)	53	48	26	48	49	26	56	48	27	55	51	29	50	49	25	52	48	24
Sensation Seeking	60	53	31	61	56	32	63	54	31	62	55	36	61	56	29	60	54	29
Averages	56	53	35	55	56	32	60	56	34	56	55	36	55	55	33	56	54	32

Table D-33. Overall Protective Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Community Rewards for Prosocial Involvement	50	49	50	50	49	49	52	46	50	59	47	49	50	49	49	50	48	46
Family Domain																		
Family Attachment	53	51	46	49	50	56	54	51	60	54	54	55	56	53	54	57	53	58
Family Opportunities for Prosocial Involvement	54	54	51	52	50	55	52	54	60	52	55	54	56	54	52	56	52	58
Family Rewards for Prosocial Involvement	56	55	46	53	53	57	55	53	63	54	57	55	57	56	54	58	55	60
School Domain																		
School Opportunities for Prosocial Involvement	54	57	57	58	57	57	58	56	56	56	55	52	56	58	55	58	56	58
School Rewards for Prosocial Involvement	45	48	50	51	49	52	51	44	51	46	48	50	47	50	48	48	47	49
Peer and Individual Domain																		
Religiosity	59	57	51	59	53	49	60	52	48	60	55	48	57	58	55	57	56	51
Belief in the Moral Order	52	60	60	55	61	60	56	56	59	50	55	53	55	62	61	54	59	50
Averages	53	54	51	54	53	54	55	52	56	53	53	52	54	55	54	55	54	55

Table D-34. Overall Risk Factor Scale Scores, Regional Estimates

		1 - NW			2 - NC			3 - NE			4 - SW			5 - SC			6 - SE	
	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005	2001	2003	2005
Community Domain																		
Low Neighborhood Attachment	48	48	46	50	49	36	44	50	41	48	48	39	46	48	39	47	46	37
Community Disorganization	50	57	56	45	56	43	49	60	55	51	61	54	47	57	49	47	50	43
Personal Transitions and Mobility	41	52	57	44	52	58	37	53	67	36	47	59	38	51	61	41	51	62
Laws and Norms Favorable to Drug Use and Handguns	48	49	25	40	47	29	43	49	25	47	48	36	48	48	29	44	44	25
Perceived Availability of Drugs and Handguns	33	33	17	27	32	18	28	33	16	34	33	20	31	31	17	30	29	15
Family Domain																		
Poor Family Supervision	46	46	29	47	46	31	52	47	30	50	45	29	44	43	29	48	45	30
Poor Family Discipline	42	40	55	42	41	26	43	43	23	42	42	25	38	38	26	41	42	25
Family History of Antisocial Behavior	44	47	43	42	42	26	36	42	30	37	41	30	36	39	26	35	39	23
Parental Attitudes Favorable toward ATOD Use	45	44	36	44	45	35	42	47	35	43	43	37	42	44	34	42	43	34
Parental Attitudes Fav. toward Antisocial Behavior	51	51	42	50	50	40	50	52	42	48	51	41	48	49	39	47	49	40
School Domain																		
Poor Academic Performance	53	51	43	48	51	39	48	54	49	50	49	51	52	51	40	49	49	41
Lack of Commitment to School	48	45	31	46	47	31	45	49	29	51	51	41	49	46	32	46	47	30
Peer and Individual Domain																		
Rebelliousness	50	45	33	48	45	32	47	46	34	51	48	32	50	45	33	47	45	31
Friends' Delinquent Behavior	47	48	39	42	46	37	42	51	44	47	48	44	44	45	41	47	47	39
Friends' Use of Drugs	43	42	23	33	38	23	36	42	21	41	41	26	37	37	23	37	37	22
Peer Rewards for Antisocial Behavior	46	47	29	38	45	30	42	49	29	50	49	32	44	46	29	45	45	31
Favorable Attitudes toward Antisocial Behavior	53	46	27	52	46	30	53	49	30	57	51	32	52	45	28	52	45	28
Favorable Attitudes toward ATOD Use	44	38	22	39	38	22	39	42	23	44	39	25	40	37	23	40	35	21
Low Perceived Risks of Drug Use	33	31	26	29	31	26	30	36	27	32	32	30	30	31	36	31	30	27
Early Initiation (of Drug Use and Antisocial Behavior)	45	42	26	38	40	26	36	43	27	43	42	29	39	39	25	39	38	24
Sensation Seeking	49	44	31	48	43	32	48	43	31	52	45	36	50	43	29	47	43	29
Averages	46	45	35	43	44	32	43	47	34	45	46	36	43	44	33	43	43	32

Appendix E 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

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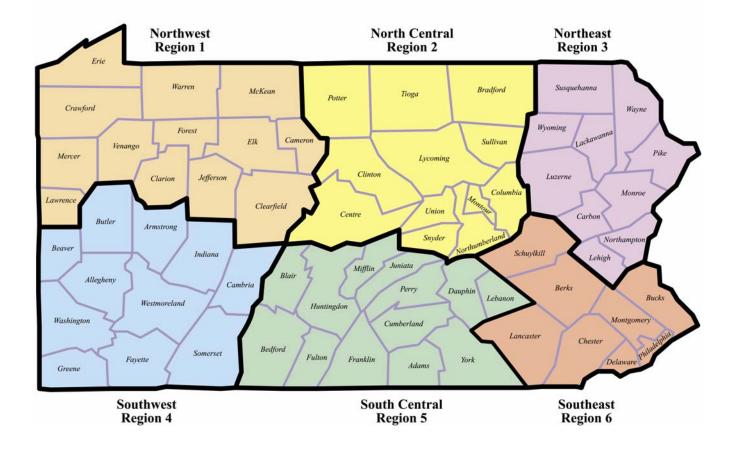
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Appendix F Counties by Region



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