# 2008 NEW JERSEY HIGH SCHOOL RISK & PROTECTIVE FACTOR SURVEY

New Jersey Department of Human Services Division of Addiction Services

## 2008 New Jersey High School Risk and Protective Factor Survey

Prepared for:

New Jersey Department of Human Services Division of Addiction Services

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## **Executive Summary of Findings**

#### Background

In July 2006, the New Jersey Department of Human Services (NJ DHS), Division of Addiction Services (DAS) contracted with Bloustein School of Planning and Public Policy, Center for Survey Research (BCSR) at Rutgers University to conduct the New Jersey Risk and Protective Factor Survey (NJ RPFS). The NJ RPFS was conducted with a sample of middle school students across the state from the fall of 2006 to the spring of 2007. The <u>2007 New Jersey Middle School Risk and Protective Factor Survey</u> was released by the NJ DHS in the spring of 2008. This report is based on results of a similar survey administered to a sample of high school students from the fall of 2007 to the spring of 2008. The survey continues efforts initiated in 1999 to systematically document risk and protective factors among New Jersey youth. The questionnaire includes risk and protective factor items that show the strongest correlations to drug use, including questions on students' feelings about school and their neighborhood; self-reported and peer use of tobacco, drugs, and alcohol; and the availability of such substances. Survey results will be used to create tailored prevention programs for New Jersey's youth population and complete the Federal application for block grant funding and for disbursement of funds within the State for prevention and planning purposes.

Data from the New Jersey High School Risk and Protective Factor Survey is highly comparable to other concurrent survey initiatives, such as:

- the Youth Tobacco Survey, conducted by the New Jersey Department of Health and Senior Services (NJDHSS), Comprehensive Tobacco Control Program;
- the New Jersey Student Health Survey, previously known as the Youth Risk Behavior Survey, conducted by the New Jersey Department of Education (NJDOE); and,
- the Survey of Drug and Alcohol Use Among New Jersey High School Students conducted by the New Jersey Department of Law and Public Safety, Division of Criminal Justice.

#### **Study Methods and Participation Rates**

BCSR conducted the surveys with a target sample of 83 high schools randomly selected throughout the state. The sample of schools was stratified by county. BCSR used a multi-stage sampling design. For high schools, a sampling ratio of 1-to-6 schools was used with a minimum of three schools when a county had 17 or fewer schools. The final participating sample included 70 high schools with the forecasted school participation goals achieved in 11 of the 21 counties. More detailed information can be found in a technical report on the administration of the 2008 survey, entitled "2008 New Jersey High School Risk and Protective Factor Survey Technical Report: Procedures, Challenges, and Recommendations" provided to the NJDHS/DAS by BCSR.

It should be noted that the administration of the survey was conducted under standards established by state law *N.J.S.A.* 18A:36-34 which requires active parental consent for student participation – meaning that students could only participate if they returned a signed consent form from a parent/guardian. Overall, the majority of all students (67.8%) returned a form that permitted participation; 4.6% returned a form that did not consent to participation, and 27.6% did not return a form at all.

With 70 of 126 schools participating (55.6% school participation rate) and 7,455 of 11,810 students returning a completed questionnaire (63.1% student participation rate), the final overall survey response rate was 35.1% (school rate x student rate), or almost three times greater than the last statewide Communities That Care Survey (12.9%).

Further, an adequate overall response rate was not reached in ten of the 21 counties. The cut-off rate for adequate performance was determined by the mean for all counties (35.1%). Any county whose performance was less than this point is presented in the list below and is marked with an asterisk(\*) throughout this report. Results for these counties should not be considered as representative of the

county overall: Morris\* (13.2%), Somerset\* (15.3%), Mercer\* (17.1%), Cape May\* (21.3%), Warren\* (21.6%), Sussex\* (23.4%), Salem\* (27.2%), Cumberland\* (30.0%), Hunterdon\* (31.1%), and Bergen\* (33.2%). Details on participation rates by county can be found in Table 1 in the Introduction.

While the overall participation rates obtained in the study are greater than similar efforts in the past, they are lower than those rates generally regarded as acceptable for considering results as representative to a broader population. For example, CDC requires a 60% overall response rate on its Youth Risk Behavior Survey as a cut-off for having data weighted to the state's student population. Therefore, since response rates were lower than these conventions, the possibility exists that a participation bias at either the school and/or student level may impact the results of the study. State, county and community representatives should consider these response rates and their potential bias on results when using the New Jersey High School Risk and Protective Factor Survey (NJ HS RPFS) report in any prevention planning efforts.

#### **Profile of High School Students**

Overall, 7,259 of the 7,455 completed surveys (97.4%) were eligible for analysis. Reasons for ineligibility include the following:

- incomplete surveys (answering less than 60% of the survey questions),
- use of *derbisol* (a fictitious drug used in questionnaires to test the reliability of answers received by students),
- two or more inconsistent affirmative responses to drug questions (e.g., indicating use of a particular drug in the last 30 days for one question and indicating *no use* in the last 12 months), or
- unscannable forms.

Table ES-1 shows the distribution of survey respondents by demographic subgroups. Based on weighted demographic data, the students were fairly evenly split between 9<sup>th</sup>/10<sup>th</sup> grade (52.8%) and 11<sup>th</sup>/12<sup>th</sup> grade (47.2%). Survey respondents were evenly split between males (50.4%) and females (49.6%). Based on weighted demographic data, 58.7% were White, 16.7% were Black or African American, 17.0% were Hispanic or Latino (including Hispanics who also identified with a race or multiple races), 7.6% were Asians, Native Hawaiian/Pacific Islanders, or Other (including American Indian/Alaskan Natives and non-Hispanic students who identified with multiple races).

	Demographic Group	Sample (n)	Sample %	Weighted %
GENDER	Female	3896	55.1%	49.6%
GENDER	Male	3174	44.9%	50.4%
CRADE	9 <sup>th</sup> /10 <sup>th</sup>	3580	49.3%	52.8%
GRADE	11 <sup>th</sup> /12 <sup>th</sup>	3679	50.7%	47.2.%
	African -American	713	9.9%	16.7%
	Hispanic/Latino	1418	19.8%	17.0%
RACE/ETHNICITT	White	4094	57.0%	58.7%
	Other	957	13.3%	7.6%

Table ES-1:	Profile	of High	School	Students	in the	2008 N	Vew J	ersey l	High S	School	Risk
and Protect	ive Fact	or Surve	ey						-		

#### Findings on Alcohol, Tobacco and Other Drug Use

This section presents findings from the 2008 New Jersey High School Risk and Protective Factor Survey on lifetime, past year, and use in the past 30 days of alcohol, tobacco, and other drugs (Figure ES-1). Specifically, students were asked how old they were when they first used each substance and how many times in the past 12 months, and in the past 30 days they had used the substance.

Notable findings on the prevalence and frequency of use of five most frequently used substances by NJ youth (alcohol, tobacco, marijuana, inhalants, and prescription drugs without a prescription) are presented in text below. These findings are disaggregated by grade, gender, race/ethnicity, county, and compared to a nationwide survey of high school students. It is important to note that, while countywide comparisons are presented, caution should be taken when interpreting the results from specific counties due to the relatively small number of participants from each county.





\* Other Illicit drugs include sedatives, methamphetamines, amphetamines, ecstasy, hallucinogens, cocaine, heroin, OxyContin, club drugs and steroids.

#### Notable Differences by Grade

More 11<sup>th</sup>/12<sup>th</sup> grade students than 9<sup>th</sup>/10<sup>th</sup> grade students reported each kind of substance use measured in the survey and the older students were more likely to report lifetime, past year and use in the past 30 days of each substance. Some of these differences are noted below:

- lifetime alcohol consumption (80.9% vs. 64.3%);
- consumption of alcohol in the past 30 days (53.7% vs. 38.9%);
- use in lifetime and the past 30 days of cigarettes (39.5% vs. 26.0%, 22.1% vs. 14.0%); and,
- use in lifetime and the past 30 days of marijuana (41.0% vs. 19.6%, 23.0% vs. 10.9%).

#### Notable Differences by Gender

Substantial differences in substance use were not noted by gender. The largest difference between boys and girls in reported use of substances was with lifetime alcohol use. Seventy-five percent (74.5%) of high school girls indicated they had tried alcohol at some point in their lives compared with 69.8% of boys. However, the difference between girls and boys in use of alcohol in the past 30 days is smaller (47.3% vs. 44.4% boys).

#### Notable Differences by Race/Ethnicity

White high school students were more likely than students of other ethnic backgrounds to report use of substances. Hispanic students tended to report similar levels of lifetime substance use to White students but when asked about use in the past 30 days, Hispanic students tended to report lower rates of usage than Whites.

- White and Hispanic students (35.6% and 35.4%, respectively) were more likely than African-American students (21.1%) and students of *other racial/ethnic backgrounds* (26.0%) to report lifetime cigarette use.
- White and Hispanic students (75.7% and 75.2%, respectively) were more likely than African-American students (64.0%) and students of *other racial/ethnic backgrounds* (55.2%) to report lifetime alcohol use and to have consumed alcohol in the 30 days prior to the survey (52.1%, 44.5%, 31.7%, and 32.4%, respectively).
- White students are more likely than any other students to report lifetime marijuana use (33.8% vs. 26.6% Hispanic, 24.2% African-American, and 17.0% other racial/ethnic backgrounds) and use of marijuana in the past 30 days (19.6%, 12.8%, 13.1%, and 10.3%).

#### Notable Differences by County

- Monmouth County had the highest lifetime alcohol use rate of 80.2%, followed by Ocean County (78.1%). The lowest lifetime rates were found in Essex (65.1%), Mercer\* (66.2%) and Passaic (66.4%) counties. Monmouth County also had the highest rate of alcohol use in the past 30 days (59.2%) which was almost two times higher than the findings for Essex County, the county with the lowest prevalence rate (31.4%) in the past 30 days. The next lowest rates of alcohol use in the past 30 days were in Somerset\* (39.2%) and Salem\* (39.4%) counties.
- Cape May\* and Monmouth counties had the highest lifetime and rate of use in the past 30 days of cigarettes with 4 in ten (40.4% in Cape May\* and 40.1% in Monmouth) high school students in these counties indicating they had smoked at some time in their lives and a quarter or more reporting use of cigarettes in the past 30 days (28.4% Monmouth and 24.6% in Cape May\*). Less than a quarter of students in Camden (23.5%) and Mercer\* (21.8%) reported ever having used cigarettes.
- Monmouth County had the highest rate of lifetime marijuana at 39.6% and Burlington County had the lowest rate at 21.8%.
- Two in ten students in Cape May\* (21.9%) and Atlantic (20.2%) counties reported lifetime use of prescription drugs without a prescription while about half that rate reported lifetime use of prescription drugs in Essex (10.7%) and Union counties (9.8%).

• Students in Cape May\* and Somerset\* counties reported the highest lifetime use of inhalants (8.0% and 7.8%, respectively) while Camden and Union counties reported the lowest rates of lifetime inhalant use (1.7% and 1.9%, respectively).

#### **Findings on Antisocial Behavior**

The 2008 New Jersey High School Risk and Protective Factor Survey measured student reports of antisocial behavior (Figure ES-2) during the 12 months prior to survey. Specifically, students were asked how many times they had engaged in each behavior: "Never", "1 to 2 times", "3 to 5 times," "6 to 9 times", "10 to 19 times", "20 to 29 times", "30 to 39 times" and "40 or more times" in the past year. Gang involvement was measured by asking if students had ever belonged to a gang. If they answered 'Yes', they were asked if the gang had a name. The nine antisocial behaviors are listed below.

- Attacking Someone with Intent to Harm
- Attempting to Steal a Vehicle
- Being Arrested
- Being Drunk or High at School
- Carrying a Handgun
- Getting Suspended
- Selling Drugs
- Taking a Handgun to School
- Belonging to a Gang

Figure ES-2 presents the percentage of high school students who reported engaging in each behavior at least once in the past year. Findings are disaggregated by grade, gender, race/ethnicity, and county. It is important to note that, while countywide comparisons are presented, caution should be taken when interpreting the results from specific counties due to the relatively small number of participants from each county.

Figure ES-2: Summary of Antisocial Behaviors in the Past 12 Months



#### Notable Differences by Grade

More 11<sup>th</sup>/12<sup>th</sup> graders than 9<sup>th</sup>/10<sup>th</sup> graders reported engaging in the following behaviors:

- selling illegal drugs (10.6% vs. 5.5%); and,
- being drunk or high at school (17.4% vs. 10.8%).

#### Notable Differences by Gender

Substantially more males than females reported engaging in the following antisocial activities:

- being suspended (17.9% vs. 12.2%);
- attacking someone with intent to harm (13.1% vs. 8.8%);
- selling illegal drugs (10.3% vs. 5.2%);
- being arrested (9.0% vs. 3.8%); and,
- being in a gang (7.1% vs. 2.0%).

There was no gender difference, however, for students being drunk or high at school (13.7% for females and 14.1% for males).

#### Notable Differences by Race/Ethnicity

White students were generally more likely than others to report behaviors related to substance use while African-American and Hispanic students were more likely to report violent and other anti-social behaviors.

- White students were most likely to report selling illegal drugs in the past year (9.1%) and students of *other racial/ethnic backgrounds* were least likely to report this behavior (4.1%).
- White students were most likely to report being drunk or high at school (15.1%) while those of other racial/ethnic backgrounds were least likely (8.3%).
- African-American students were most likely to report attacking someone with intent to harm in the last year (15.8%) and White students were least likely to report engaging in this activity (9.3%).
- More African-American and Hispanic students (9.0% and 9.3%, respectively) reported being in a gang than did White students (2.4%) or students of *other racial/ethnic backgrounds* (3.2%).
- African-American and Hispanic students reported being suspended at much higher rates than other ethnic groups (27.4% and 23.7%, respectively) versus 9.8% of White students and 12.0% of students from other ethnic backgrounds.

#### Notable Differences by County

- Cumberland\* and Essex counties had the highest reported suspension rates (24.3% and 26.4%, respectively) while Hunterdon and Mercer\* students were least likely to report school suspensions (4.6% and 6.0%, respectively).
- Atlantic County students were most likely to report selling illegal drugs (12.9%) while students in Passaic County were least likely (4.5%).
- Cape May County\* had the highest proportion of students being arrested (12.7%). In contrast, the county with the lowest rate was Hunterdon County (2.2%).
- Cumberland County\* had the highest proportion of students reporting attacking someone with intent to harm (16.9%). The lowest rate was in Hunterdon County (5.9%).
- Four counties had prevalence rates of students being drunk or high at school of close to 20% --Monmouth (20.5%), Atlantic (19.0%), Cape May\* (18.9%), and Ocean (18.8%). Two counties had rates of less than 10% -- Hunterdon (8.1%) and Mercer\* (6.5%).
- Cumberland\* and Somerset\* counties had the greatest proportion of students with gang affiliation (10.8% and 10.0%, respectively). In contrast, Hunterdon and Sussex\* counties had the lowest proportion of students with gang affiliation (1.0% and 1.2%, respectively).

## Findings on Gambling

The 2008 New Jersey High School Risk and Protective Factor Survey also surveyed students about gambling behaviors (Figure ES-3). These questions asked students how often in the past 12 months they participated in various types of gambling activity. Students chose from the following response set: 'never', 'before, but not in the past year', 'a few times in the past year', 'once or twice a month', 'once or twice a week', and 'almost every day'. Findings are disaggregated by grade, gender, race/ethnicity, and county. It is important to note that, while countywide comparisons are presented, caution should be taken when interpreting the results from specific counties due to the relatively small number of participants from each county.





\* For money or possessions

#### Notable Differences by Grade

Slightly more 11<sup>th</sup>/12<sup>th</sup> grade students than 9<sup>th</sup>/10<sup>th</sup> grade students reported engaging in the following gambling activities:

- betting on card games at least a few times in the past year (28.3% vs. 24.1%); and,
- betting on dice games at least *a few times in the past year* (11.8% vs. 8.4%).

#### Notable Differences by Gender

Substantially more males than females reported engaging in the following gambling activities:

- betting on team sports at least a few times in the past year (33.6% vs. 12.4%);
- betting on cards at least a few times in the past year (37.6% vs. 14.4%);
- betting on games of personal skill at least a few times in the past year (24.7% vs. 7.0%);
- betting on video games at least a few times in the past year (24.3% vs. 3.9%); and,
- betting on dice games (15.7% vs. 4.1%).

#### Notable Differences by Race/Ethnicity

- White students were most likely to report playing the lottery or scratch-off tickets a few times in the past year (37.0%) and monthly, weekly, or almost every day (12.0%), while African-American students were the least likely to report this gambling behavior a few times in the past year (11.7%) and monthly, weekly, or almost every day (8.6%).
- One quarter (24.9%) of White students reported betting on team sports as least a few times in the past year compared with 21.1% of Hispanic students, 20.1% of African-American students and 17.7% of students of other racial/ethnic backgrounds.
- White students reported the highest prevalence of gambling on card games at least *a few times in the past year* (29.3%) while African-American, Hispanic, and students of *other racial/ethnic backgrounds* reported less (24.2%, 19.1%, and 20.9%).
- White students (7.1%) reported betting on horse races more frequently than their respective counterparts (1.4%-2.8%).
- African-American students reported betting on video games the most frequently (22.2%) followed closely by Hispanic students (17.6%). White students reported betting on video games the least in both past year categories (11.3%).
- African-American students reported betting on dice games more frequently than other students (14.8% vs. 10.9% Hispanic, 9.0% other racial/ethnic backgrounds, 8.6% White).
- Hispanic students reported playing bingo for money (11.2%) more than any other racial/ethnic group in both past-year categories (6.1%-7.0%).

#### Notable Differences by County

- More than half of students in Ocean (57.6%), Morris\* (53.8%), Sussex\* (53.5%), Monmouth (52.5%) and Warren\* (51.9%) counties reported playing the lottery or scratch-off tickets in the past year, compared to less than 30% of students in Atlantic (29.9%) and Camden (27.5%) counties.
- Gloucester County students were most likely (32.5%) and Cape May\* students were least likely (19.5%) to report betting on card games in the past year.
- Betting on team sports in the past year was reported most frequently by students in Monmouth County (32.1%) versus the county-wide low (14.7%) in Warren County\*.
- Horse race betting was reported most frequently by students in Monmouth County (13.9%) and least frequently by Cumberland County\* students (3.2%).
- The prevalence of Internet gambling was fairly similar across NJ counties with Monmouth County slightly higher than most other counties (9.7%) and Cape May County\* a bit lower (2.3%).

- Betting on video games was reported most frequently in Hudson County (20.7%) versus a low of 6.9% in Sussex County\*.
- Betting on dice games varied greatly between counties from 2.4% in Sussex County\* to 14.4% in Monmouth County.
- Betting on games of personal skill in the last year ranged from a high of 24.1% in Monmouth County to a low of 12.6% in Middlesex County\*.

#### **Risk and Protective Factors**

The New Jersey High School Risk and Protective Factor Survey contains four overarching domains – Community, Family, School, and Peer-Individual – for the 20 risk factors and two overarching domains – School and Peer-Individual – for the five protective factors. Multiple survey items comprise each of these factors and there was a minimum number of questions that must be answered in order to calculate a scale score for that factor. BCSR computed scale scores for each risk and protective factor, their respective domains, and summary risk and protective factor scores, which were created by combining all 20 risk factors and all 5 protective factors, respectively.

Risk factors are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior while protective factors buffer students against these risks. These two types of factors (risk and protective) are important in regard to prevention planning. While one may not be able to eliminate the risk factors in a student's environment, it is possible that the number of protective factors can be increased.

These variables have been standardized to a 0 to 1 scale. It is important to note that risk and protective factors are interpreted differently. Overall, it is better to have lower risk factor scores than higher. Research has shown that the more risk factors students are exposed to, the more likely they are to use drugs or participate in antisocial behaviors. Higher scores indicate more risks in the student's environment. Conversely, it is better to have higher protective factor scores. These scores represent characteristics in the students' environment that will protect them against risk factors.

#### **Risk Factors**

Risk factors are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior. Each question was scored so that the most negative behaviors received the highest score. For example, if a student indicated that he was 10 years old or younger when he began smoking cigarettes, then this would be scored as a 1. Conversely, a student who indicated having never smoked would receive a score of 0. Mean scores for each factor were then computed on a scale of 0 to 1, with a higher score indicating that the student is at greater risk of being influenced negatively by that factor. For example, if the mean score for *Early Initiation of Drug Use* factor was 0.60, then these students would be more likely than students with lower risk scores to use drugs at an early age.

Overall, as displayed in Table ES-2, mean scores on the risk factors show that NJ high school students are more likely to be at-risk for negative behaviors by factors in the school and community domains, which received the greatest mean scores (0.38 and 0.37, respectively). In particular, living in a community where drugs are perceived as easily available (*Perceived Availability of Drugs*) and where drug use is acceptable (*Laws and Norms Favorable to Drug Use*) posed the greatest risk. There were also several individual factors within the Family and Peer-Individual domains that indicated higher risk for negative behaviors, such as *Poor Family Management*, *Friends' Use of Drugs* and *Perceived Risks of Drug Use*.

Domain	Risk Factors	Ν	Mean
	Laws and Norms Favorable to Drug Use	7118	0.51
	Community Transitions and Mobility	7165	0.31
Community	Low Neighborhood Attachment	7226	0.38
(mean= 0.37)	Perceived Availability of Drugs	7175	0.56
	Community Disorganization	7159	0.27
	Perceived Availability of Handguns	7162	0.22
	Poor Family Management	7130	0.33
Family	Parental Attitudes Favorable Toward Antisocial Behavior	7151	0.16
(mean= 0.21)	Parental Attitudes Favorable Toward Drug Use	7157	0.14
School	Low Commitment to School	7128	0.42
(mean= 0.38)	Academic Failure	7141	0.34
	Perceived Risks of Drug Use	7203	0.30
	Favorable Attitudes Toward Antisocial Behavior	7244	0.23
	Peer Rewards for Antisocial Behavior	7184	0.23
Peer-Individual	Favorable Attitudes Toward Drug Use	7245	0.29
$(m_{22}) = (0.20)$	Early Initiation of Drug Use	7198	0.20
(mean= 0.20)	Friends' Use of Drugs	7235	0.32
	Early Initiation of Antisocial Behavior	7215	0.08
	Gang Involvement	7182	0.05
	Interaction with Antisocial Peers	7243	0.09
Statewide Risk	Factor Average	7095	0.27

Table ES-2: Summary of All Risk Factors by Domain

#### Notable Differences by Grade

Older students (11<sup>th</sup>/12<sup>th</sup> graders) had higher mean scores than younger students (9<sup>th</sup>/10<sup>th</sup> graders) on several of the 20 risk factors, as detailed below.

- Eleventh- and twelfth-grade students had a substantially higher risk factor mean score (0.65) than 9<sup>th</sup>/10<sup>th</sup> grade students (0.49) for *Perceived Availability of Drugs*, indicating that ATOD were perceived as easier to get among the older students.
- Older students had a higher risk factor mean score (0.55) than younger students (0.48) on the *Laws and Norms Favorable to Drug Use* factor, which suggests that older students believe that their community is more favorable to drug use.
- Older students had higher risk factor mean scores than younger students on two of the three Family Domain factors – *Poor Family Management* (0.36 vs. 0.29) and on *Parental Attitudes Favorable to Drug Use* (0.18 vs. 0.10) – indicating that these older students are living in families with less parental supervision and more parental tolerance of drug use.
- Older students had higher risk factor means scores than younger students on three of the nine Peer-Individual Domain risk factors Perceived Risks of Drug Use (0.33 vs. 0.27), Favorable

Attitudes Toward Drug Use (0.34 vs. 0.24), and Friends' Use of Drugs (0.39 vs. 0.25). These findings indicate that while older students may be more aware of the risks of drugs than their younger counterparts, they are also hold more favorable attitudes toward the use of drugs and are more likely to have friends who are using drugs.

#### Notable Differences by Gender

Male students had higher mean scores than female students on several of the risk factors in the Peer-Individual Domain while female students were more likely to report negative feelings about their neighborhood.

- Male students had a lower mean factor score than female students on *Low Neighborhood Attachment* (0.34 vs. 0.41) which suggests that girls have more negative feelings about their neighborhood than boys.
- The mean for male students was higher than the female student mean (0.25 vs. 0.18), for *Perceived Availability of Handguns*, indicating that male students perceived it easier to get a handgun than female students.
- The mean for male students was greater than the mean for females (0.10 vs. 0.05) on the *Early Initiation of Antisocial Behavior* factor, which suggests that males were younger when they first started engaging in anti-social behavior.
- Males are more likely to hold favorable attitudes toward anti-social behavior as evidenced by the slightly higher mean score on this factor when compared with the mean score for female students (0.25 vs. 0.20).
- The mean for male students is higher than for female students on *Perceived Risks of Drug Use* factor (0.32 vs. 0.27), indicating that boys see more risks from drug use than girls.

#### Notable Differences by Race/Ethnicity

In general, African-American and Hispanic students had higher mean scores on factors associated with community dysfunction and anti-social behaviors while White students were more at risk on factors related to substance use.

- African-American and Hispanic students were at higher risk to be influenced by Low Neighborhood Attachment (0.45 and 0.44, respectively) than students of other racial/ethnic backgrounds (0.37) or White students (0.34).
- African-American and Hispanic students had substantially higher scores on the *Community Disorganization* factor (0.38 and 0.35, respectively) than White students and students of *other racial/ethnic backgrounds* (0.23 and 0.24 respectively), indicating that there are more threats to safety in their neighborhoods.
- African-American and Hispanic students had higher mean scores on the *Community Transitions and Mobility* factor (0.41 and 0.37, respectively) than White students (0.26), indicating that they had changed homes or schools more frequently.
- African-American students had the highest mean (0.38) and White students and those of other racial/ethnic backgrounds had the lowest mean (0.16 each) on the Perceived Availability of Handguns factor.
- Students of other racial/ethnic backgrounds had the lowest mean (0.45) on the Laws and Norms Favorable to Drug Use factor suggesting that they believe their community is less favorable to drug use than White, African-American or Hispanic students (0.52, 0.51, 0.51, respectively).
- African-American (0.37) and Hispanic (0.38) students had higher mean scores on the *Academic Failure* factor than White students (0.32) or those of *other racial/ethnic backgrounds* (0.29).
- African-American and Hispanic students (0.09) had higher mean scores on the *Gang Involvement* factor than White students (0.02) or students of *other racial/ethnic backgrounds (0.04)*.
- Mean scores were higher for African-American (0.14) on the *Early Initiation of Antisocial Behavior* factor than for other students (0.10 for Hispanic, 0.07 for *Other*, and 0.06 for White students).

- African-American and Hispanic students had higher mean scores (0.12 each) on the *Interaction* with Anti-Social Peers factor than did White students or students of other racial/ethnic backgrounds (0.07 each).
- White, Hispanic, and African-American students had higher mean scores (0.58, 0.56, 0.54) than students of other racial/ethnic backgrounds (0.48) on the Perceived Availability of Drugs factor.
- White students had the highest mean score on *Parental Attitudes Favorable to Drug Use* factor compared to African-American, Hispanic and students of *other racial/ethnic backgrounds* (0.17 vs. 0.09, 0.11, 0.09, respectively).
- White students had the highest mean score (0.33) and African-American students had the lowest mean score (0.20) on the *Favorable Attitudes Toward Drug Use* factor but White students also had the highest mean score on the *Perceived Risks of Drug Use* factor compared to African-American, Hispanic, and students of *other racial/ethnic backgrounds* (0.32 vs. 0.26, 0.27, and 0.25, respectively).
- White students also had the highest mean score (0.34) on the *Friends' Use of Drug* factor compared to African-American (0.25), Hispanic (0.32), and students of other racial/ethnic backgrounds (0.23).

#### Notable Differences by County

• The average county level risk factor scores did not vary widely across the 21 counties. Eleven counties had mean risk factor scores above the mean and 10 counties were below the mean. The range of scores ran from a low of 0.23 in Mercer County\* to a high of 0.29 in Cumberland\*, Monmouth (0.29), and Sussex\* (0.29) counties.

#### **Protective Factors**

Protective factors are characteristics of the students' school, and peer relationships that have been associated with buffering the risks in a students' environment and thereby reducing the likelihood of experimentation with alcohol, tobacco, and other drugs and antisocial behavior. Each question was scored so that the most positive behaviors received the highest score. For example, if a student indicated that she had done community service 40 or more times in the last year, then this would be scored as a 1. Conversely, a student who indicated having never done community service would receive a score of 0. Mean scores for each factor were then computed on a scale of 0 to 1, with a higher score indicating that the student has a greater chance of being protected by that factor. For example, if the mean score for the *Prosocial Involvement* factor was 0.60 then students would be more likely to be participating in positive activities.

Overall, mean scores on the protective factors show that NJ high school students are more likely to be protected from negative behaviors by factors in the school domain, which received the greatest mean scores (Table ES-3). Having increased interaction with prosocial peers also contributes to this protection.

Domain	Protective Factors	Ν	Mean
Peer-Individual	Peer-Individual Interaction with Prosocial Peers		0.53
	Peer Rewards for Prosocial Involvement	7180	0.40
(mean= 0.43)	Prosocial Involvement	7245	0.34
School	School Opportunities for Prosocial Involvement	7244	0.63
(mean= 0.58) School Rewards for Prosocial Involvement		7233	0.53
Statewide Prot	7249	0.49	

#### Table ES-3: Summary of All Protective Factors by Domain

#### Notable Differences by Grade

Ninth- and tenth-grade students score slightly higher than their older counterparts (11<sup>th</sup>/12<sup>th</sup> grade students) on the *Interaction with Prosocial Peers* factor (0.55 vs. 0.50) while the reverse is true for the *Peer Rewards for Prosocial Involvement* factor where older students scored higher (0.38 vs. 0.32) indicating that younger students reported having more pro-social friends but fewer rewards for pro-social involvement.

#### Notable Differences by Gender

The mean score for female students for *Peer-Individual Domain* protective factors was higher than the mean score for males (0.45 vs. 0.40) but there was no difference on school related factors, indicating that girls have a greater chance for being protected from using drugs and participating in antisocial behaviors by peer related factors but not by school related factors.

- Females had a higher mean score on the *Interaction with Prosocial Peers* factor than males (0.55 vs. 0.50), indicating that the friends of females have participated in more positive behaviors.
- Females had a higher mean score than males on the *Prosocial Involvement* factor (0.37 vs. 0.32), indicating that females more frequently engaged in prosocial activities than males.
- Females had a higher mean score than males on the *Peer Rewards for Prosocial Involvement* factor (0.44 vs. 0.37), indicating that more females believed they would be seen as cool if they participated in prosocial activities.

#### Notable Differences by Race/Ethnicity

- Students of other racial/ethnic backgrounds had the highest mean (0.59) on the Interaction with Prosocial Peers factor versus the lowest mean score of 0.50 for Hispanic students.
- White students and students of *other racial/ethnic backgrounds* (0.37, and 0.39) scored higher on the *Prosocial Involvement* factor than African-American and Hispanic students (0.32 and 0.26).
- White students scored lowest on the *Peer Rewards for Prosocial Involvement* factor (0.37) compared to the mean scores for Hispanic (0.42), African-American (0.47), and students of *other racial/ethnic backgrounds* (0.47), indicating that fewer White students believe they would be seen as cool if they participated in prosocial activities.

#### Notable Differences by County

• The average county level protective factor score ranged from a low of 0.46 in Middlesex County\* to a high of 0.52 in Mercer County\*. Hunterdon and Salem\* counties also had a high protective factor score at 0.51 each.

#### Impact of Average Risk Factor Score on Substance Use

In order to better interpret the risk factor mean scores, student scores were divided into four categories – *very low, low, high,* and *very high.* These categories were based on a normal distribution of scores, such that 68% of the scores are within one standard deviation of the mean. Risk categories were determined by examining the mean and standard deviations of the average risk factor score (0.27). Each quartile division of the following graphs was created using standard deviations. The *low* division represents one standard deviation *below* the mean while the *high* division represents scores one standard deviation *above* the mean. The *very low* division represents scores more than one standard deviation *below* the mean. Similarly, the *very high* division includes scores more than one standard deviation *above* the mean.

Once risk factor categories were established, the interaction of these categories with the prevalence of tobacco, alcohol, and other drug use was analyzed. The relationships between the average risk factor score and the rate of substance use are illustrated in Figure ES-4 below.



Figure ES-4: Prevalence of Lifetime Substance Use by Risk Factor Groupings

**Risk Factor Grouping** 

As shown, as risk scores increase, lifetime use of alcohol, tobacco, marijuana, and other illicit drugs increase. Use of all four substances showed a strong positive linear relationship between risk factor and prevalence of use. Notably, use of marijuana shows the strongest relationship with increased risk – a change from 0.5% to 75.1% over the four risk categories. The relationship between tobacco use and increased risk closely parallels that of marijuana use with a change of 1.7% to 74.4% over the four risk categories. Alcohol use also shows a strong positive relationship with a change from 26.4% to 95.1% over the four risk categories.

There are sharp increases between those at *low* and *high* risk on the use of tobacco (16.7% vs. 47.7%) and marijuana (13.2% vs. 43.6%) as well as between those at *high* and *very high* risk on the use of tobacco (47.7% vs. 74.4%), marijuana (43.6% vs. 75.1%), and other illicit drugs (10.9% vs. 39.0%) indicating that reducing risk at any of these levels would likely impact use of these substances. In contrast, alcohol use shows the largest increase between *very low* and *low* categories of risk (26.4% vs.

69.0%) suggesting that concentrating efforts to reduce risk from low to very low could have the greatest impact.

#### Impact of Average Protective Factor Score on Substance Use

To examine the relationship between protective factors and substance use, students were divided into four categories of protective factor scores (very low, low, high, very high) as described above. These categories were based on a normal distribution of scores, such that 68% of the scores are within one standard deviation of the mean. Protective categories were determined by examining the mean and standard deviations of the average protective factor score (0.49). Each quartile division of the following graphs was created using standard deviations. The low division represents one standard deviation below the mean while the *high* division represents scores one standard deviation above the mean. The very low division represents scores more than one standard deviation below the mean. Similarly, the very *high* division includes scores more than one standard deviation *above* the mean.

The relationship between average protective factor score and substance use is illustrated in Figure ES-5 below. It is important to note that these are inverse relationships.

#### Figure ES-5: Prevalence of Lifetime Substance Use by Protective Factor Groupings



## Lifetime Substance Use

#### **Protective Factor Grouping**

As shown, as protective factor scores increase, the likelihood of the use of alcohol, tobacco, marijuana, and other illicit drugs in high school decreases. However, even with very high protective factor scores, more than half of high school students have tried alcohol in their lifetime (56.9%). Use of tobacco showed the largest potential for change (34.0%) between those with low protective factor scores (50.6%) and those with very high protective factors scores (16.6%) while consumption of alcohol showed the least potential for change (22.4%) between students with low protective scores (79.3%) and those with high protective scores (56.9%).

Declines in substance use across categories of protective factors are fairly steady for use of tobacco, and marijuana. However, alcohol use shows the largest decrease between protective factor categories of high and very high (70.4% vs. 56.9%), indicating that even among students with very high protective factor scores, decreases in alcohol use can be realized by even modest reductions in those scores. Use of other illicit drugs shows decreases between very low and low protective factor groups (20.8% and 12.5%) and between low and high (12.5% and 5.4%) but then very little reduction between high and very high protective factor groups (5.4% and 4.6%).

## Introduction

#### A. Background

In July 2006, the New Jersey Department of Human Services (NJ DHS), Division of Addiction Services (DAS) contracted with Bloustein School of Planning and Public Policy, Center for Survey Research (BCSR) at Rutgers University to conduct the 2008 New Jersey High School Risk and Protective Factor Survey (NJ HS RPFS). The survey continues efforts initiated in 1999 to systematically document risk and protective factors among New Jersey youth. The NJ HS RPFS expands this research by including students in grades 9 through 12. Previous surveys were administered only to Middle Schools students. Until 2003, the NJ DHS/DAS used the Communities That Care survey provided by the Channing Bete Company, Inc. Results of the 1999 and 2003 surveys can be found on the NJ DHS/DAS website at http://www.state.nj.us/humanservices/das/das reports.html. County and state-level drug and alcohol coordinators use information from the survey to plan tailored prevention programs for New Jersey's youth population. In addition, the NJ DHS/DAS uses the data to complete the Federal application for block grant funding and for disbursement of funds within the State for prevention and planning purposes.

Data from the New Jersey High School Risk and Protective Factor Survey is highly comparable to that collected during the fall 2006 Youth Tobacco Survey conducted by the New Jersey Department of Health and Senior Services (NJDHSS), Comprehensive Tobacco Control Summary Program. reports are available on the NJDHSS web site at www.state.ni.us/health/as/ctcp/research.htm. In addition, the New Jersey Department of Education (NJDOE) has collected biennial data concerning student health in the ninth through twelfth grades since 1993. The New Jersey Student Health Survey, previously known as the Youth Risk Behavior Survey, features core questions promulgated nationally by the Centers for Disease Control and Prevention (CDC) concerning student self reports on their attitudes and behaviors in areas that are highly related to preventable illness and premature death. While the questions are asked differently from those on the New Jersey High School Risk and Protective Factor Survey, the responses do provide a means to examine changes in student use with increasing age and grade. Results of the biennial NJ Student Health Survey can be found at www.nj.gov/njded/students/safety/health/reporting.shtml. Finally, from 1980 to 1998, the New Jersey Department of Law and Public Safety, Division of Criminal Justice conducted the triennial Survey of Drug and Alcohol Use Among New Jersey High School Students. Findings of the spring 1998 survey can be found at www.state.nj.us/lps/dcj/dahs1230.htm.

#### B. Study Design and Methods

The following information outlines the major aspects of the study design, methods, field procedures, and participation rates. More detailed information can be found in a technical report on the administration of the 2008 survey, entitled "2008 New Jersey High School Risk and Protective Factor Survey Technical Report: Procedures, Challenges, and Recommendations" provided to the NJDHS/DAS by BCSR.

#### **Sampling Design**

BCSR aimed to conduct the survey with a targeted sample of 83 high schools randomly selected throughout the state. The sample of schools was stratified by county. BCSR used a multi-stage sampling design. For high schools, a sampling ratio of 1-to-6 schools was used with a minimum of three schools when a county had 17 or fewer schools.

Using this sampling approach, the target number of high schools selected was 83 with county samples ranging from 3 to 8 schools. Schools were selected systematically with probability proportional to enrollment in grades 9 through 12 using a random start. At the school level, sampling with replacement was used so that if a school refused to participate, the next school in the list of schools was selected to participate. A total of 126 high schools were recruited for survey participation.

The goal was to obtain weighted percentage data within each county that represented the total student population in the county with a margin of error at approximately +/- 5.0 percentage points at a 95% confidence interval. Within schools, a targeted 60% student response rate was assumed in calculating the total number of students to participate per county.

This method assumed that all schools were recruited prior to any survey administration. Since this was not possible, estimates for sample sizes were made based on school enrollment and weighted adjustments were made to the final dataset. The total number of high school students intended to be sampled was 12,736. Assuming a 60% response rate, 7,640 students were expected to complete the survey.

The final participating sample included 70 high schools with the forecasted goals of school participation achieved in 11 of the 21 counties. Overall, 7,455 students submitted surveys in those 70 participating schools. Student participation rates met or exceeded the 60% response rate goal in 15 of the 21 counties.

#### **Field Procedures**

BCSR staff members began contacting school superintendents and principals in September 2007 to obtain permission to conduct the survey at the school. Once a school agreed to participate, a list of all classes was provided to BCSR. Classes were then randomly selected in a manner that assured that all students were eligible for selection into the sample.<sup>1</sup> BCSR staff administered the survey in each randomly-selected classroom at sampled schools between November 2007 and June 2008.

It should be noted that the administration of the survey was conducted under standards established by state law *N.J.S.A.* 18A:36-34 which requires active parental consent for student participation – meaning that students could only participate if they returned a signed consent form from a parent/guardian. The parental consent requirement may act as a screening process whereby students not participating in the survey are the students who fail to bring home or return permission forms necessary for participation. At the same time, there is another group of students who are excluded because their parents have chosen not to consent to participation

<sup>&</sup>lt;sup>1</sup> All classes in a required subject *or*, depending on the school's choice, all classes meeting during a particular period of the day were included in the sampling frame. Systematic equal probability sampling with a random start was used to select classes from each school that participated in the survey.

in this survey. While there is no empirical evidence to support the notion that these groups of students differ in any way from students who do return their consent form allowing survey participation, the active parental consent process creates an obvious screening criteria for inclusion in this study. Both of these non-participating groups are small. Overall, the majority of all students (67.8%) returned a form that permitted participation; 4.6% returned a form that did not consent to participation, and 27.6% did not return a form at all.

Participating schools were provided with parent consent letters and survey fact sheets to send home with students. In all cases, documented parental consent was required for a student to participate, consistent with New Jersey statute. Any student who did not want to participate on the day of administration was also excused.

The questionnaires were completely anonymous and confidential and, once completed, procedures were followed to protect the confidentiality of subjects and their data. All procedures are reviewed and approved on an annual basis by Rutgers University's Institutional Review Board (IRB) for compliance with federal guidelines for the treatment of human subjects. Participation is voluntary. Questionnaires are self-administered and formatted for optical scanning.

#### **Participation Rates**

For the 70-school sample, 8,550 of the 11,810 students sampled (72.4%) returned their parent consent forms. Among students who did return the parent consent form, most parents (93.6%, n=8,004) agreed to participate. A total of 546 parents refused permission (6.4%). There did not seem to be any common characteristics of schools with higher percentages of refusals.

Actual participation in the 2008 NJ HS RPFS totaled 7,455 students. This represents 63.1% of the students included in the sampled classes. Of the students who returned a consent form that was marked 'Yes', 6.8% of those students were absent on the day of administration. In prior years, response rates on the NJ DHS DAS administration of the 'Communities that Care' survey for middle school students, response rates have been a concern. In 2003, the school participation rate of 32.2% and student response rate of 40.2% led to an overall participation rate of 12.9%.

With 70 of 126 schools participating (55.6% school participation rate) and 7,455 of 11,810 students returning a completed questionnaire (63.1% student participation rate), the final overall survey response rate was 35.1% (school rate x student rate), or almost 3 times greater than the last statewide Communities That Care Survey (12.9%). Table 1 presents a summary of the school and student response rates by county, and the overall response rates by county. While these overall participation rates are greater than similar efforts in the past, they are lower than those rates generally regarded as acceptable to considering results as representative to a broader population. For example, CDC requires a 60% overall response rate on its Youth Risk Behavior Survey as a cut-off for having data weighted to the state's student population. Therefore, since response rates were lower than these conventions, the possibility exists that a participation bias at either the school and/or student level may impact the results of the study. State, county and community representatives should consider these response rates and their potential bias on results when using the NJ HS RPFS report in any prevention planning efforts.

COUNTY	# Schools Selected	Target	# Agreed	# Schools Completed	School Rate	# Students Completed	Student Rate	Overall Rate
Atlantic	4	3	3	3	75.0%	398	64.6%	48.5%
Bergen*	14	8	7	7	50.0%	512	66.4%	33.2%
Burlington	4	4	4	4	100.0%	420	64.1%	64.1%
Camden	5	5	5	5	100.0%	484	68.7%	68.7%
Cape May*	5	3	2	2	40.0%	224	53.2%	21.3%
Cumberland*	6	3	3	3	50.0%	326	62.0%	31.0%
Essex	8	6	5	5	62.5%	284	61.6%	38.5%
Gloucester	5	3	3	3	60.0%	482	70.0%	42.0%
Hudson	7	4	4	4	57.1%	526	79.9%	45.7%
Hunterdon	3	3	3	3	100.0%	432	64.9%	64.9%
Mercer*	6	3	3	3	50.0%	369	62.2%	31.1%
Middlesex*	8	5	2	2	25.0%	190	68.4%	17.1%
Monmouth	7	6	5	5	71.4%	333	59.9%	42.8%
Morris*	7	4	2	2	28.6%	157	46.0%	13.2%
Ocean	7	4	4	4	57.1%	434	66.4%	37.9%
Passaic	3	3	3	3	100.0%	356	50.4%	50.4%
Salem*	5	3	2	2	40.0%	295	68.0%	27.2%
Somerset*	7	3	2	2	28.6%	262	52.6%	15.0%
Sussex*	6	3	2	2	33.3%	323	70.1%	23.4%
Union	4	4	4	4	100.0%	404	60.5%	60.5%
Warren*	5	3	2	2	40.0%	244	54.0%	21.6%
TOTAL	126	83	70	70	55.6%	7455	63.1%	35.1%

 Table 1: Disposition by County: Summary of School and Student Response Rates

As shown in Table 1, overall survey response rates ranged from a high of 68.7% in Camden County to a low of 13.2% in Morris County<sup>\*</sup>. While it is not possible to ascertain differences between survey responders and non-responders, BCSR would urge readers to exercise caution in interpreting data from counties with low response rates. Considering survey response rates are an important element in determining the quality of data collected, these rates must be considered when looking at survey analysis on the data compiled in the study.

The cut-off rate for adequate performance was determined by the mean for all counties (35.1%).<sup>2</sup> An adequate overall response rate was not reached in ten of the 21 counties. All counties whose response rates were less than the State mean are listed below and are marked with an asterisk (\*) throughout this report. Results for these counties should not be considered as representative of the county overall:

- Morris\* (13.2%)
- Somerset\* (15.0%)
- Middlesex\* (17.1%)
- Cape May\* (21.3%)
- Warren\* (21.6%)

- Sussex\* (23.4%)
- Salem\* (27.2%)
- Cumberland\* (31.0%)
- Mercer\* (31.1%)
  - Bergen\* (33.2%)

<sup>&</sup>lt;sup>2</sup> After reviewing the overall response rates, counties fell into two distinct groups. The ten lower performing counties (noted by \* throughout the report) had an overall response rate of 23.8% while the 11 higher performing counties had an overall response rate of 48.9%.

#### C. Questionnaire

#### Background

From 1999 to 2003, the New Jersey Division of Addiction Services administered the Communities That Care Youth Survey (CTCYS) in a sample of high schools on three occasions (1999, 2001, and 2003). The CTCYS instrument was developed out of a multi-state study funded by the Center for Substance Abuse Prevention (CSAP) in order to assess a wide range of risk and protective factors. Prior research had shown that a number of constructs exist to adequately predict the initiation of substance use and anti-social behaviors (Coie et al., 1993; Durlak, 1998; Hawkins, Arthur, and Catalano, 1995; Hawkins, Catalano, and Miller, 1992; Kellam, Koretz, and Moscicki, 1999; Mrazek and Haggerty, 1994).<sup>3</sup> During the CSAP project it was determined that no existing instrument measured the necessary array of risk and protective factors needed to focus prevention programs across geographic areas and subpopulations (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002).<sup>4</sup> The instrument includes risk and protective factors that show the strongest correlations to drug use, including feelings about school and their neighborhood; self-reported and peer use of tobacco, drugs, and alcohol; and the availability of such substances. The original CTCYS includes 333 items measuring 32 constructs, or risk and protective factors depending on whether behavior is influenced negatively or positively.

Since the development of the Communities That Care Youth Survey in 1992, the instrument has been revised and condensed into the Pride Risk and Protective Factors Survey (RPF). Dr. Jack Pollard, one of the original developers of the CTCYS, led the charge to shorten the original 12-page survey into a more manageable four pages (the Pride RPF). To do this, Pollard considered the practicality of administration (four pages can be completed in one class

Durlak, J. A. (1998). Common risk and protective factors in successful prevention programs. *American Journal of Orthopsychiatry* 68 (4): 512-20.

Hawkins, J.D., Arthur, M.W., & Catalano, R.F. (1995). Preventing substance abuse. In *Crime and justice: Vol. 19. Building a safer society: Strategic approaches to crime prevention*, edited by M. Tonry and D. Farrington, 343-427. Chicago: University of Chicago Press.

Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin* 112 (1): 64-105.

Kellam, S. G., D. Koretz, & E. K. Moscicki. 1999. Core elements of developmental epidemiologically based prevention research. *American Journal of Community Psychology* 27 (4): 463-82.

Mrazek, P.J., Haggerty, R.J. eds., & Committee on Prevention of Mental Disorders, Institute of Medicine. (1994). *Reducing risks for mental disorders: Frontiers for prevention intervention research*. Washington, DC: National Academy Press.

<sup>4</sup> Arthur, M.W., Hawkins, J.D., Pollard, J.A., Catalano, R.F., & Baglioni, A.J. (2002). Measuring risk and protective factors for substance use, delinquency, and other adolescent problem behaviors: The Communities That Care Youth Survey. *Evaluation Review*, 26, 575-601. Retrieved April 7, 2008, from <a href="http://www.pridesurveys.com/supportfiles/CTC\_reliability.pdf">http://www.pridesurveys.com/supportfiles/CTC\_reliability.pdf</a>.

<sup>&</sup>lt;sup>3</sup> Coie, J.D., Watt, N.F., West, S.G., Hawkins, J.D., Asarnow, J.R., Markman, H.J., Ramey, S.L., Shure, M.B., & Long, B. (1993). The science of prevention. A conceptual framework and some directions for a national research program. *American Psychologist* 48 (10): 1013-22.

period), political and communities issues around measuring sensitive topics (e.g., family conflict), whether intervention is possible (e.g., *Sensation Seeking* is interpreted as more of a personality trait rather than a risk factor), and the degree of importance to the domain (e.g., *Opportunities for Positive Involvement* in the community is less important factor than the community's *Laws and Norms Favorable to Drug Use*). Finally, the instrument was tested to determine that the items reliably and efficiently measured the constructs intended (Arthur et. al., 2002). In all, the final four-page RPF survey included 121 items measuring 29 risk and protective factor constructs.

Per Pride Surveys, more than 8,000 individual schools and school systems have used its surveys since 1982.<sup>5</sup> Moreover, in 1999, Pride Surveys were selected by Congress "as an official measure of adolescent drug use in the nation." The CTCYS and four-page RPF survey is appropriate for adolescents aged 11 through 18 and allows for the analysis of risk and protective factors at different ages (Arthur et. al., 2002). As a result, federal, state, and local agencies have found these factors to be useful for prevention needs assessments and the planning of prevention programs.

In 2006, the Division of Addiction Services switched from the CTCYS to the Pride RPF. The current 73-item questionnaire, published by Pride Surveys, is a revised version of the final RPF survey and has been customized with recommendations from DAS. This instrument includes 20 risk and five protective factors. Chapters 1-3 present the prevalence summaries of New Jersey high school students' use of drugs, participation in antisocial behaviors, and gambling activities, respectively. Chapter 4 presents analysis of the instrument's risk and protective factor items, as well as graphical representations of the impact of risk and protective factor scores on substance use.

#### **Risk and Protective Factor Scales**

The New Jersey High School Risk and Protective Factor Survey contains four overarching domains – Community, Family, School, and Peer-Individual – for the 20 risk factors and two overarching domains – School and Peer-Individual – for the five protective factors. Multiple survey items comprise each of these factors and there was a minimum number of questions that must be answered in order to calculate a scale score for that factor. BCSR computed scale scores for each risk and protective factor, their respective domains, and summary risk and protective factor scores, which were created by combining all 20 risk factors and all 5 protective factors, respectively.

Risk factors are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior. These variables have been standardized to a 0 to 1 scale. Each question was scored so that the most negative behaviors received the highest score. It is important to note that risk and protective factors are interpreted differently. *The higher the score on a risk factor, the more likely the student is 'at-risk' for using drugs or participating in delinquent behaviors.* 

Protective factors are characteristics of the students' school, and peer relationships that have been associated with reducing the likelihood of experimentation with alcohol, tobacco, and

<sup>&</sup>lt;sup>5</sup> Pride Surveys. *Why use Pride Surveys?*. Retrieved April 7, 2008, from <u>http://www.pridesurveys.com/</u>.

other drugs and antisocial behavior. Each question was scored so that the most positive behaviors received the highest score. For example, if a student indicated that she had done community service 40 or more times in the last year, then this would be scored as a 1. The higher the score on a protective factor, the more likely the student is to be 'protected' from negative behaviors, such as using drugs and participating in antisocial activities.

### D. Weighting

This section outlines the steps used to generate the school/student weights used for the study to make the raw data more representative of the New Jersey high school student population at the county and statewide level:

#### **Overview of Weighting Procedure**

The sampling and weighting strategies for this survey were designed and implemented to produce survey estimates that would be representative of the population of 9<sup>th</sup> through 12<sup>th</sup> grade students enrolled in public (non-charter) schools with 40 or more students in the state. The analysis of the survey data examines individual county level and state level data so the data were weighted to be representative of the 9<sup>th</sup> through 12<sup>th</sup> grade public school population at each level. The sample for the survey was designed to produce county and state level estimates and required that the data be weighted to compensate for the designed sample disproportionality at the county level.

The sample was a school-based sample selected at the county level. Schools within counties were selected with probabilities proportionate to enrollment size and, to the extent possible given school enrollment size, students were sampled equally across the selected schools within each county. Classes of students were selected randomly from among all 9<sup>th</sup> through 12<sup>th</sup> grade period two classes at each sampled school and attempts were made to collect completed surveys from all students within each sampled class.

There are two components to the weighting procedure: (a) one adjustment is associated with school/student probability of selection, and (b) the other adjustment is to insure demographic comparability. A weight is associated with each questionnaire to reflect the likelihood of sampling each student. The sample is weighted by the probability of selection at the school and classroom level and to reflect the county and state student population parameters. The weight used for estimation is given by:

- W1 = the inverse of the probability of selecting the school;
- W2 = the inverse of the probability of selecting the classroom within the school;
- f1 = a post-stratification adjustment factor calculated by gender within grade and by race/ethnicity.

The weighted percentages used in this report are a more accurate reflection of the total New Jersey high school population than if the results were to be used in their non-weighted form. Although the response rate only reached 35.1%, weighting the data in this manner allows the weighted results to more closely match the attitudes and behaviors of all regular public

school students in grades 9 through 12 in New Jersey to improve inferences concerning the substance use prevalence.

The sampling strategy is an equal probability of selection method in design involving three stages of adjustments. The county level sample is first weighted by the probability of selection at the school and student level. Additionally, weighting on student demographic characteristics was necessary at the county level to mitigate the effects of student and school selection on the survey estimates. Finally, state level weighting was necessary to ensure that the weighted sample estimates would accurately represent the entire student population in the state. The calculation of sample and demographic weights was accomplished in multiple stages and different weights are calculated for analysis at the county level and the state level. More information on the specific steps used to calculate weight coefficients are presented in "2008 New Jersey High School Risk and Protective Factor Survey: Weighting Procedures and Statistical Tabulations."

#### E. Profile of High School Students

As discussed, the survey results are representative of all New Jersey high school students in grades 9 through 12. Overall, 7,259 of the 7,455 completed surveys (97.4%) were eligible for analysis. Reasons for ineligibility include the following:

- incomplete surveys (answering less than 60% of the survey questions);
- use of *derbisol* (a fictitious drug used in questionnaires to test the reliability of answers received by students);
- two or more inconsistent affirmative responses to drug questions (e.g., indicating use of a particular drug in the last 30 days for one question and indicating *no use* in the last 12 months); or,
- unscannable forms.

The weighted and unweighted demographic characteristics of the sample are included in Table 2 below.

**Age:** The students ranged in age from 12 years old to 19 years old. Overall, 14.5% of the students were 14 or younger, 25.1% were 15 years old, 23.2% were 16 years old, 23.0% were 17 years old and 14.1% were 18 or older.

**Grade:** Based on weighted demographic data, the students were fairly evenly split between  $9^{th}/10^{th}$  grade (52.8%) and  $11^{th}/12^{th}$  grade (47.2%).

**Sex:** Overall, an equivalent number of males (50.4%) and females (49.6%) responded to the survey.

**Race/Ethnicity:** Based on weighted demographic data, 58.7% were White, 16.7% were Black or African-American, 17.0% were Hispanic or Latino (including Hispanics who also identified with a race or multiple races), 7.6% were some other race/ethnicity (including Asians, Native Hawaiian/Pacific Islanders and American Indian/Alaskan Natives and non-Hispanic students who identified with multiple races).

Table 2: Profile of High school students in the 2008 New Jersey High School Risk andProtective Factor Survey

	Demographic Group	Sample (n)	Sample %	Weighted %
CENDER	Female	3896	55.1	49.6
GENDER	Male	3174	44.9	50.4
	14 Years Old or Younger	958	13.2	14.6
	15 Years Old	1721	23.7	25.1
AGE	16 Years Old	1726	23.8	23.2
	17 Years Old	1825	25.2	23.0
	18 Years Old or Older	1017	14.0	14.1
CRADE	9 <sup>th</sup> /10 <sup>th</sup>	3580	49.3	52.8
GRADE	11 <sup>th</sup> /12 <sup>th</sup>	3679	50.7	47.2
	Black	713	9.9	16.7
	Hispanic/Latino	1418	19.8	17.0
	White	4094	57.0	58.7
	Other	957	13.3	7.6

## Chapter 1: Alcohol, Tobacco and Other Drug Use

#### A. Presentation of the Findings

The following section presents the findings on alcohol, tobacco, and other drug use collected by the *2008 New Jersey High School Risk and Protective Factor Survey*. The survey focuses on New Jersey high school students, specifically 9<sup>th</sup> through 12<sup>th</sup> graders. The drug information collected includes the prevalence and frequency of use of alcohol, tobacco, marijuana, inhalants, prescription drugs without a prescription, cocaine, methamphetamines, amphetamines and tranquilizers/sedatives,<sup>6</sup> hallucinogens, heroin, steroids, ecstasy, OxyContin, and club drugs.

Many of the items on the 2008 New Jersey High School Risk and Protective Factor Survey were comparable to the Monitoring the Future survey, a national study of drug use by middle and high school students conducted each year by the University of Michigan's Institute for Social Research's Survey Research Center. The survey provides data on the national prevalence of use for alcohol, tobacco, and other illicit drugs (ATOD) using a representative sample of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students. For many years, the Monitoring the Future survey served as the primary reference for determining the ATOD use among adolescents in the United States. Readers should keep in mind the Monitoring the Future survey was conducted in Spring 2007 and the NJ HS RPFS was conducted in Fall 2007 and Spring 2008. In addition to difference in study field periods, it is important to note the Monitoring the Future survey includes students in 10<sup>th</sup> and 12<sup>th</sup> grades while the NJ HS RPFS includes 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students.

The use of ATODs by high school students in New Jersey is shown in Tables 3 to 24. Students' ATOD use is shown in two distinct ways – by prevalence tables and by frequency tables.

1. **Prevalence tables** display the percentage of students who reported use of a drug at least once in the specified time period. These results are presented for three prevalence periods: *lifetime* (whether the student has ever used the substance); *past year* (whether the student has used the substance within 12 months prior to the survey date); and, *past 30 days* (whether the student has used the substance within 30 days prior to the survey date). ATOD prevalence table results are presented by grade, sex and race/ethnicity. *Caution should be taken when interpreting the results of some of these groups, especially when comparing differences, because of small subsample sizes.* 

2. **Frequency tables** illustrate the number of occasions that students reported using a particular drug in a specified time period. It is important to note that, due to rounding errors, the frequency of use for a substance (divided amongst multiple categories) does not always precisely match the prevalence of use.

County-level results are discussed throughout the report and are included in the appendices. Caution should be taken when interpreting the results from specific counties due to the low participation rates obtained in some counties. One should not assume that the findings

<sup>&</sup>lt;sup>6</sup> Amphetamines asked as "Uppers" and tranquilizers and sedatives asked as "Downers" in the survey.

reported for counties having low response rates are representative of that county. Tables in the appendices include sample sizes for each county.

#### B. Summary of the Alcohol, Tobacco and Other Drug Findings

Tables 3 and 4 display the results from the 2008 NJ HS RPFS while national comparative results from the 2007 Monitoring the Future survey are presented in Table 5. As shown in Table 5, New Jersey 10<sup>th</sup> and 12<sup>th</sup> grade students reported lower levels of use for many substances than those reported in the 2007 Monitoring the Future study. It is important to note that the Monitoring the Future data are based on 10<sup>th</sup> and 12<sup>th</sup> grade students only. Comparisons of national 10<sup>th</sup> grade students are made with the combination of New Jersey's 9<sup>th</sup> and 10<sup>th</sup>, and those of national 12<sup>th</sup> grade students are made with the combination of New Jersey's 9<sup>th</sup> and 10<sup>th</sup> and 12<sup>th</sup> grade data. Differences in substance use between New Jersey and national students are noted in various sections in this report and are summarized in Table 5.

Each of the substances displayed in Table 3 are discussed in greater detail in the following sections. Tables 6 through 13 show the lifetime, past year, and use in the past 30 days of alcohol, tobacco and other drugs. Use in the 30 days prior to the survey date was only asked for alcohol, cigarettes, marijuana, cocaine, and methamphetamines.

		9 <sup>th</sup> /10 <sup>th</sup>		11 <sup>th</sup> /	<b>′12<sup>th</sup></b>	Ove	rall
		Ν	%	n	%	n	%
Alcohol	Lifetime	3457	64.3	3611	80.9	7068	72.1
	Past Year	3388	54.8	3554	72.1	6942	63.1
	Past 30 Days	3461	38.9	3581	53.7	7042	45.9
Cigarettes	Lifetime	3530	26.0	3633	39.5	7163	32.4
	Past Year	3531	20.3	3632	31.2	7163	25.4
	Past 30 Days	3542	14.0	3635	22.1	7177	17.8
Marijuana	Lifetime	3521	19.6	3633	41.0	7154	29.7
-	Past Year	3512	17.1	3610	33.6	7122	24.9
	Past 30 Days	3528	10.9	3622	23.0	7150	16.6
Inhalants	Lifetime	3543	4.6	3662	4.9	7205	4.8
	Past Year	3555	2.8	3669	2.4	7224	2.6
Prescription Drugs	Lifetime	3500	12.6	3620	17.4	7120	14.8
w/o Prescription	Past Year	3535	10.0	3645	13.8	7180	11.8

## Table 3: Summary of the Prevalence of Use of Primary Substances for the 2008 NewJersey High School Risk and Protective Factor Survey

Note: "n" represents the unweighted number of responses for a given survey item, and '%' represents the weighted percentage of students reporting use.

		9 <sup>th</sup> /10 <sup>th</sup>		11 <sup>th</sup> /	/12 <sup>th</sup>	Overall	
		n	%	n	%	n	%
Cocaine	Lifetime	3548	2.1	3656	5.5	7204	3.7
	Past Year	3554	1.8	3668	4.2	7222	2.9
	Past 30 Days	3552	1.0	3647	2.3	7199	1.6
Methamphetamines	Lifetime	3511	0.8	3632	0.4	7143	0.6
-	Past Year	3548	0.5	3658	0.2	7206	0.4
	Past 30 Days	3554	0.3	3648	0.1	7202	0.2
Amphetamines	Lifetime	3553	2.0	3660	5.9	7213	3.9
	Past Year	3564	1.4	3669	4.1	7233	2.7
Sedatives	Lifetime	3551	2.5	3658	6.7	7209	4.5
	Past Year	3562	1.6	3669	4.9	7231	3.2
Hallucinogens	Lifetime	3554	1.3	3664	3.9	7218	2.6
-	Past Year	3563	0.9	3668	3.2	7231	2.0
Heroin	Lifetime	3554	0.4	3665	1.1	7219	0.7
	Past Year	3565	0.2	3671	0.9	7236	0.5
Steroids	Lifetime	3553	1.2	3662	1.0	7215	1.1
	Past Year	3566	0.8	3671	0.7	7237	0.7
Ecstasy	Lifetime	3552	1.9	3660	5.3	7212	3.5
-	Past Year	3565	1.7	3667	4.1	7232	2.8
OxyContin	Lifetime	3546	2.5	3657	5.7	7203	4.0
	Past Year	3560	2.2	3661	4.6	7221	3.3
Club Drugs	Lifetime	3554	0.6	3661	1.7	7215	1.1
-	Past Year	3562	0.3	3669	1.0	7231	0.6
Total of Other Illicit Drugs	Lifetime	3557	7.0	3668	13.8	7225	10.2
-	Past Year	3568	5.5	3674	10.9	7242	8.0

# Table 4: Summary of the Prevalence of the Use of Other Illicit Drugs for the 2008 New Jersey High School Risk and Protective Factor Survey

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use. 'Total of Other Illicit Drugs' is the combined prevalence of all the drugs listed in this table.
# Table 5: Lifetime, Past Year and Use in the Past 30 Days of Alcohol, Tobacco and Other Drugs from the 2008 NJ HS RPFS Compared to the 2007 "Monitoring the Future" Study

	2008 NJ Sur	HS RPF vev	2007 Monitor Su	rg the Future ey <u>12<sup>th</sup></u> % 72.2 46.2 41.8 10.5 6.5		
	9 <sup>th</sup> /10 <sup>th</sup>	11 <sup>th</sup> /12 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>		
	%	%	%	%		
Lifetime Use						
Alcohol	64.3	80.9	61.7	72.2		
Cigarettes	26.0	39.5	34.6	46.2		
Marijuana	19.6	41.0	31.0	41.8		
Inhalants	4.6	4.9	13.6	10.5		
Ecstasy	1.9	5.3	5.2	6.5		
Cocaine or Crack*	2.1	5.5	5.3	7.8		
Heroin	0.4	1.1	1.5	1.5		
Use in the Past Year						
Alcohol	54.8	72.1	56.3	66.4		
Cigarettes*	20.3	31.2	na	na		
Marijuana	17.1	33.6	24.6	31.7		
Inhalants	2.8	2.4	6.6	3.7		
Ecstasy	1.7	4.1	3.5	4.5		
Cocaine or Crack*	1.8	4.2	3.4	5.2		
Heroin	0.2	0.9	0.8	0.9		
Use in the Past 30 Days						
Alcohol	38.9	53.7	33.4	44.4		
Cigarettes	14.0	22.1	14.0	21.6		
Marijuana	10.9	23.0	14.2	18.8		
Cocaine or Crack*	1.0	2.3	1.3	2.0		

\* Note: *Monitoring the Future*<sup>7</sup> does not provide prevalence rates for the use of cigarettes in the past year. Also, MTF asks about Cocaine and Crack use in separate questions while NJ HS RPFS combines the terms in one question. Percentages shown for MTF are for cocaine use only.

<sup>&</sup>lt;sup>7</sup> Exact *Monitoring the Future* survey questions could not be obtained. Please keep this in mind when comparing the *2008 New Jersey Risk and Protective Factor High School Survey* with 2007 *Monitoring the Future* data.

## Alcohol

Alcohol, which includes beer, wine and hard liquor, is the drug used most often by adolescents. Findings for alcohol use by New Jersey high school students surveyed in 2008 are presented in Tables 6 and 7.

Among New Jersey high school students, 72.1% reported having used alcohol at some time in their lives. The lifetime rate for 11<sup>th</sup>/12<sup>th</sup> graders was higher than for 9<sup>th</sup>/10<sup>th</sup> graders (80.9% vs. 64.3%, respectively). The Monitoring the Future study found a lifetime alcohol prevalence of 61.7% for 10<sup>th</sup> graders and 72.2% for 12<sup>th</sup> graders nationwide in 2007. When compared to the findings from the 2008 New Jersey High School Risk and Protective Factor Survey, slightly more 9<sup>th</sup>/10<sup>th</sup> (64.3%) and 11<sup>th</sup>/12<sup>th</sup> (80.9%) grade students in New Jersey consumed alcohol than 10<sup>th</sup> and 12<sup>th</sup> grade students nationwide. As shown in Table 6, 45.9% of 9<sup>th</sup> through 12<sup>th</sup> graders and 38.9% of 9<sup>th</sup>/10<sup>th</sup> graders reported such use. The past 30 days prevalence rates for NJ 11<sup>th</sup>/12<sup>th</sup> graders (53.7%) and NJ 9<sup>th</sup>/10<sup>th</sup> graders (38.9%) exceed the Monitoring the Future study rates of 44.4% for national 12<sup>th</sup> graders and 33.4% for national 10<sup>th</sup> graders.

Male and female New Jersey high school students differed in reported lifetime alcohol use, with females reporting greater alcohol use (74.5% and 69.8%, respectively). The difference was smaller for use of alcohol in the past 30 days (47.3% and 44.4%, respectively).

Differences among race/ethnicity groups regarding alcohol use were evident in lifetime, past year and use in the past 30 days. For each timeframe, White students were more likely than other students to report using alcohol. For lifetime use, White (75.7%) and Hispanic (75.2%) students were more likely to report lifetime use than African-American (64.0%) students or students of *other race/ethnic backgrounds* (55.2%). Results for use in the past 30 days showed White students were still most likely to report such use (52.1%) and African-American (31.7%) students and students of *other race/ethnic backgrounds* (32.4%) were least likely, but Hispanic students were in the middle at 44.5%.

Lifetime alcohol use rates varied somewhat across counties with the largest difference between counties at 15.1% (Table A1). Monmouth County had the highest lifetime prevalence rate at 80.2%, followed by Ocean County at 78.1%. The lowest lifetime rates were found in Mercer County\* (66.2%) and Essex County (65.1%). Monmouth County also had the highest rate in the past 30 days (59.2%) which was nearly two times higher than the findings for Essex County, the county with the lowest past 30 days prevalence rate (31.4%). However, because of low response rates in some counties caution must be used when interpreting county-level findings.

Table 7 presents the frequency of alcohol use in the past 30 days. The number of occasions of use has been broken down into four categories: *Never*, *1 to 2 occasions*, *3 to 5 occasions*, and *6 or more occasions*. One quarter (25.4%) of high school students reported using alcohol on 1 or 2 occasions and one in ten reported more frequent use (10.0% for 3 to 5 uses and 10.5% for 6 or more uses). Male and female students did not differ in the frequency with which they used alcohol but there were differences between younger and older students, particularly for high frequency usage. Fourteen percent (14.1%) of 11<sup>th</sup>/12<sup>th</sup> grade students reported using alcohol on 6 or more occasions in the past 30 days, compared with 7.5% of younger students. The difference between younger and older students was slightly smaller for

less frequent use: 27.7% vs. 23.2% for 1 to 2 occasions and 11.9% vs. 8.2% for 3 to 5 occasions. White students were most likely to report frequent alcohol use (13.1%) and African-American students were least likely to report using alcohol on 6 or more occasions in the past 30 days (5.1%)

	Life	Lifetime		Past Year		0 Days
	n	%	n	%	n	%
NJ High School Students	7068	72.1	6942	63.1	7042	45.9
Grade						
9 <sup>th</sup> /10 <sup>th</sup>	3457	64.3	3388	54.8	3461	38.9
11 <sup>th</sup> /12 <sup>th</sup>	3611	80.9	3554	72.1	3581	53.7
Sex						
Male	3095	69.8	3052	60.9	3087	44.4
Female	3790	74.5	3711	65.3	3772	47.3
Race/Ethnicity						
White	4005	75.7	3949	69.2	3992	52.1
African-American	689	64.0	684	48.5	694	31.7
Hispanic	1365	75.2	1317	63.1	1350	44.5
Other	933	55.2	918	46.4	931	32.4

Table 6:	Lifetime,	Past Year,	and Use in the	he Past 30	Days of	Alcohol by	Demographi	С
Subgrou	ps							

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

### Table 7: Frequency of Alcohol Use during the Past 30 Days by Demographic Subgroups

			Prevalence		Number of Occasions		
			Never	Any Occasion	1-2	1-2 3-5	
		n	%	%	%	%	%
NJ High Sch	ool Students	7042	54.1	45.9	25.4	10.0	10.5
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3461	61.1	38.9	23.2	8.2	7.5
	11 <sup>th</sup> /12 <sup>th</sup>	3581	46.3	53.7	27.7	11.9	14.1
Sex							
	Male	3087	55.6	44.3	24.5	9.0	10.8
	Female	3772	52.7	47.2	26.2	10.8	10.2
Race/Ethnici	ty						
	White	3992	47.9	52.2	27.3	11.8	13.1
	African-American	694	68.3	31.8	19.9	6.8	5.1
	Hispanic	1350	55.5	44.4	26.1	8.9	9.4
	Other	931	67.6	32.5	20.7	5.8	6.0

## Cigarettes

After alcohol, tobacco was the most commonly used substance among surveyed New Jersey high school students in 2008. New Jersey students, however, reported substantially lower rates of lifetime cigarette smoking in comparison to the national prevalence of cigarette smoking reported in 2007. Twenty-six percent of NJ 9<sup>th</sup>/10<sup>th</sup> graders in 2008 reported lifetime cigarette smoking as compared to 34.6% of national 10<sup>th</sup> graders in 2007. Similarly, 39.5% of NJ 11<sup>th</sup>/12<sup>th</sup> grade students in 2008 smoked a cigarette as compared to 46.2% of national 12<sup>th</sup> grade students in 2007.

Table 8 presents the lifetime, past year and past 30 days prevalence rates for cigarette smoking. As shown, overall 32.4% of NJ high school students have smoked cigarettes in their lifetimes. In addition, 25.4% reported use in the past year and 17.8% reported smoking cigarettes in the past 30 days. Eleventh and 12th-grade students were more likely than 9<sup>th</sup>/10<sup>th</sup> graders to report having smoked cigarettes in their lifetime (39.5% vs. 26.0%), in the past year (31.2% vs. 20.3%) and in the past 30 days (22.1% vs. 14.0%).

Males were slightly less likely than females to have smoked cigarettes in their lifetime (30.4% vs. 34.0%, respectively), in the last year (22.2% vs. 28.2%), or in the past 30 days (16.4% vs. 19.0%). Substantial differences occurred across racial/ethnic groups, with a greater proportion of White and Hispanic students (35.6% and 35.4%, respectively) than African-American students (21.1%) or students of *other racial/ethnic backgrounds* (26.0%) reporting smoking in their lifetime. Findings for cigarette smoking in the past 30 days show that White students are still most likely to report smoking (22.4%) but there are smaller differences among the other race/ethnicity categories (15.4% for Hispanic students, 12.1% for students of *other racial/ethnic backgrounds*, and 7.0% for African-American students).

The findings at the county level indicate that Cape May\* (40.4%) and Monmouth (40.1%) counties had the highest rates for lifetime cigarette smoking while Mercer County\* (21.8%) had the lowest rate, followed by Union (22.9%) and Camden (23.5%) counties. Cape May\* (24.6%) and Monmouth (28.4%) counties also had the highest use in the past 30 days and Union had the lowest rate (9.5%).

Table 9 presents the frequency of cigarette use in the past 30 days in terms of the number of occasions on which the students smoked. Roughly one in ten (9.8%) NJ high school students reported smoking cigarettes on 6 or more occasions in the past 30 days. An additional 1.9% smoked on 3 to 5 occasions and 6.2% reported smoking on just one or two occasions. Older high school students were more likely to have smoked frequently in the past 30 days (13.5% vs. 6.3% for 9<sup>th</sup>/10<sup>th</sup> graders). Males and females did not differ in their reported frequency of smoking. White students were the most likely to smoke frequently (12.8% vs. 4.2% of African-Americans, 6.1% of Hispanics, and 6.0% of students of *other racial/ethnic backgrounds*).

Among students who reported that they had smoked cigarettes in the past 30 days, about half reported they smoked less than one cigarette per day (49.1%).

		Lifetime		Past	Past Year		0 Days
		n	%	n	%	n	%
NJ High School	Students	7163	32.4	7163	25.4	7177	17.8
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3530	26.0	3531	20.3	3542	14.0
	11 <sup>th</sup> /12 <sup>th</sup>	3633	39.5	3632	31.2	3635	22.1
Sex		1 1 1					
	Male	3125	30.4	3129	22.2	3138	16.4
	Female	3851	34.0	3846	28.2	3851	19.0
Race/Ethnicity							
	White	4044	35.6	4048	30.5	4056	22.4
	African-American	701	21.1	704	11.9	705	7.0
	Hispanic	1401	35.4	1395	24.9	1395	15.4
	Other	941	26.0	942	17.8	946	12.1

# Table 8: Lifetime, Past Year and Past 30 Days Prevalence of Cigarette Smoking by Demographic Subgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

# Table 9: Frequency of Cigarette Smoking During the Past 30 Days by DemographicSubgroups

		<i>Prevalence</i> Anv		Number of Occasions		asions
		Never	Occasion	1-2	3-5	6+
	n	%	%	%	%	%
NJ High School Students	7177	82.2	17.9	6.2	1.9	9.8
Grade						
9 <sup>th</sup> /10 <sup>th</sup>	3542	86.0	13.9	6.0	1.6	6.3
11 <sup>th</sup> /12 <sup>th</sup>	3635	77.9	22.1	6.3	2.3	13.5
Sex						
Male	3138	83.6	16.4	5.3	2.2	8.9
Female	3851	81.0	19.0	7.0	1.7	10.3
Race/Ethnicity						
White	4056	77.6	22.3	7.2	2.3	12.8
African-American	705	93.0	7.0	1.9	.9	4.2
Hispanic	1395	84.6	15.3	7.4	1.8	6.1
Other	946	87.9	12.0	4.3	1.7	6.0

## Marijuana

New Jersey students reported lower rates of marijuana use in 2008 than the Monitoring the Future students surveyed in 2007. Nearly 20% (19.6%) of NJ 9<sup>th</sup>/10<sup>th</sup> grade students in 2008 reported marijuana use as compared to 31.0% among 10<sup>th</sup> grade Monitoring the Future students 2007. Among NJ 11<sup>th</sup>/12<sup>th</sup> grade students, 41.0% used marijuana as compared to 41.8% of national 12<sup>th</sup> graders. Use in the past 30 days was 10.9% and 23.0% among 2008 New Jersey 9<sup>th</sup>/10<sup>th</sup> and 11<sup>th</sup>/12<sup>th</sup> grade students compared to 14.2% and 18.8% among 2007 Monitoring the Future 10<sup>th</sup> and 12<sup>th</sup> grade students.

Marijuana was the third most common substance used by NJ high school students in 2008. The lifetime, past year and use in the past 30 days of marijuana by demographic subgroups is presented in Table 10. Three in ten (29.7%) NJ high school students reported using marijuana in their lifetime. A similar proportion (24.9%) reported using marijuana in the past year but fewer (16.6%) reported using it in the past 30 days. Older students (11<sup>th</sup>/12<sup>th</sup> grade) were twice as likely to have used marijuana as 9<sup>th</sup>/10<sup>th</sup> grade students and this was true for all usage timeframes measured (lifetime, past year and past 30 days). Forty-one percent of 11<sup>th</sup>/12<sup>th</sup> grade students reported lifetime use compared with 19.6% of 9<sup>th</sup>/10<sup>th</sup> grade students; for past year the usage rates were 33.6% for older students and 17.1% for younger students and for the past 30 days the percentages were 23.0% and 10.9%.

Male and female high school students did not differ in reported use of marijuana during their lifetime, during the past year, or during the past 30 days. Across racial/ethnic categories, White students were most likely to report lifetime use (33.8%); Hispanic (26.6%), African-American (24.2%) and students of *other racial/ethnic backgrounds* (17.0%) reported less lifetime use. This pattern remained the same for use in the past year and past 30 days as well.

At the county level, lifetime marijuana use varied across counties with Burlington having the lowest lifetime usage rate (21.8%) and Monmouth County having the highest rate (39.6%). (See Table A1). Monmouth County also had the highest rate for past 30 days usage (23.4%); Passaic and Salem\* counties had the lowest rates at 10.4% and 10.7%, respectively.

Table 11 summarizes the frequency of marijuana use during the past 30 days. One in ten (9.6%) NJ high school students reported using marijuana three or more times in the past 30 days and an additional 7.1% reported using marijuana one or two times during this period. There was no difference between male and female students in reported frequency of use in the past 30 days but 11<sup>th</sup>/12<sup>th</sup> grade students were more likely than 9<sup>th</sup>/10<sup>th</sup> grade students to report using 1 or 2 times (9.5% vs. 4.9%) and also more likely to report more frequent use (13.4% vs. 5.9%) in the past 30 days. There was no difference across racial/ethnic groups with respect to use of marijuana one or two times in the past month but White students were most likely (11.6%) and students of *other racial/ethnic backgrounds* (4.8%) were least likely to report using marijuana on 3 or more occasions during this time period.

	Lifetime		Past	Year	Past 3	0 Days
	n	%	n	%	n	%
NJ High School Students	7154	29.7	7122	24.9	7150	16.6
Grade						
9 <sup>th</sup> /10 <sup>th</sup>	3521	19.6	3512	17.1	3528	10.9
11 <sup>th</sup> /12 <sup>th</sup>	3633	41.0	3610	33.6	3622	23.0
Sex						
Male	3122	30.6	3112	25.3	3128	17.4
Female	3846	28.8	3824	24.2	3835	15.8
Race/Ethnicity						
White	4045	33.8	4029	29.4	4044	19.6
African-American	702	24.2	695	18.7	698	13.1
Hispanic	1388	26.6	1386	19.9	1390	12.8
Other	942	17.0	939	14.7	944	10.3

# Table 10: Lifetime, Past Year and Past 30 Days Prevalence of Marijuana Use by Demographic Subgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

# Table 11: Frequency of Marijuana Use during the Past 30 Days by DemographicSubgroups

		Prevalence					
		Never	1 or 2 times	3+ times			
	n	%	%	%			
NJ High School Students	7150	83.4	7.1	9.6			
Grade							
9 <sup>th</sup> /10 <sup>th</sup>	3528	89.1	4.9	5.9			
11 <sup>th</sup> /12 <sup>th</sup>	3622	77.0	9.5	13.4			
Sex		1 1 1					
Male	3128	82.6	7.1	10.3			
Female	3835	84.2	7.0	8.8			
Race/Ethnicity							
White	4044	80.4	7.9	11.6			
African-American	698	86.9	5.9	7.2			
Hispanic	1390	87.2	6.1	6.8			
Other	944	89.7	5.6	4.8			

## **Prescription Drugs without a Prescription**

Findings on prescription drug use without a prescription among NJ high school students are presented in Table 12. Fifteen percent (14.8%) of NJ high school students reported lifetime prescription drug use without a prescription and 11.8% reported use in the past year.

As with the other substances measured in the survey,  $11^{th}/12^{th}$  grade students were more likely to report using prescription drugs without a prescription than  $9^{th}/10^{th}$  grade students, both for lifetime use (17.4% vs. 12.6%) and for use in the past year (13.8% vs. 10.0%). Female students were more likely than male students to report lifetime usage (17.2% vs. 12.5%) and past year usage (13.7% vs. 10.1%) although, as with grade level, this difference was fairly small. White students were most likely and African-American students were least likely to report prescription drug use during their lifetime (17.4% vs. 7.7%) and during the past year (14.6% vs. 4.7%).

County-level findings on prescription drugs without a prescription showed that Cape May\* (21.9%) and Atlantic (20.2%) counties had the highest rates for lifetime use while Essex (10.7%) and Union (9.8%) counties had the lowest rates.

		Lifet	Lifetime		Year
		n	%	n	%
NJ High S	chool Students	7120	14.8	7180	11.8
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3500	12.6	3535	10.0
	11 <sup>th</sup> /12 <sup>th</sup>	3620	17.4	3645	13.8
Sex					
	Male	3117	12.5	3143	10.1
	Female	3823	17.2	3854	13.7
Race/Ethr	nicity				
	White	4030	17.4	4061	14.6
	African-American	696	7.7	698	4.7
	Hispanic	1386	14.2	1404	10.3
	Other	932	12.0	942	8.7

# Table 12: Lifetime and Past Year Prevalence of Prescription Drug Use by Demographic Subgroups

## Inhalants

New Jersey students reported substantially lower rates of inhalant use in 2008 than the Monitoring the Future students surveyed in 2007. Five percent (4.6%) of NJ 9<sup>th</sup>/10<sup>th</sup> grade students in 2008 used inhalants as compared to 13.6% of Monitoring the Future 10<sup>th</sup> grade students in 2007. Among NJ 11<sup>th</sup>/12<sup>th</sup> grade students, 4.9% reported inhalant use in 2008 as versus 10.5% of national 12<sup>th</sup> grade students in 2007. Past Year use of inhalants was 2.8% among 2008 New Jersey 9<sup>th</sup>/10<sup>th</sup> graders and 2.4% among 11<sup>th</sup>/12<sup>th</sup> graders compared to 6.6% among 2007 Monitoring the Future 10<sup>th</sup> graders and 3.7% among 12<sup>th</sup> graders.

After alcohol, cigarettes, marijuana, and prescription drugs without prescriptions, inhalants were the fifth most commonly used drug among surveyed New Jersey high school students (Table 13), although prevalence rates for this substance were much smaller than for the other substances. Overall, 4.8% of students reported using inhalants sometime in their lifetime and 2.6% reported using them some time in the past year. Little variation was shown by grade or gender. Hispanic (6.0%) and White (5.5%) students reported the greatest rate of use while African-American students had the least (1.0%). This is the only drug of the top five where there is no difference between  $11^{th}/12^{th}$  grade students and  $9^{th}/10^{th}$  grade students.

County-level findings on inhalant use are presented in Table A1. Cape May<sup>\*</sup> (8.0%) and Somerset<sup>\*</sup> (7.8%) counties reported the highest use of inhalants while Union (1.9%) and Camden counties reported the lowest rates of inhalant use (1.7%).

		Lifetime		Past Year	
		n	%	n	%
NJ High S	School Students	7205	4.8	7224	2.6
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3543	4.6	3555	2.8
	11 <sup>th</sup> /12 <sup>th</sup>	3662	4.9	3669	2.4
Sex					
	Male	3144	4.0	3160	2.1
	Female	3873	5.6	3877	3.2
Race/Eth	nicity				
	White	4060	5.5	4073	3.3
	African-American	710	1.0	711	.6
	Hispanic	1407	6.0	1411	2.5
	Other	951	4.4	953	2.4

### Table 13: Lifetime and Past Year Prevalence of Inhalant Use by Demographic Subgroups

## **Other Illicit Drugs**

The Other illicit drugs category includes cocaine or crack, Ecstasy, methamphetamines, other club drugs, OxyContin, hallucinogens, heroin, amphetamines, sedatives/tranquilizers, and steroids. Tables 14 through 24 present the results for these drugs. Overall, the use of these other illicit drugs was much lower than the rates for alcohol, tobacco, marijuana, and non-medical prescription drugs. The prevalence rates for lifetime use of these other illicit drugs were all 4% or less among the NJ high school students surveyed, closer to the lifetime usage rate for inhalants.

## Sedatives/Tranquilizers

Table 14 reports the findings for prevalence of sedatives/tranquilizers use among New Jersey high school students. Of all the 'other illicit drugs', sedatives/tranquilizers were the most commonly used among NJ high students, although the prevalence rate was still less than 5% for lifetime use. Four percent (4.5%) reported using sedatives/tranquilizers in their lifetime while a slightly smaller proportion (3.2%) used them in the past year. Older students were more likely than younger students (6.7% vs. 2.5%) and White students were more likely than African-American, Hispanic, and students of *other racial/ethnic backgrounds* (6.3% vs. 0.8%, 3.1%, 2.0%) to report lifetime use. The same pattern of sub-group differences was also seen with past year usage.

## OxyContin

Table 15 reports the lifetime and past year prevalence rates of OxyContin use by high school students. These rates are similar to use of sedatives/tranquilizers; 4.0% of 9<sup>th</sup> through 12<sup>th</sup> grade students reported having used OxyContin in their lifetime and 3.3% reported having used it in the past year. Older students were more likely than younger students (5.7% vs. 2.5%) and White students were more likely than African-American, Hispanic, and students of *other racial/ethnic backgrounds* (5.9% vs. 0.3%, 2.0%, 1.9%) to report lifetime use. The same pattern of sub-group differences was also seen with past year usage.

## Amphetamines

Table 16 reports the findings for prevalence of amphetamine use among New Jersey high school students. Four percent (3.9%) of 9<sup>th</sup> through 12<sup>th</sup> graders reported using amphetamines in their lifetime. Past year use was slightly less with 2.7% of students using amphetamines in the past year. Older students were more likely than younger students (5.9% vs. 2.0%) and White students were more likely than African-American, Hispanic, and students of *other racial/ethnic backgrounds* (5.9% vs. 0.1%, 1.7%, 1.7%) to report lifetime use. The same pattern of sub-group differences was also seen with past year usage.

## **Cocaine or Crack**

As shown in Table 17, overall 3.7% of New Jersey high school students reported using cocaine or crack in their lifetimes, with 2.9% reporting use in the past year and 1.6% in the past 30 days. Prevalence rates that are this small can be unstable and unreliable so caution should

be used when looking at prevalence rates for subgroups. However, the general trend seen with many other substances that shows older students and White students were more likely to use than other students holds for cocaine as well.

### Ecstasy

The reported lifetime Ecstasy use was 3.5% with 2.8% reporting use in the past year (Table 18). As noted above, caution should be used when evaluating prevalence rates for subgroups.

### Hallucinogens

Lifetime and past year hallucinogen use is presented in Table 19. Only 2.6% reported use at least once in their lifetime and 2.0% reported use in the past year. With low overall prevalence rates, differences between subgroups are not meaningful.

### Steroids

The lifetime and past year prevalence of steroid use is presented in Table 20. In summary, only 1.1% of students reported lifetime use of steroids and only 0.7% reported use in the past year. With low overall prevalence rates, differences between subgroups are not meaningful.

### **Club Drugs**

Club drug use is summarized in Table 21 with 1.1% of students reporting use in their lifetime and 0.6% of students reporting use in the past year. With low overall prevalence rates, differences between subgroups are not meaningful.

#### Heroin

The prevalence of use of heroin is summarized on Table 22. Overall, only 0.7% of surveyed New Jersey high school students reported heroin use in their lifetimes, and 0.5% of students reported use in the past year. With low overall prevalence rates, differences between subgroups are not meaningful.

### Methamphetamines

Table 23 reports the lifetime, past year and past 30 days prevalence rates for methamphetamine use. The percentage of NJ high school students who reported using methamphetamines was very low; the percentage was 0.6% for lifetime use, with 0.4% and 0.2% using in the past year or 30 days, respectively. With low overall prevalence rates, differences between subgroups are not meaningful.

## **Total of Other Illicit Drugs**

Table 24 presents information on other illicit drug use. This is a combined category, and shows the percentage of NJ high school students who reported use of any of the following: hallucinogens, Ecstasy, methamphetamines, club drugs, OxyContin, heroin, steroids, cocaine or crack, amphetamines, and sedatives/tranquilizers. The combined results show that one in ten (10.2%) NJ high school students reported using at least one of these drugs in their lifetime. The past year prevalence rate was 8.0% for these drugs.

As with other results for substance use, 11<sup>th</sup>/12<sup>th</sup> grade students were more likely to report both lifetime and past year use of at least one of these drugs (13.8% vs. 7.0% lifetime; 10.9% vs. 5.5% past year) but there was no difference between male and female students. White students were more likely than African-American, Hispanic, or students of *other racial/ethnic backgrounds* to report lifetime (13.6% vs. 2.3%, 7.8%, 6.8%) and past year use (11.0% vs. 1.6%, 5.3%, 5.0%).

	Life	Lifetime		Past Year	
	n	%	n	%	
NJ High School Students	7209	4.5	7231	3.2	
Grade					
9 <sup>th</sup> /10 <sup>th</sup>	3551	2.5	3562	1.6	
11 <sup>th</sup> /12 <sup>th</sup>	3658	6.7	3669	4.9	
Sex					
Male	3144	4.3	3164	3.0	
Female	3879	4.8	3881	3.5	
Race/Ethnicity					
White	4066	6.3	4081	4.6	
African-American	711	0.8	712	0.5	
Hispanic	1404	3.1	1409	1.7	
Other	951	2.0	953	1.5	

# Table 14: Lifetime and Past Year Prevalence of Sedative Use by DemographicSubgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

# Table 15: Lifetime and Past Year Prevalence of OxyContin Use by Demographic Subgroups

		Lifet	Lifetime		Year
		n	%	n	%
NJ High S	chool Students	7203	4.0	7221	3.3
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3546	2.5	3560	2.2
	11 <sup>th</sup> /12 <sup>th</sup>	3657	5.7	3661	4.6
Sex					
	Male	3137	3.6	3158	3.1
	Female	3878	4.5	3875	3.7
Race/Ethr	nicity				
	White	4063	5.9	4073	5.0
	African-American	708	0.3	712	0.3
	Hispanic	1405	2.0	1408	1.5
	Other	950	1.9	952	1.6

		Lifet	Lifetime		Year
		n	%	n	%
NJ High	School Students	7213	3.9	7233	2.7
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3553	2.0	3564	1.4
	11 <sup>th</sup> /12 <sup>th</sup>	3660	5.9	3669	4.1
Sex					
	Male	3147	3.5	3165	2.5
	Female	3879	4.4	3880	3.0
Race/Eth	nicity				
	White	4068	5.9	4084	4.0
	African-American	710	0.1	711	0.0
	Hispanic	1407	1.7	1409	1.5
	Other	951	1.7	954	1.3

# Table 16: Lifetime and Past Year Prevalence of Amphetamine Use by DemographicSubgroups

Note: "n" represents the unweighted number of responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

Table 17:	Lifetime, Past Year	, and Past 30 Days	Prevalence of	<sup>•</sup> Cocaine or Cra	ack Use by
Demogra	phic Subgroups				

	Lifetime		Past Year		Past 30 Days	
	n	%	n	%	n	%
NJ High School Students	7204	3.7	7222	2.9	7199	1.6
Grade						
9 <sup>th</sup> /10 <sup>th</sup>	3548	2.1	3554	1.8	3552	1.0
11 <sup>th</sup> /12 <sup>th</sup>	3656	5.5	3668	4.2	3647	2.3
Sex						
Male	3140	3.6	3158	2.7	3148	1.2
Female	3879	3.6	3879	3.0	3863	2.0
Race/Ethnicity						
White	4060	5.2	4072	4.2	4068	2.3
African-American	710	0.1	710	0.0	706	0.0
Hispanic	1408	2.4	1411	1.8	1399	1.4
Other	949	2.5	953	2.1	950	0.4

		Lifet	Lifetime		Year
		n	%	n	%
NJ High	School Students	7212	3.5	7232	2.8
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3552	1.9	3565	1.7
	11 <sup>th</sup> /12 <sup>th</sup>	3660	5.3	3667	4.1
Sex					
	Male	3147	3.1	3162	2.3
	Female	3877	3.8	3883	3.3
Race/Eth	nnicity				
	White	4067	4.7	4081	3.8
	African-American	711	0.9	712	0.8
	Hispanic	1408	2.4	1411	1.9
	Other	949	2.1	952	2.0

Table 18: Lifetime and Past Year Prevalence of Ecstasy Use by Demographic Subgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

Table 19:	Lifetime	and	Past	Year	Prevalence	of	Hallucinogen	Use	by	Demographic
Subgroups										

		Lifet	Lifetime		Year
		n	%	n	%
NJ High S	School Students	7218	2.6	7231	2.0
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3554	1.3	3563	0.9
	11 <sup>th</sup> /12 <sup>th</sup>	3664	3.9	3668	3.2
Sex					
	Male	3147	3.2	3162	2.5
	Female	3883	2.0	3881	1.6
Race/Eth	nicity				
	White	4072	3.6	4081	3.0
	African-American	710	0.0	712	0.0
	Hispanic	1408	1.6	1408	1.0
	Other	951	1.7	954	0.8

		Lifetime		Past	Year
		n	%	n	%
NJ High	School Students	7215	1.1	7237	0.7
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3553	1.2	3556	0.8
	11 <sup>th</sup> /12 <sup>th</sup>	3662	1.0	3671	0.7
Sex					
	Male	3147	1.7	3166	1.2
	Female	3881	0.5	3884	0.3
Race/Eth	nnicity	1		-	
	White	4070	1.6	4083	1.1
	African-American	711	0.4	712	0.0
	Hispanic	1408	0.5	1413	0.3
	Other	949	0.8	953	0.3

Table 20: Lifetime and Past Year Prevalence of Steroid Use by Demographic Subgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

# Table 21: Lifetime and Past Year Prevalence of Club Drug Use by DemographicSubgroups

		Lifet	Lifetime		Year
		n	n %		%
NJ High	School Students	7215	1.1	7231	0.6
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3554	0.6	3562	0.3
	11 <sup>th</sup> /12 <sup>th</sup>	3661	1.7	3669	1.0
Sex					
	Male	3147	1.1	3161	0.3
	Female	3880	1.1	3882	0.8
Race/Eth	nicity				
	White	4071	1.5	4082	0.8
	African-American	711	0.1	711	0.0
	Hispanic	1408	1.0	1410	0.5
	Other	949	0.3	952	0.3

		Lifet	Lifetime		Year
		n	%	n	%
NJ High	NJ High School Students		0.7	7236	0.5
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3554	0.4	3565	0.2
	11 <sup>th</sup> /12 <sup>th</sup>	3665	1.1	3671	0.9
Sex					
	Male	3150	0.9	3166	0.7
	Female	3881	0.6	3882	0.4
Race/Eth	nicity				
	White	4074	1.0	4082	0.9
	African-American	710	0.0	712	0.0
	Hispanic	1407	0.5	1412	0.3
	Other	951	0.2	954	0.0

Table 22: Lifetime and Past Year Prevalence of Heroin Use by Demographic Subgroups

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

Table 23:	Lifetime, Past Year,	and Past 30 Days	Prevalence of	Methamphetamir	ie Use by
Demogra	phic Subgroups				

	Lifetime		Past Year		Past 30	) Days
	n	%	n	%	n	%
NJ High School Students	7143	0.6	7206	0.4	7202	0.2
Grade						
9 <sup>th</sup> /10 <sup>th</sup>	3511	0.8	3548	0.5	3554	0.3
11 <sup>th</sup> /12 <sup>th</sup>	3632	0.4	3658	0.2	3648	0.1
Sex						
Male	3120	0.7	3151	0.4	3152	0.2
Female	3837	0.5	3867	0.4	3863	0.2
Race/Ethnicity						
White	4023	0.5	4067	0.3	4068	0.2
African-American	703	0.0	709	0.0	707	0.0
Hispanic	1399	1.0	1407	0.7	1402	0.5
Other	942	1.0	948	0.9	949	0.0

	Lifetime		Past	Year
	n	%	n	%
NJ High School Students	7225	10.2	7242	8.0
Grade				
9 <sup>th</sup> /10 <sup>th</sup>	3557	7.0	3568	5.5
11 <sup>th</sup> /12 <sup>th</sup>	3668	13.8	3674	10.9
Sex	-			
Male	3151	10.2	3167	8.0
Female	3886	10.3	3887	8.0
Race/Ethnicity				
White	4077	13.6	4088	11.0
African-American	711	2.3	712	1.6
Hispanic	1409	7.8	1412	5.3
Other	951	6.8	954	5.0

# Table 24: Lifetime and Past Year Prevalence of Total Other Illicit Drug Use by Demographic Subgroups (excludes marijuana, inhalants, prescription drugs)

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use.

## C. Age of Onset of Substance Use

Students self-reported the age at which they began using alcohol, tobacco, and other drugs. Students could choose from nine categories – '10 or younger', '11', '12', '13', '14', '15', '16', '17 or older', or 'Never Have'. In order to best show ATOD use at early ages, the age groups were combined into a dichotomous response set – onset of use at 11 or younger and onset of use at 12 or older. As shown in Table 25, students were substantially more likely to try ATOD when they were 12 or older. For all substances, differences between age groups were very large.

	Lifetime Use	Onset at Age 11 or Younger	Onset at Age 12 or Older	Total
	%	%	%	Ν
Alcohol	72.1	8.1	64.1	7068
Cigarettes	32.4	4.6	27.8	7163
Marijuana	29.7	0.8	28.9	7154
Prescription Drugs w/o Prescription	14.8	1.8	13.0	7120
Inhalants	4.8	0.6	4.1	7205
Other Illicit Drugs	10.2	0.6	9.7	7225

# Table 25: Summary of the Age of Onset of Primary Substances for the 2008 New JerseyHigh School Risk and Protective Factor Survey

Note: "n" represents the number of unweighted responses for a given survey item, and "%" represents the weighted percentage of students reporting use. Rounding can produce percentages for 'Onset at Age 11 or Younger' and 'Onset at Age 12 or Older' that do not sum to the percentage for 'Lifetime Use'.

## D. Substance Use Among Smokers vs. Non-Smokers

Students who smoked in the past year are much more likely than students who have not smoked to indicate they also have used other substances in the past year. Figure 1 compares smokers and non-smokers in the past year with respect to student use of alcohol, marijuana, and other drugs. Student smokers are substantially more likely to have used any other substance in the past year than non-smokers. Students who smoked at least once in the past year were almost twice as likely than non-smokers to have used alcohol (96.1% vs. 51.0%); about six times more likely to have used marijuana (66.6% vs. 10.8%); and 10 times more likely to have used some other drug (24.6% vs. 2.4%) in that same time period.



Figure 1: Past Year Substance Use by Smokers vs. Non-Smokers

\* Other drug includes hallucinogens, Ecstasy, methamphetamines, club drugs, OxyContin, heroin, steroids, cocaine/crack, amphetamines, or sedatives/tranquilizers.

## **Chapter 2: Other Antisocial Behavior**

The 2008 New Jersey High School Risk and Protective Factor Survey measured conduct that goes against established cultural norms, rules, or laws by a series of nine other problem or antisocial behaviors. These nine antisocial behaviors are only measured for a prevalence period of the last 12 months and are listed below:

- Getting Suspended
- Being Drunk or High at School
- Attacking Someone with Intent to
- Being Arrested
- Belonging to a Gang
- Carrying a Handgun

Harm

Attempting to Steal a Vehicle

Selling Drugs

• Taking a Handgun to School

Each behavior is described in detail in the subsections that follow. The possible response options for most behaviors included; 'Never', '1 to 2 times', '3 to 5 times,' and '6 or more times.' 'Belonging to a Gang,' however, has its own unique set of responses. These include 'Never in a gang', 'In a gang, without a name,' and 'In a gang, has a name.' See the section on 'Belonging to a Gang' for additional details.

Table 26 is a summary table giving the reported 9<sup>th</sup>/10<sup>th</sup> and 11<sup>th</sup>/12<sup>th</sup> grade and combined prevalence rates of the given behavior. Tables 27 through 35 give specific information for each of the nine antisocial behaviors by grade, sex and ethnicity, as well as information on frequency. County data is presented in Table A2. Please note that given the small proportion of students that reported engaging in any antisocial behaviors, differences by grade, sex, and race/ethnicity should be interpreted with caution. However, consistent differences between genders were found such that boys reported all antisocial behaviors more often than girls, with the exception of reports of being drunk or high at school in which case boys and girls were similar in their reports.

	9 <sup>th</sup> /′	10 <sup>th</sup>	11 <sup>th</sup> /12 <sup>th</sup>		Ove	rall
	n	%	n	%	n	%
Getting Suspended	3568	14.8	3675	15.5	7243	15.2
Being Drunk or High at School	3565	10.8	3664	17.4	7229	13.9
Attacking Someone with Intent to Harm	3569	11.8	3672	10.4	7241	11.1
Selling Drugs	3545	5.5	3645	10.6	7190	7.9
Being Arrested	3535	5.8	3657	7.3	7192	6.5
Belonging to a Gang, With or Without a Name	3146	5.1	3222	4.2	6368	4.7
Carrying a Handgun	3567	2.0	3675	2.7	7242	2.5
Attempting to Steal a Vehicle	3570	1.6	3675	2.0	7245	1.9
Taking a Handgun to School	3490	0.2	3615	0.5	7105	0.4

# Table 26: Summary of the Prevalence of Delinquent Behaviors for New Jersey HighSchool Students

## A. Getting Suspended

Getting suspended from school had the highest prevalence rate of any of the nine antisocial behaviors measured. (Note that 'suspension' is captured by the question "How many times in the past year have you been suspended from school?" The question does not define 'suspension.' Rather, it is left to the individual student to make that definition. It should also be noted that school suspension rates are difficult to interpret because policies vary substantially from district to district. Therefore, these rates should be interpreted with caution.)

As presented in Table 27, 15.2% of high school students reported having been suspended at least once in the past year, with very few reporting more than two suspensions in the past year (3.9%). This majority, in the 1 to 2 suspension range, was consistent across all demographic subgroups.

Findings appeared fairly consistent across the two grade levels but more males than females reported being suspended in the past year (17.9% vs. 12.1%). There were wide disparities among racial/ethnic groups: African-American and Hispanic students reported being suspended at much higher rates than other ethnic groups (27.4% and 23.7%, respectively vs. 9.8% for White students and 12.0% for students of *other racial/ethnic backgrounds*).

County-wide suspension prevalence also varied considerably (Table A2). The two counties with the highest reported suspension rates were Essex County and Cumberland County\* (26.4% and 24.3%, respectively).

			Prevalence		Number of Occasion		casions
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	hool Students	7243	84.9	15.2	11.3	2.5	1.4
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3568	85.1	14.8	11.0	2.6	1.2
	11 <sup>th</sup> /12 <sup>th</sup>	3675	84.6	15.5	11.6	2.4	1.5
Sex							
	Male	3170	82.2	17.9	12.8	2.9	2.2
	Female	3886	87.8	12.1	9.5	2.1	0.5
Ethnicity							
	White	4086	90.4	9.8	7.4	1.4	1.0
	African-American	710	72.7	27.4	21.0	3.2	3.2
	Hispanic	1417	76.4	23.7	16.6	5.7	1.4
	Other	953	87.9	12.0	9.1	2.0	0.9

### Table 27: Getting Suspended During the Past Year, by Demographic Subgroups

## B. Being Drunk or High at School

As shown in Table 28, 13.9% of New Jersey high school students reported having been drunk or high at school in the year prior to the survey. This was the second most commonly reported behavior of the nine anti-social behaviors measured. Older students  $(11^{th}/12^{th} \text{ graders})$  were more likely than younger students  $(9^{th}/10^{th} \text{ graders})$  to report having been drunk or high at school in the past year (17.4% vs. 10.8%). There was no notable difference between males (14.1%) and females (13.7%). There was little variation across White (15.1%), African-American (11.8%) and Hispanic (13.8%) students but students of other racial/ethnic backgrounds were least likely to report being drunk or high at school in the last year (8.3%).

County data revealed relatively high prevalence rates in Monmouth (20.5%), Atlantic (19.0%), Cape May\* (18.9%), and Ocean counties (18.8%) and low rates in Mercer\* (6.5%) and Hunterdon (8.1%) counties (Table A2).

Table 28: Being Drun	k or High at School	During the Past	Year, by Demographic
Subgroups			

			Prevalence		Number of Occasions		casions
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	chool Students	7229	86.1	13.9	7.7	2.5	3.7
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3565	89.2	10.8	6.5	1.8	2.5
	11 <sup>th</sup> /12 <sup>th</sup>	3664	82.7	17.4	9.0	3.4	5.0
Sex							
	Male	3161	86.0	14.1	7.2	2.3	4.6
	Female	3879	86.3	13.7	8.2	2.7	2.8
Ethnicity							
	White	4076	84.8	15.1	8.3	2.7	4.1
	African-American	709	88.2	11.8	5.9	3.2	2.7
	Hispanic	1413	86.2	13.8	8.8	1.9	3.1
	Other	954	91.7	8.3	4.1	1.4	2.8

## C. Attacking Someone with Intent to Harm

Overall, 11.1% of surveyed students reported having attacked someone with intent to harm in the past year (Table 29). Students in the different grades were about equally likely to report that they engaged in this type of behavior in the past year (11.8% 9<sup>th</sup>/10<sup>th</sup> graders; 10.4% 11<sup>th</sup>/12<sup>th</sup> graders). Males were slightly more likely to report this behavior than females (13.1% vs. 8.8%). African-American students were most likely (15.8%) and White students were least likely (9.1%) to report that they had engaged in this behavior but the variation by race/ethnicity was not substantial.

Of the 11.1% of high school students who reported attacking someone, most (7.9%) reported attacking someone *1 to 2 times* in the past year. Overall, very few students reported this behavior occurred on more than two occasions (3.2%). This pattern was seen also in all the demographic subgroups. However, the prevalence rates are so low in some of the frequency categories that caution should be taken when interpreting the results.

County-wide results are presented for this behavior in Table A2. Cumberland County\* had the highest prevalence rate for this kind of behavior (16.9%) and Hunterdon County had the lowest rate (5.9%).

# Table 29: Attacking Someone with Intent to Harm During the Past Year, by Demographic Subgroups

			Prevalence		Number of Occasion		asions
		1	Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	hool Students	7241	88.9	11.1	7.9	1.7	1.5
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3569	88.2	11.8	7.8	2.2	1.8
	11 <sup>th</sup> /12 <sup>th</sup>	3672	89.6	10.4	8.0	1.3	1.1
Sex		, , , ,					
	Male	3165	86.9	13.1	8.8	1.8	2.5
	Female	3887	91.2	8.8	6.7	1.6	0.5
Ethnicity							
	White	4087	90.7	9.3	6.9	1.4	1.0
	African-American	712	84.3	15.8	10.3	2.6	2.9
	Hispanic	1413	87.2	12.9	8.5	2.6	1.8
	Other	953	88.9	11.1	8.8	0.9	1.4

## D. Selling Drugs

Fewer than one in ten (7.9%) high school students reported selling illegal drugs in the past year. It is important to mention that, 'selling drugs' is captured by the question, *"How many times in the past year have you sold illegal drugs?"* Note that the question asks about, but does not define, 'illegal drugs.' As shown in Table 30, twice as many  $11^{th}/12^{th}$  grade students as  $9^{th}/10^{th}$  grade students reported that they had sold drugs on at least one occasion in the past year (10.6% vs. 5.5%). Similarly, twice as many male students as female students reported engaging in this behavior (10.3% vs. 5.2%). White, African-American, and Hispanic students do not differ much in their reports of selling drugs (9.1%, 6.5%, and 7.0%) but as with other antisocial behavior, students of other racial/ethnic backgrounds have the lowest prevalence rate (4.1%).

In contrast with other anti-social behaviors, selling drugs appears to be more than an occasional activity for those who engage in it at all. Overall, 3.6% of NJ high school students report selling drugs on just one or two occasions but an equivalent percentage (3.1%) report selling drugs 6 or more times in the past year. This pattern is also seen with male students (4.0% reported one or two times, 4.6% reported 6 or more times) and older students (4.1% reported one or two times, 4.7% reported 6 or more times).

When disaggregated by county, Atlantic County had the highest prevalence rate for selling drugs at 12.9% and Passaic County had the lowest rate at 4.5% (Table A2).

			Prevalence		Number of Occasions		casions
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	chool Students	7190	92.1	7.9	3.6	1.2	3.1
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3545	94.6	5.5	3.2	0.6	1.7
	11 <sup>th</sup> /12 <sup>th</sup>	3645	89.4	10.6	4.1	1.8	4.7
Sex							
	Male	3154	89.7	10.3	4.0	1.7	4.6
	Female	3847	94.9	5.2	3.1	0.5	1.6
Ethnicity							
	White	4056	91.0	9.1	4.2	1.3	3.6
	African-American	711	93.5	6.5	3.1	0.7	2.7
	Hispanic	1400	93.1	7.0	3.0	1.5	2.5
	Other	947	95.9	4.1	1.6	0.6	1.9

### Table 30: Selling Drugs during the Past Year, by Demographic Subgroups

## E. Being Arrested

As shown in Table 31, in the year prior to the survey, 6.5% of New Jersey high school students surveyed reported having been arrested. Though 6.5% reported ever having been arrested in the past year, 5.5% indicated that it had only been 1 or 2 times. Only 0.6% reported being arrested three or more times in the past year and 0.4% reported 6 or more times. This pattern held up across all demographic subgroups. More males than females reported being arrested (9.0% vs. 3.8%). There was no notable difference between prevalence rates for 9<sup>th</sup>/10<sup>th</sup> grade students and 11<sup>th</sup>/12<sup>th</sup> grade students (7.3% vs. 5.8%) and the variation across racial/ethnic groups was fairly small with Hispanic students the most likely to report being arrested (7.9%) and students of *other racial/ethnic backgrounds* the least likely (4.6%).

County data for this behavior varied somewhat (Table A2). Cape May County\* had the highest prevalence rate at 12.2% and Hunterdon and Mercer\* counties were the lowest at 2.2% and 2.7%, respectively.

			Prevalence		Number of Occasion		casions
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	chool Students	7192	93.6	6.5	5.5	0.6	0.4
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3535	94.3	5.8	4.9	0.5	0.4
	11 <sup>th</sup> /12 <sup>th</sup>	3657	92.8	7.3	6.2	0.7	0.4
Sex							
	Male	3154	91.1	9.0	7.6	0.7	0.7
	Female	3853	96.1	3.8	3.3	0.4	0.1
Ethnicity							
	White	4066	93.9	6.1	5.4	0.5	0.2
	African-American	703	93.5	6.5	5.4	0.6	0.5
	Hispanic	1401	92.1	7.9	6.8	0.4	0.7
	Other	945	95.4	4.6	2.9	1.2	0.5

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## F. Belonging to a Gang

Students' involvement with gangs was captured by the cross-product of the two questions, "Have you ever belonged to a gang?" and "If you have you ever belonged to a gang, did the gang have a name?" The results are shown in Table 32. Discordant responses were considered a non-response and consequently removed from the response list.<sup>8</sup>

Overall, 4.7% of students reported being in a gang, with 4.2% reporting that their gang had a name. Since only 0.5% percent of New Jersey high school students reported being in a gang without a name, the following percentages incorporate their data. Analyzing membership in gangs with and without names separately would be unreliable since the percentages were so small. Interestingly, there was little variation by grade though 9<sup>th</sup>/10<sup>th</sup> grade students reported a greater rate than 11<sup>th</sup>/12<sup>th</sup> graders did (5.1% vs. 4.2%). More than three times as many males as females (7.1% vs. 2.0%) reported being a gang. There was a wide range of differences when broken down by racial/ethnic categories. Notably more African-American and Hispanic students (9.0% and 9.3%, respectively) reported being in a gang than did White students (2.4%) or students of *other racial/ethnic backgrounds*.

County-wide data showed Cumberland\* and Somerset\* counties had the highest prevalence rates (10.8% and 10.0%, respectively). Hunterdon and Sussex\* had the smallest proportion of students with gang affiliation (1.0% and 1.2%, respectively). (Table A2.)

			Never in a gang	In a gang, without a name	In a gang, gang has a name	Total in a gang
		n	%	%	%	%
NJ High So	chool Students	6368	95.3	0.5	4.2	4.7
Grade				- - -		
	9 <sup>th</sup> /10 <sup>th</sup>	3146	94.9	0.5	4.6	5.1
	11 <sup>th</sup> /12 <sup>th</sup>	3222	95.8	0.4	3.8	4.2
Sex						
	Male	2734	92.9	0.8	6.3	7.1
	Female	3483	98.1	0.1	1.9	2.0
Ethnicity						
	White	3643	97.6	0.4	2.0	2.4
	African-American	594	91.0	0.3	8.7	9.0
	Hispanic	1226	90.6	0.9	8.4	9.3
	Other	839	96.8	0.1	3.1	3.2

### Table 32: Belonging to a Gang during the Past Year, by Demographic Subgroups

Note: The three prevalence categories generally sum to 100% and represent the total number of valid cases ("n") for the survey question. However, rounding can produce totals that do not equal 100%.

<sup>&</sup>lt;sup>8</sup> For example, if an individual said they were never in a gang in the first question, but then respond on the second question that they had been in a gang and it did not have a name, the response was considered discordant and thus removed.

## G. Carrying a Handgun

Overall, only 2.5% of surveyed New Jersey high school students reported carrying a handgun in the past year (Table 33). There were no notable differences by grade. Further, more than three times as many males (3.9%) than females (0.7%) were likely to carry a handgun. African-American students reported the highest frequency of this behavior (4.3%) but the variation by race/ethnicity was small. Of the 2.5% of students who reported carrying a handgun in the past year, 1.3% reported carrying it 1 to 2 times.

This prevalence data along with the frequency and demographic subgroup information for 'Carrying a Handgun' should be interpreted with caution considering the overall low prevalence rate of the behavior.

			Prevalence		Number of Occasions		
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	chool Students	7242	97.6	2.5	1.3	0.5	0.7
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3567	98.0	2.0	1.1	0.3	0.6
	11 <sup>th</sup> /12 <sup>th</sup>	3675	97.1	2.7	1.5	0.6	0.6
Sex							
	Male	3165	96.1	3.9	1.9	0.8	1.2
	Female	3888	99.2	0.7	0.6	0.1	0.0
Ethnicity							
	White	4086	98.4	1.6	1.0	0.3	0.3
	African-American	711	95.6	4.3	2.0	1.1	1.2
	Hispanic	1416	96.7	3.3	1.8	0.5	1.0
	Other	953	97.4	2.5	1.2	0.2	1.1

### Table 33: Carrying a Handgun during the Past Year, by Demographic Subgroups

## H. Attempting to Steal a Vehicle

Among New Jersey high school students, 1.9% reported having stolen, or attempted to steal, a motor vehicle in the past year (Table 34). This behavior was about as prevalent among  $9^{th}/10^{th}$  graders as  $11^{th}/12^{th}$  graders (1.6% vs. 2.0%) and among males compared to females (2.4% vs. 1.2%).

This prevalence data along with the frequency and demographic subgroup information for 'Attempting to Steal a Vehicle' should be interpreted with caution considering the overall low prevalence rate of the behavior.

# Table 34: Stealing/Attempting to Steal a Vehicle During the Past Year, by Demographic Subgroups

			Prevalence		Number of Occasions		casions
			Never	Any Occasion	1-2	3-5	6+
		n	%	%	%	%	%
NJ High So	chool Students	7245	98.2	1.9	1.5	0.1	0.3
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3570	98.4	1.6	1.3	0.1	0.2
	11 <sup>th</sup> /12 <sup>th</sup>	3675	98.0	2.0	1.7	0.1	0.2
Sex							
	Male	3168	97.6	2.4	1.9	0.1	0.4
	Female	3888	98.8	1.2	1.1	0.1	0.0
Ethnicity							
	White	4086	98.7	1.3	1.2	0.1	0.0
	African-American	712	97.0	3.0	2.5	0.1	0.4
	Hispanic	1416	97.3	2.7	2.3	0.0	0.4
	Other	955	99.0	1.1	0.3	0.1	0.7

## I. Taking a Handgun to School

As presented in Table 35, only 0.4% of New Jersey high school students reported having taken a handgun to school in the past year. Rates were very low across all demographic subgroups and should be interpreted with extra caution. The county-level data reflect the same low rates and should be reviewed in the same fashion.

Table 35:	Taking a l	Handgun to	School during	g the Past Yea	r, by Demo	graphic Subgroups

			Pre	valence	Num	Number of Occasions					
			Never	Any Occasion	1-2	3-5	6+				
		N	%	%	%	%	%				
NJ High So	chool Students	7105	99.7	0.4	0.1	0.0	0.3				
Grade											
	9 <sup>th</sup> /10 <sup>th</sup>	3490	99.8	0.2	0.1	0.0	0.1				
	11 <sup>th</sup> /12 <sup>th</sup>	3615	99.5	0.5	0.1	0.0	0.4				
Sex											
	Male	3121	99.5	0.4	0.1	0.0	0.3				
	Female	3795	99.9	0.1	0.0	0.0	0.1				
Ethnicity		1									
	White	4011	99.8	0.2	0.0	0.0	0.2				
	African-American	691	99.6	0.4	0.2	0.0	0.2				
	Hispanic	1390	99.6	0.4	0.1	0.0	0.3				
	Other	937	99.2	0.8	0.1	0.0	0.7				

## **Chapter 3: Gambling**

Tables 36 and 37 summarize the questions asked by the *2008 New Jersey High School Risk and Protective Factor Survey* that investigate gambling behavior among New Jersey high school students. Specifically, these questions ask how often in the past 12 months a student participated in various types of gambling activity. Students chose from the following response set: 'never', 'before, but not in the past year', 'a few times in the past year', 'once or twice a month', 'once or twice a week', and 'almost every day'. A summary table is initially provided ranking the gambling behaviors in order of prevalence and providing summary statistics (Table 36). For the purpose of analysis, 'never' and 'before, but not in the past year' were combined and past year use was divided between those who only participated in a gambling activity 'a few times in the past year' and those who participated more frequently – 'monthly, weekly, or almost daily'. Table 37 provides a breakdown of gambling activities in the past 12 months by demographic subgroups. Further, a final summary table (Table 38) is provided giving the percentage of students who participated in one, two, three to five, or six or more types of gambling in the past 12 months. Overall, county-wide trends in gambling type followed the same overall order as shown in Table 36 below. Please see Table A3 for details.

			Pas	t Year
In the past 12 months, how often have you		Never/Before, but not in the past year	A few times in the past year	Monthly, weekly, or almost every day
	n	%	%	%
Played the lottery or scratch-off tickets?	7194	60.3	28.8	10.8
Played cards for money or possessions?	7200	73.9	17.3	8.8
Bet on team sports for money or possessions?	7181	77.0	15.4	7.6
Bet money or possessions on games of personal skill such as pool, darts or bowling?	7215	84.0	10.0	6.0
Bet money or possessions on video games?	7212	85.8	7.2	7.1
Bet money or possessions on dice games such as craps?	7207	90.0	6.2	3.9
Played bingo for money or possessions?	7206	92.9	5.4	1.7
Bet money or possessions on horse races?	7197	95.0	3.7	1.2
Gambled on the internet?	7186	95.3	2.4	2.3
Gambled at a casino?	7208	97.6	1.7	0.6

### Table 36: Summary of Gambling Activities in the Past 12 Months

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

The gambling activities listed below are presented in order by prevalence – from the most frequently reported activity to the least frequent.

## Playing the Lottery or Scratch-off Tickets

The gambling behavior most frequently reported by students was playing the lottery or scratch-off tickets. Nearly three in ten (28.8%) high school students reported engaging in this behavior a few times in the past year and an additional one in ten (10.8%) reported playing monthly, weekly, or almost every day. However, the majority of students (60.3%) reported playing the lottery or scratch-off tickets never or before, but not in this year.

There was no difference between younger and older students or between males and females in reports of playing lottery or scratch-off tickets in the past year. White students (37.0%) reported playing the lottery or scratch-off tickets *a few times in the past year* more often than students of other ethnicities (21.2% for Hispanics, 20.2% for students of *other racial/ethnic backgrounds*, and 11.7% for African-Americans). There was a smaller difference in the *monthly, weekly, or almost every day* category between Whites (12.0%) and other racial groups (10.4% for Hispanics, 8.6% for African-Americans, and 7.8% for students of *other racial/ethnic backgrounds*).

## **Playing Cards for Money or Possessions**

Approximately 17.3% students reported engaging in betting on card games *a few times in the past year* while 8.8% did so *monthly, weekly, or almost every day*. Somewhat more 11<sup>th</sup>/12<sup>th</sup> grade students than 9<sup>th</sup>/10<sup>th</sup> grade students (28.3% vs. 24.1%) and substantially more male students than female students (37.6% vs. 14.4%) reported betting on cards at least once in the past year. White students (29.3%) reported the highest prevalence of gambling on card games at least *a few times in the past year* while African-American students (24.2%), students of *other racial/ethnic backgrounds* (20.9%), and Hispanic students (19.1%) reported less.

## Betting on Team Sports for Money or Possessions

Fifteen percent (15.4%) of NJ high school students reported gambling on sports *a few times in the past year* while an additional 7.6% bet *monthly, weekly, or almost every day.* There was no difference between 9<sup>th</sup>/10<sup>th</sup> and 11<sup>th</sup>/12<sup>th</sup> grade students in their reported betting on team sports in the past year. However, as is seen with other gambling behaviors, more male students than female students reported betting on team sports *a few times in the past year* (20.8% vs. 10.0%) as well as *monthly, weekly or almost every day* (12.8% vs. 2.4%). Prevalence rates among race/ethnic categories varied slightly, with White students the most likely (24.9%) and students of *other racial/ethnic backgrounds* the least likely (17.7%) to report this type of gambling.

### Betting on Games of Personal Skill such as Pool, Darts, or Bowling

One in ten (10.0%) high school students reported betting on personal skill games a few times in the past year and slightly fewer (6.0%) reported betting monthly, weekly, or almost every day. There was no difference in prevalence rates for this type of gambling across grade level or racial/ethnic category but like some of the previously mentioned gambling types, substantially more male students than female students (24.7% vs. 7.0%) reported betting on games of personal skill at least a few times in the last year.

### **Betting Money or Possessions on Video Games**

NJ high school students were about equally as likely to report betting on video games *a few times in the past year* (7.2%) as they were to report betting *monthly, weekly, or almost every day* (7.1%) in the past 12 months. In general, this type of gambling was influenced by gender but not by age. Students in 9<sup>th</sup>/10<sup>th</sup> grade did not differ from students in 11<sup>th</sup>/12<sup>th</sup> grade in prevalence of reported betting on video games but significantly more male students than female students reporting betting on video games *a few times in the past year* (11.9% vs. 2.4%) and *monthly, weekly, or almost every day* (12.4% vs. 1.5%). African-American students reported betting on video games the most frequently (22.2%) followed by Hispanic students (17.6%). White students and students of *other racial/ethnic backgrounds* reported betting on video games the least in both past year categories (11.3% and 12.7%, respectively).

### Betting Money or Possessions on Dice Games such as Craps

One in ten (10.1%) high school students reported betting on dice games at least *a few times in the past year*. Notably, males (15.7%) and African-Americans (14.8%) reported betting on dice games more frequently than females and students of other ethnicities. There was very little difference in the reported prevalence of this type of gambling between  $11^{\text{th}}/12^{\text{th}}$  (11.8%) and 9th/10<sup>th</sup> grade students (8.4%).

## Playing Bingo for Money or Possessions

Overall, few students (5.4%) reported playing bingo in the *a few times in the past year* and only 1.7% of students reported playing *monthly, weekly, or almost every day*. Bingo playing did not differ by grade or gender. Hispanic students reported playing bingo for money more than any other racial/ethnic group in the combined past-year categories (11.2% vs. 6.1%, 7.0%, 6.3%). With overall prevalence being so small, differences between groups should be reviewed with caution.

## Betting Money or Possessions on Horse Races

Only 3.7% of students reported betting on horse racing *a few times in the past year* and an additional 1.2% gambled on horses *monthly, weekly, or almost every day.* With overall prevalence being so small, differences between groups should be reviewed with caution. Notably, White students (7.1%) reported betting on horse races more frequently than African-American, Hispanic, and other students (1.4%-2.8%). There were no real differences by gender or grade.

## Gambling on the Internet

A small proportion of students (2.4%) reported gambling on the Internet *a few times in the past year* and 2.3% reported playing *monthly, weekly, or almost every day.* Prevalence rates for this category are too small to be compared between groups.

## Gambling at a Casino

The least most reported gambling type was gambling at a casino. Only 1.7% of NJ high school students reported gambling at a casino *a few times in the past year* and 0.6% reported doing so *monthly, weekly, or almost every day*. Prevalence rates for this category are too small to be compared between groups.

		Playing t	he Lottery o off Tickets	r Scratch-	Р	aying Card	ls*	Bettin	g on Team S	ports*	Betting o	Betting on Games of Personal Skill* Betting on V			g on Video	Games*	
		•	Never/ Before,	A few	Monthly, weekly,	Never/ Before,	A few times	Monthly, weekly,	Never/ Before,	A few	Monthly, weekly,	Never/ Before,	A few times	Monthly, weekly,	Never/ Before,	A few times	Monthly, weekly,
			but not in the past	times in the past	or almost	but not in the	in the past	or almost	but not in the	times in the past vear	or almost every	but not in the nast	in the past	or almost everv	but not in the nast	in the past	or almost
			year	yeu	day	year	year	day	year	year	day	year	year	day	year	year	day
n range		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
NJ High School Students 7181-7215		60.3	28.8	10.8	73.9	17.3	8.8	77.0	15.4	7.6	84.0	10.0	6.0	85.8	7.2	7.1	
0	9 <sup>th</sup> /10 <sup>th</sup>	3532-3553	61.9	27.8	10.3	75.9	16.4	7.7	77.2	15.9	6.9	85.2	10.0	4.8	86.0	6.9	7.1
Grade	11 <sup>th</sup> /12 <sup>th</sup>	3647-3662	58.6	29.9	11.5	71.7	18.3	10.0	76.8	14.8	8.3	82.7	10.0	7.2	85.5	7.5	7.0
Sox	Male	3129-3147	59.1	28.7	12.2	62.5	23.2	14.4	66.4	20.8	12.8	75.3	14.9	9.8	75.6	11.9	12.4
Sex	Female	3864-3880	61.2	29.4	9.4	85.7	11.1	3.3	81.8	10.0	2.4	93.0	4.8	2.2	96.0	2.4	1.5
	White	4054-4068	51.0	37.0	12.0	70.7	20.7	8.6	75.1	18.1	6.8	83.1	11.6	5.3	88.7	6.3	5.0
Race/ Ethnicity	African- American	701-709	79.7	11.7	8.6	75.7	13.1	11.1	80.0	9.7	10.4	86.2	5.6	8.2	77.8	8.5	13.7
	Hispanic	1396-1411	68.3	21.2	10.4	81.0	11.2	7.9	78.8	13.0	8.1	85.0	8.7	6.4	82.5	8.8	8.8
	Other	946-950	72.1	20.2	7.8	79.1	13.1	7.8	82.3	11.8	5.9	83.8	10.0	6.2	87.3	7.5	5.2

## Table 37: Gambling activities in the past 12 months by Demographic Subgroups

			Betti	ng on Dice G	ames*		Playing Binge	<u></u>	Bettin	ig on Horse F	Races	Gambling on the Internet			Gambling at a Casino		
			Never/ Before, but not in the past year	A few times in the past year	Monthly, weekly, or almost every day	Never/ Before, but not in the past year	A few times in the past year	Monthly, weekly, or almost every day	Never/ Before, but not in the past year	A few times in the past year	Monthly , weekly, or almost every day	Never/ Before, but not in the past year	A few time s in the past year	Monthly, weekly, or almost every day	Never/ Before, but not in the past year	A few times in the past year	Monthly, weekly, or almost every day
n range		%	%	%	%	%	%	%	%	%	%	%	%	%	%	: %	
NJ High School Students 7181-7215		90.0	6.2	3.9	92.9	5.4	1.7	95.0	3.7	1.2	95.3	2.4	2.3	97.6	1.7	0.6	
Orreade	9 <sup>th</sup> /10 <sup>th</sup>	3532-3553	91.6	5.3	3.1	92.4	6.0	1.6	95.7	3.4	0.9	95.4	2.6	2.0	98.5	1.0	0.4
Graue	11 <sup>th</sup> /12 <sup>th</sup>	3647-3662	88.1	7.2	4.6	93.6	4.7	1.8	94.2	4.1	1.7	95.2	2.2	2.5	96.5	2.5	0.9
Sov	Male	3129-3147	84.4	9.2	6.5	93.1	4.8	2.0	94.1	4.0	1.9	93.1	3.8	3.2	97.0	2.0	1.0
Sex	Female	3864-3880	96.0	3.0	1.1	92.8	6.0	1.3	95.8	3.6	0.6	97.5	1.1	1.5	98.2	1.4	0.3
	White	4054-4068	91.4	5.9	2.7	93.9	5.0	1.1	92.9	5.6	1.5	94.5	3.2	2.3	97.6	2.0	0.3
Race/ Ethnicity	African- American	701-709	85.3	7.9	6.9	93.1	5.4	1.6	98.5	0.7	0.7	97.0	0.6	4.7	98.5	0.8	0.8
	Hispanic	1396-1411	89.1	6.4	4.5	88.8	7.8	3.4	97.6	1.3	1.1	96.4	1.5	2.1	96.7	1.9	1.4
	Other	946-950	90.9	4.7	4.3	93.7	3.2	3.1	97.3	1.2	1.6	94.9	2.2	2.9	97.5	1.0	1.6

\* - for money or possessions Note: Rounding can produce totals that do not equal 100%
			Never/ Before.	Has Gambled in the Last 12 Months					
			but not in the past year	1 Туре	2 Types	3-5 Types	6 or More Types		
		n	%	%	%	%	%		
NJ High S	chool Students	6962	40.8	26.2	13.7	14.4	4.9		
Grade							•		
	9 <sup>th</sup> /10 <sup>th</sup>	3437	42.5	25.9	13.7	13.6	4.3		
	11 <sup>th</sup> /12 <sup>th</sup>	3525	39.0	26.4	13.6	15.4	5.5		
Sex							- - - -		
	Male	2971	32.2	22.8	16.2	20.4	8.4		
	Female	3808	48.9	30.1	11.2	8.4	1.4		
Ethnicity						- - - -	- - - -		
	White	3923	35.0	29.3	15.1	15.7	4.9		
	African-American	677	48.4	22.4	11.4	12.9	4.9		
	Hispanic	1364	47.9	21.3	12.7	13.7	4.5		
	Other	924	53.7	22.1	9.5	9.6	5.1		

#### Table 38: Summary of Gambling Activities in the Past 12 Months

Note: The two prevalence categories ('Never' and 'Any Occasion') generally sum to 100% and represent the total number of valid cases ("n") for the survey question. However, rounding can produce totals that do not equal 100%. The three 'Number of Occasions' categories generally sum to the 'Any Occasion' category. However, again, rounding can produce slightly different sums.

In summary, approximately four in ten NJ high school students (40.8%) reported either *never having gambled in the past 12 months* or having *gambled before, but not in the past year* (Table 38). One quarter (26.2%) reported that they engaged in one type of gambling, 13.7% engaged in two types, 14.4% engaged in three to five types of gambling in the past year, while only 4.9% engaged in six or more types of gambling.

By grade, there was very little difference between 9<sup>th</sup>/10<sup>th</sup> grade students and 11<sup>th</sup>/12<sup>th</sup> grade students but there were gender differences. Males were more likely than females to report each type of gambling activity and more likely to report gambling more frequently. Females were slightly more likely than males to say they had gambled once or twice in the past year (30.1% vs. 22.8%) while males were more likely to report gambling 2 times (16.2% vs. 11.2%), 3 to 5 times (20.4% vs. 8.4%), and 6 or more times (8.4% vs. 1.4%) in the last year. White students were most likely to have gambled in the past year (65.0%) and students of *other racial/ethnic background* were least likely to have gambled (46.3%).

By county, Cape May\*, Atlantic, and Hudson counties had the highest frequency of students indicating that they had never gambled or had not gambled in the past year (50.6%, 49.9%, 49.3%, respectively). Conversely, Ocean and Monmouth counties had the highest frequencies of students gambling in the past year (71.7% and 68.5%, respectively) and those who participated in three of more types of gambling (21.5% and 25.5%, respectively).

#### **Chapter 4: Risk and Protective Factors**

The following chapter presents the risk and protective factors from the 2008 New Jersey High School Risk and Protective Factor Survey. The survey contains four overarching domains – Community, Family, School, and Peer-Individual – for the 20 risk factors and two overarching domains – School and Peer-Individual – for the five protective factors. Multiple survey items comprise each of these factors and a minimum number of questions must be answered in order to calculate a score for each factor. Scores on these factors have been standardized to a 0 to 1 scale. Standardization is commonly achieved by subtracting the lowest outcome value from all values in an array, which forces the low value to equal 0. Then, all values in the array are divided by the upper end of the adjusted array range. This second step forces the high value to equal 1.

Risk factors are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior while protective factors buffer students against such experimentation. Risk and protective factors are important for prevention planning. While one may not be able to eliminate the risk factors in a students' environment, it is possible that risks may be mitigated and that the number of protective factors can be increased.

It is important to note that risk and protective factors must be interpreted differently. Overall, it is better to have lower risk factor scores than higher. Research has shown that the more risk factors students are exposed to, the more likely they are to use drugs or participate in antisocial behaviors. Higher scores indicate more risks in the student's environment. Conversely, it is better to have higher protective factor scores. These scores represent characteristics in the students' environment that will protect them against risk factors and substance use and participation in antisocial behavior. For example, a student who lives in a community where drug use is acceptable may be less likely to use drugs if they have friends who have made commitments to stay drug-free or are rewarded for positive behavior at school.

The first two sections of this chapter describe the 20 risk factors and five protective factors, their specific survey items, and their respective mean scores. The third section provides the average risk and protective factor scores for the State. The fourth and fifth sections show graphs of the relationships between the average risk and protective scores and cigarette, alcohol, marijuana, and other illicit drug use.<sup>9</sup> All of the survey items that define the factors are presented with the mean score for the factor.

Table 39 presents the mean scores for all 20 risk factors and all 5 protective factors, by domain. In addition, each domain mean score is shown. For data disaggregated by demographic subgroups (grade level, gender, race/ethnicity and county) for each of the risk and protective factor domains, please see Tables B1 and B2 in Appendix B. Tables B3 and B4 in Appendix B present mean scores on each of the 20 risk factors and 5 protective factors broken down by county.

<sup>&</sup>lt;sup>9</sup> 'Other illicit drug' is a combined category, and includes New Jersey high school students who reported use of any of the following: hallucinogens, Ecstasy, methamphetamines, club drugs, OxyContin, heroin, steroids, cocaine or crack, amphetamines, barbiturates, and tranquilizers.

Domain	Risk Factors	N	Mean	
	Laws and Norms Favorable to Drug Use	7118	0.51	
0 "	Community Transitions and Mobility	7165	0.31	
Community	Low Neighborhood Attachment	7226	0.38	
(mean= 0.37)	Perceived Availability of Drugs	7175	0.56	
(	Community Disorganization	7159	0.27	
	Perceived Availability of Handguns	7162	0.22	
	Poor Family Management	7130	0.33	
Family	Parental Attitudes Favorable Toward Antisocial Behavior	7151	0.16	
(mean= 0.21)	Parental Attitudes Favorable Toward Drug Use	7157	0.14	
School	Low Commitment to School	7128	0.42	
(mean= 0.38)	Academic Failure	7141	0.34	
	Perceived Risks of Drug Use	7203	0.30	
	Favorable Attitudes Toward Antisocial Behavior	7244	0.23	
	Peer Rewards for Antisocial Behavior	7184	0.23	
Peer-Individual	Favorable Attitudes Toward Drug Use	7245	0.29	
(max = 0.20)	Early Initiation of Drug Use	7198	0.20	
(mean= 0.20)	Friends' Use of Drugs	7235	0.32	
	Early Initiation of Antisocial Behavior	7215	0.08	
	Gang Involvement	7182	0.05	
	Interaction with Antisocial Peers	7243	0.09	
Statewide Risk	Statewide Risk Factor Average			

#### Table 39: Summary of All Risk and Protective Factors by Domain

Domain	Protective Factors	N	Mean
Peer-Individual Interaction with Prosocial Peers		7206	0.53
	Peer Rewards for Prosocial Involvement		0.40
(mean= 0.43)	Prosocial Involvement	7245	0.34
School	School Opportunities for Prosocial Involvement	7244	0.63
(mean= 0.58) School Rewards for Prosocial Involvement		7233	0.53
Statewide Prot	7249	0.49	

#### A. Statewide Risk Factors

This section presents each of the risk domains and their respective risk factors, including individual questions from the survey. As mentioned previously, risk factors are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior. Each question was scored so that the most negative behaviors received the highest score. For example, if a student indicated that he was 10 years old or younger when he began smoking cigarettes, then this would be scored as a 1. Conversely, a student who indicated having never smoked would receive a score of 0. Mean scores for each factor were then computed on a scale of 0 to 1, with a higher score indicating that the student is at greater risk of being influenced negatively by that factor. For example, if a student's mean score for *Early Initiation of Drug Use* factor was 0.60, that student would be more likely than students with lower risk scores to use drugs at an early age.

The *Community Domain Risk Factor* refers to neighborhoods where residents feel little attachment to the community; where there is a high population density, physical deteriorations, and high crime rates; where children experience frequent residential moves; and where drugs and weapons are perceived to be readily available. The *Community Domain Risk Factor* scores by demographic subgroup are presented in Tables 40 and 41.

#### Low Neighborhood Attachment

- I'd like to get out of my neighborhood.
- If I had to move, I would miss the neighborhood I now live in.
- I like my neighborhood.

Higher mean scores on the *Low Neighborhood Attachment* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of feelings of low neighborhood attachment. The overall mean for all students on this factor was 0.38. Eleventh and twelfth-grade students reported more negative feelings about their neighborhood (0.40) than 9<sup>th</sup>/10<sup>th</sup> grade students (0.36). Female students also reported more negative feelings toward their neighborhood (0.41 vs. 0.34) than male students. When broken down by race/ethnicity, African-American and Hispanic students were at higher risk to be influenced by *Low Neighborhood Attachment* (0.45 and 0.44, respectively) than White students (0.34) or students of *other racial/ethnic backgrounds* (0.37).

#### **Community Disorganization**

- I feel safe in my neighborhood.
- How much do the following statements describe your neighborhood: crime and/or drug selling?
- How much do the following statements describe your neighborhood: fights?
- How much do the following statements describe your neighborhood: lots of empty or abandoned buildings?
- How much do the following statements describe your neighborhood: lots of graffiti?

Higher mean scores on the *Community Disorganization* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of issues related to community disorganization. The overall mean was 0.27. Younger and older students did not differ in their risk scores on this factor and the mean score for females was only slightly higher than for male students (0.29 vs. 0.26). By race/ethnicity, African-American and Hispanic students had higher scores on the *Community Disorganization* factor (0.38 and 0.35, respectively) than White students (0.23) or students of *other racial/ethnic backgrounds* (0.24).

#### **Community Transitions and Mobility**

- Have you changed homes in the past year?
- How many times have you changed homes since kindergarten?
- Have you changed schools (...) in the past year?
- How many times have you changed schools (...) since kindergarten?

Higher mean scores on the *Community Transitions and Mobility* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of issues related to community transitions and mobility. The overall mean was 0.31. Ninth and tenth grade students had a higher mean (0.34) than 11<sup>th</sup>/12<sup>th</sup> grade students (0.28), though this is likely because they had more recently changed schools into high school than the older students. There was no notable difference between male and female student mean scores. For race/ethnicity in this category, African-American and Hispanic students had higher mean scores (0.41 and 0.37, respectively) than White students (0.26).

## Table 40: Community Domain Risk Factor Demographics – Low Neighborhood Attachment, Community Disorganization, and Community Transitions and Mobility

		Low Neighborhood Attachment		Community Disorganization		Community Transitions an Mobility	
		n	Mean	N	Mean	n	Mean
NJ High Sc	hool Students	7226	0.38	7159	0.27	7165	0.31
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3561	0.36	3522	0.28	3524	0.34
	11 <sup>th</sup> /12 <sup>th</sup>	3665	0.40	3637	0.27	3641	0.28
Sex							
	Male	3157	0.34	3127	0.26	3135	0.30
	Female	3881	0.41	3848	0.29	3847	0.32
Ethnicity							
	White	4078	0.34	4061	0.23	4063	0.26
	African-American	710	0.45	698	0.38	695	0.41
	Hispanic	1410	0.44	1382	0.35	1386	0.37
	Other	951	0.37	944	0.24	947	0.33

Note: Higher scores indicate higher risk

#### Perceived Availability of Drugs

- If you wanted to, how easy would it be for you to get: some beer, wine or hard liquor
   (...)?
- If you wanted to, how easy would it be for you to get: some cigarettes?
- If you wanted to, how easy would it be for you to get: some marijuana?

 If you wanted to, how easy would it be for you to get: a drug like cocaine, LSD, or amphetamines?

Higher mean scores on the *Perceived Availability of Drugs* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of the ease of obtaining ATOD. The overall mean was 0.56. Eleventh and twelfth-grade students had a substantially higher mean score (0.65) on this risk factor than 9<sup>th</sup>/10<sup>th</sup> grade students (0.49), indicating that ATOD were perceived by the older students as easier to get. There was no notable difference between male and female students in perceptions of the availability of drugs. The means for race/ethnicity categories were fairly similar for White (0.58), Africa-American (0.54) and Hispanic students (0.48).

#### Perceived Availability of Handguns

• If you wanted to, how easy would it be for you to get: a handgun?

Higher mean scores on the *Perceived Availability of Handguns* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of the ease of obtaining handguns. The overall mean was 0.22. Older students had a higher mean score than younger students (0.24 and 0.19, respectively) and male students had a higher mean score than female students (0.25 and 0.18, respectively) indicating that 11<sup>th</sup>/12<sup>th</sup> grade students and male students perceived it easier to get a handgun than their respective counterparts. There was substantial variability across race/ethnicity groups on perceptions of the availability of handguns: African-American students had the highest mean score at 0.38, followed by Hispanic students with a mean of 0.26 and White students and those of *other racial/ethnic backgrounds* had the lowest mean at 0.16 each.

#### Laws and Norms Favorable to Drug Use

- If a kid smoked marijuana in your neighborhood would he or she be caught by the police?
- If a kid drank some beer, wine or hard liquor (...) in your neighborhood would he or she be caught by the police?
- If a kid carried a handgun in your neighborhood would he or she be caught by the police?
- If a kid smoked a cigarette in your neighborhood would he or she be caught by the police?
- How wrong would most adults (...) in your neighborhood think it is for kids your age: to use marijuana.
- How wrong would most adults (...) in your neighborhood think it is for kids your age: to drink alcohol.
- How wrong would most adults (...) in your neighborhood think it is for kids your age: to smoke cigarettes.

Higher mean scores on the *Laws and Norms Favorable to Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because the laws and norms of their community are favorable to drug use. The overall mean was 0.51. The 11<sup>th</sup>/12<sup>th</sup> grade students had a higher mean score (0.55) than the 9<sup>th</sup>/10<sup>th</sup> grade students (0.48), which suggests that older students believe that their community is more favorable to drug use.

There was no difference between male and female student mean scores. By race/ethnicity, students of *other racial/ethnic backgrounds* had the lowest mean score at 0.45 and the other three groups were all very similar with mean scores of 0.52 for White students and 0.51 for African-American and Hispanic students.

## Table 41: Community Domain Risk Factor Demographics – Perceived Availability of Drugs, Perceived Availability of Handguns, and Laws and Norms Favorable to Drug Use

		Perceived Availability of Drugs		Perceived Availability of Handguns		Law No Favo to Dru	s And rms orable ug Use
		n	Mean	N	Mean	n	Mean
NJ High Sc	hool Students	7175	0.56	7162	0.22	7118	0.51
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3534	0.49	3529	0.19	3494	0.48
	11 <sup>th</sup> /12 <sup>th</sup>	3641	0.65	3633	0.24	3624	0.55
Sex							
	Male	3140	0.57	3133	0.25	3113	0.51
	Female	3851	0.55	3845	0.18	3825	0.51
Ethnicity							
	White	4061	0.58	4056	0.16	4045	0.52
	African-American	694	0.54	694	0.38	692	0.51
	Hispanic	1398	0.56	1394	0.26	1365	0.51
	Other	946	0.48	942	0.16	940	0.45

#### Family Domain Risk Factor

The Family Domain Risk Factor refers to family dynamics defined by the following characteristics: little parental supervision, unclear behavioral expectations, and inconsistent rewards/punishments for behavior, parents are tolerant of children's antisocial behaviors or drug/alcohol use; and parents engage in criminal behavior or drug/alcohol abuse. The Family Domain Risk Factor scores by demographic subgroup are presented in Table 42.

#### Poor Family Management

- My parents ask if I've gotten my homework done.
- Would your parents know if you did not come on time?
- When I am not at home, one of my parents knows where I am and who I am with.
- The rules in my family are clear.
- My family has clear rules about alcohol and drug use.
- If you drank some beer or wine or liquor (...) without your parent's permission, would you be caught by your parents?
- If you carried a handgun without your parents' permission, would you be caught by your parents?
- If you skipped school would you be caught by your parents?

Higher mean scores on the *Poor Family Management* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because their family is poorly managed. The overall mean was 0.33. The 11<sup>th</sup>/12<sup>th</sup> grade mean was 0.36 and the 9<sup>th</sup>/10<sup>th</sup> grade mean was lower at 0.29. The difference between male and female students was very small (0.34 and 0.31, respectively). There were no notable differences across racial/ethnic groups with the range of means running from 0.31 for students of *other racial/ethnic background*s to 0.33 for White and Hispanic students.

#### Parental Attitudes Favorable Toward Drug Use

- How wrong do your parents feel it would be for you to: drink beer, wine or hard liquor (...) regularly (...)?
- How wrong do your parents feel it would be for you to: smoke cigarettes?
- How wrong do your parents feel it would be for you to: smoke marijuana?

Higher mean scores on the *Parental Attitudes Favorable Toward Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because their parents' attitudes are favorable to drug use. The overall mean was 0.14. The mean for 11<sup>th</sup>/12<sup>th</sup> grade students was higher than the mean for 9<sup>th</sup>/10<sup>th</sup> grade students (0.18 and 0.10, respectively). There was no notable difference between male and female student means. Among racial/ethnic groups there was little difference between African-American (0.09), Hispanic (0.11) and students of *other racial/ethnic background*s (0.09) but White students had a higher mean at 0.17.

#### Parental Attitudes Favorable Toward Antisocial Behavior

How wrong do your parents feel it would be for you to: steal something worth more than \$5?

- How wrong do your parents feel it would be for you to: draw graffiti, or write things or draw pictures on building or other property (...)?
- How wrong do your parents feel it would be for you to: pick a fight with someone?

Higher mean scores on the *Parental Attitudes Favorable Toward Antisocial Behavior* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because their parents' attitudes are favorable to antisocial behavior. The overall mean was 0.16. There was no difference between younger and older students but males had a slightly larger mean score than female students (0.18 and 0.14, respectively). Racial/ethnic differences were slight: White students scored a high of 0.17 while African-American students had the lowest mean score at 0.12.

# Table 42: Family Domain Risk Factor Demographics – Poor Family Management, Parental Attitudes Favorable Toward Drug Use, and Parental Attitudes Favorable Toward Antisocial Behavior

		Poor Family Management		Parental Attitudes Favorable Toward Drug Use		Parental Attitude Favorable Towa Antisocial Behavior	
		n	Mean	N	Mean	n	Mean
NJ High Sc	hool Students	7130	0.33	7157	0.14	7151	0.16
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3505	0.29	3518	0.10	3516	0.15
	11 <sup>th</sup> /12 <sup>th</sup>	3625	0.36	3639	0.18	3635	0.16
Sex							
	Male	3119	0.34	3133	0.15	3130	0.18
	Female	3830	0.31	3843	0.13	3840	0.14
Ethnicity							
	White	4056	0.33	4060	0.17	4057	0.17
	African-American	691	0.32	697	0.09	695	0.12
	Hispanic	1370	0.33	1380	0.11	1380	0.16
	Other	937	0.31	945	0.09	944	0.14

#### **School Domain Risk Factor**

The School Domain Risk Factor refers to students achieving failing grades and having little commitment to school, as demonstrated by not likening school, seeing schoolwork as irrelevant, and skipping or cutting class. The School Domain Risk Factor scores by demographic subgroup are presented in Table 43.

#### Academic Failure

- Putting them all together what were your grades like last year?
- Are your school grades better than the grades of most students in your class?

Higher mean scores on the *Academic Failure* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they achieve poor or failing grades in school. The overall mean was 0.34. There was no difference by grade level or gender. For race/ethnicity in this domain, Hispanic students had the highest mean of 0.38 and those students of *other racial/ethnic background*s had the lowest mean of 0.29.

#### Low Commitment to School

- During the LAST FOUR WEEKS how many whole days have you missed: because you skipped or "cut"?
- How interesting are most of your courses to you?
- Now, thinking back over the past year in school, how often did you: enjoy being in school?
- Now, thinking back over the past year in school, how often did you: hate being in school?
- Now, thinking back over the past year in school, how often did you: try to do your best work in school?
- How often do you feel that the schoolwork you are assigned is meaningful and important?
- How important do you think the things you are learning in school are going to be for your later life?

Higher mean scores on the *Low Commitment to School* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they have a low commitment to school. The overall mean was 0.42. No difference was seen between grade levels and male students had a mean of 0.43, only very slightly higher than female students (0.40) indicating that males were only slightly less committed to school than females. White students were at greatest risk to be impacted by their low commitment to school (0.44) versus African-American students who had the lowest mean (0.37).

		Acad Fai	Academic Failure		ow tment to hool
		n	Mean	n	Mean
NJ High Sc	hool Students	7141	0.34	7128	0.42
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3501	0.34	3501	0.41
	11 <sup>th</sup> /12 <sup>th</sup>	3640	0.34	3627	0.43
Sex					
	Male	3123	0.35	3104	0.43
	Female	3823	0.33	3842	0.40
Ethnicity					
	White	4049	0.32	4059	0.44
	African-American	696	0.37	685	0.37
	Hispanic	1382	0.38	1375	0.40
_	Other	938	0.29	934	0.40

## Table 43: School Domain Risk Factor Demographics – Academic Failure and Low Commitment to School

#### Peer-Individual Domain Risk Factor

The *Peer-Individual Domain Risk Factor* refers to youths' attitudes about drug use and antisocial behavior, the age which they began using drugs and engaging in antisocial behavior, whether or not their friends use drugs or are delinquents, and if there are peer rewards for delinquent behavior. The *Peer-Individual Domain Risk Factor* scores by demographic subgroup are presented in Tables 44 through 47.

#### **Gang Involvement**

- Think of your four best friends (...). In the past year (...) how many of your best friends have: been members of a gang?
- Have you ever belonged to a gang?
- If you have ever belonged to a gang, did the gang have a name?
- How old were you when you first: belonged to a gang?

Higher mean scores on the *Gang Involvement* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because of their involvement with gangs. The overall mean was 0.05. There was little variation between grade levels. Male students had a mean of 0.06 and female students had a mean of 0.03, indicating that males were very slightly more likely than females to be negatively influenced by gangs. For race/ethnicity in this category, African-American and Hispanic students (0.09 and 0.09, respectively) had higher mean scores than students of other racial/ethnic backgrounds (0.04) and White students who had the lowest mean (0.02).

#### Perceived Risks of Drug Use

- How much do you think people risk harming themselves (...) if they: smoke one or more packs of cigarettes per day.
- How much do you think people risk harming themselves (...) if they: try marijuana once or twice.
- How much do you think people risk harming themselves (...) if they: smoke marijuana regularly.
- How much do you think people risk harming themselves (...) if they: have one or two drinks of an alcoholic beverage (...) nearly every day.

Higher mean scores on the *Perceived Risks of Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they believe that using ATOD is of little risk to their health. The overall mean was 0.30. Differences were seen by grade and gender. The 11<sup>th</sup>/12<sup>th</sup> grade mean score was 0.33 versus the 9<sup>th</sup>/10<sup>th</sup> grade mean of 0.27. The male mean score was higher than the female student mean (0.32 vs. 0.27). The race/ethnicity breakdown for this domain shows that White students had the highest perceived risk of drug use (0.32) while African-American, Hispanic, and students of *other racial and ethnic backgrounds* (0.26, 0.27, 0.25, respectively) reported lower perceived risks.

		Ga Involv	ang /ement	Perceiv of Dru	ed Risks ıg Use
		n	Mean	n	Mean
NJ High Sc	hool Students	7182	0.05	7203	0.30
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3538	0.05	3545	0.27
	11 <sup>th</sup> /12 <sup>th</sup>	3644	0.04	3658	0.33
Sex					
	Male	3126	0.06	3150	0.32
	Female	3872	0.03	3867	0.27
Ethnicity					
	White	4063	0.02	4072	0.32
	African-American	702	0.09	701	0.26
	Hispanic	1401	0.09	1403	0.27
	Other	940	0.04	951	0.25

Table 44: Peer-Individual Domain Risk Factor Demographics – Gang Involvement andPerceived Risks of Drug Use

#### Early Initiation of Drug Use

- How old were you when you first: smoked cigarettes?
- How old were you when you first: drank alcoholic beverages?
- How old were you when you first: smoked marijuana?
- How old were you when you first: began drinking alcoholic beverages regularly, that is, at least once or twice a month?

Higher mean scores on the *Early Initiation of Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they began using ATOD at an early age. The overall mean was 0.20. There was no difference by grade level or gender indicating that younger and older students and males and females first used ATOD at similar ages. The highest mean by racial/ethnic groups was for White and Hispanic students (0.22 each), and was slightly higher than the means for African-American students (0.15) or students of *other racial/ethnic backgrounds* (0.16).

#### Early Initiation of Antisocial Behavior

- How old were you when you first: got suspended from school?
- How old were you when you first: got arrested?
- How old were you when you first: carried a handgun?
- How old were you when you first: attacked someone with the idea of seriously hurting them?

Higher mean scores on the *Early Initiation of Antisocial Behavior* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they began engaging in antisocial behaviors at an early age. The overall mean was 0.08. There was no notable difference by grade level. The mean for male students (0.10) was greater than the mean for females (0.05), which suggests that males were younger when they first started engaging in anti-social behavior. Broken down by race/ethnicity, mean scores were slightly higher for African-American and Hispanic students (0.14 and 0.10, respectively) than for White students (0.06) and students of *other racial/ethnic backgrounds* (0.07).

Table 45: Peer-Individual Domain Risk Factor Demographics – Early Initiation of Di	rug
Use and Early Initiation of Antisocial Behavior	

		Early Initiation of Drug Use		Early Ini Antis Beh	itiation of social avior
		n	Mean	n	Mean
NJ High Sc	hool Students	7198	0.20	7125	0.08
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3544	0.19	3554	0.08
	11 <sup>th</sup> /12 <sup>th</sup>	3654	0.21	3661	0.07
Sex					
	Male	3142	0.20	3144	0.10
	Female	3868	0.21	3884	0.05
Ethnicity					
	White	4066	0.22	4074	0.06
	African-American	704	0.15	707	0.14
	Hispanic	1405	0.22	1408	0.10
	Other	946	0.16	950	0.07

#### **Favorable Attitudes Toward Drug Use**

- How wrong do you think it is for someone your age to: drink beer, wine or hard liquor (...) regularly (...)?
- How wrong do you think it is for someone your age to: smoke cigarettes?
- How wrong do you think it is for someone your age to: smoke marijuana?
- How wrong do you think it is for someone your age to: use LSD, cocaine, amphetamines or another illicit drug?

Higher mean scores on the *Favorable Attitudes Toward Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they perceive drug use as less wrong. The overall mean was 0.29. The  $11^{\text{th}}/12^{\text{th}}$  grade student mean was 0.34 and the  $9^{\text{th}}/10^{\text{th}}$  grade student mean was 0.24, which suggests that the older students believed it was less wrong for someone their age to use ATOD. There was no notable difference by gender. Whites had the highest mean score (0.33) and African-American students had the lowest mean score (0.20).

#### **Favorable Attitudes Toward Antisocial Behavior**

- How wrong do you think it is for someone your age to: take a handgun to school?
- How wrong do you think it is for someone your age to: steal something worth more than \$5?
- How wrong do you think it is for someone your age to: pick a fight with someone?
- How wrong do you think it is for someone your age to: attack someone with the idea of seriously hurting them?
- How wrong do you think it is for someone your age to: stay away from school all day when their parents think they are at school?

Higher mean scores on the *Favorable Attitudes Toward Antisocial Behavior* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they perceive antisocial behavior as less wrong. The overall mean was 0.23. There was no difference by grade level but the mean for male students (0.25) was higher than that for female students (0.20), indicating that males believed it was less wrong for someone their age to engage in antisocial behavior. By racial/ethnic groups, African-American students had the lowest mean score of 0.18 while White (0.24) and Hispanic (0.23) students and *students of other racial/ethnic backgrounds* (0.23) had higher mean scores on this domain.

#### **Rewards for Antisocial Behavior**

- What are the chances you would be seen as cool if you: smoked cigarettes.
- What are the chances you would be seen as cool if you: began drinking alcoholic beverages regularly, that is, at least once or twice a month.
- What are the chances you would be seen as cool if you: smoked marijuana.
- What are the chances you would be seen as cool if you: carried a handgun.

Higher mean scores on the *Rewards for Antisocial Behavior* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because they perceive more rewards for drug use and antisocial behavior. The overall mean was 0.23. There was no difference by grade or gender and only very small differences by race/ethnicity. White students had the highest score (0.24), followed closely by African-American (0.22) and Hispanic students (0.21). Students of *other racial/ethnic backgrounds* had the lowest mean score (0.19).

# Table 46: Peer-Individual Domain Risk Factor Demographics – Favorable AttitudesToward Drug Use, Favorable Attitudes Toward Antisocial Behavior, and Rewards forAntisocial Behavior

		Favorable Attitudes Toward Drug Use		Favorable Attitudes Toward Antisocial Behavior		Rewards for Antisocial Behavior	
		n	Mean	n	Mean	n	Mean
NJ High Sc	hool Students	7245	0.29	7244	0.23	7184	0.23
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3571	0.24	3569	0.23	3540	0.23
	11 <sup>th</sup> /12 <sup>th</sup>	3674	0.34	3675	0.22	3644	0.23
Sex							
	Male	3164	0.30	3165	0.25	3144	0.23
	Female	3892	0.28	3890	0.20	3854	0.24
Ethnicity							
	White	4088	0.33	4089	0.24	4058	0.24
	African-American	711	0.20	710	0.18	696	0.22
	Hispanic	1413	0.26	1413	0.23	1404	0.21
	Other	956	0.23	955	0.23	950	0.19

#### Friends' Use of Drugs

- Think of your four best friends (...). In the past year (...) how many of your best friends have: smoke cigarettes.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: tried beer, wine or hard liquor (...) when their parents didn't know about it.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: used marijuana.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: used LSD, cocaine, amphetamines or other illegal drugs.

Higher mean scores on the *Friends' Use of Drugs* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because more of their friends have used ATOD. The overall mean was 0.32. The 11<sup>th</sup>/12<sup>th</sup> grade student mean was 0.39, while the 9<sup>th</sup>/10<sup>th</sup> grade mean was 0.25. There was no notable difference between males and females. For race/ethnicity in this category, Whites students had the highest mean score (0.35) while students of *other racial/ethnic background* had the lowest (0.23).

#### Interaction with Antisocial Peers

- Think of your four best friends (...). In the past year (...) how many of your best friends have: been suspended from school.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: carried a handgun.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: sold illegal drugs.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: stolen or tried to steal a motor vehicle such as a car or motorcycle.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: been arrested.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: dropped out of school.

Higher mean scores on the *Interaction with Antisocial Peers* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because more of their friends have engaged in antisocial behavior. The overall mean was 0.09. There was no notable difference by grade level or gender. African-American and Hispanic students had the highest mean of 0.12, each while White students and students of *other racial/ethnic backgrounds* reported the lowest mean of 0.07.

### Table 47: Peer-Individual Domain Risk Factor Demographics – Friends' Use of Drugs and Interaction with Antisocial Peers

		Friends Dra	a' Use of Ugs	Interact Antisoc	tion with ial Peers	
		n	Mean	n	Mean	
NJ High Sch	nool Students	7235	0.32	7243	0.09	
Grade						
	9 <sup>th</sup> /10 <sup>th</sup>	3563	0.25	3571	0.08	
	11 <sup>th</sup> /12 <sup>th</sup>	3672	0.39	3672	0.10	
Sex						
	Male	3161	0.31	3163	0.10	
	Female	3886	0.32	3892	0.07	
Ethnicity						
	White	4086	0.35	4088	0.07	
	African-American	711	0.25	712	0.12	
	Hispanic	1410	0.31	1413	0.12	
	Other	952	0.23	954	0.07	

#### **B. Statewide Protective Factors**

This section presents each of the protective domains and their respective protective factors, including individual questions from the survey. As mentioned previously, protective factors are characteristics of the students' school, and peer relationships that have been associated with reducing the likelihood of experimentation with alcohol, tobacco, and other drugs and antisocial behavior by buffering the effects of risks in their environment. Each question was scored so that the most positive behaviors received the highest score. For example, if a student indicated that she had done community service 40 or more times in the last year, then this would be scored as a 1. Conversely, a student who indicated having never done community service would receive a score of 0. Mean scores for each factor were then computed on a scale of 0 to 1, with a higher score indicating that the student has a greater chance of being protected by that factor. For example, if the mean score for the *Prosocial Involvement* factor was 0.60 then students would be more likely than average than students with lower protective scores to be participating in positive activities.

#### **Peer-Individual Domain Protective Factors**

The *Peer-Individual Domain Protective Factor* refers to youths' attitudes about school, their participation in extra-curricular activities, whether or not their friends engage in prosocial behaviors, and if there are peer rewards for prosocial behavior. The *Peer-Individual Domain Protective Factor* scores by demographic subgroup are presented in Table 48.

#### Interaction with Prosocial Peers

- Think of your four best friends (...). In the past year (...) how many of your best friends have: participated in clubs, organizations or activities at school.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: made a commitment to stay drug-free.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: liked school.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: regularly attended religious services.
- Think of your four best friends (...). In the past year (...) how many of your best friends have: tried to do well in school.

Higher mean scores on the *Interaction with Prosocial Peers* factor indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors because more of their friends have engaged in prosocial behavior. The overall mean was 0.53. The mean for 11<sup>th</sup>/12<sup>th</sup> grade students was lower than the mean for 9<sup>th</sup>/10<sup>th</sup> grade students (0.50 and 0.55, respectively), indicating that the friends of the younger students have participated in more positive behaviors than the friends of older students. The same difference is seen between males and females with females more likely to have friends who participate in more positive behaviors (0.55 vs. 0.50). By racial/ethnic group, students of *other racial/ethnic backgrounds* had the highest mean (0.59) compared to the lowest mean score of 0.50 for Hispanic students.

#### **Prosocial Involvement**

- How many times in the past year (...) have you: participated in clubs, organizations or activities at school.
- How many times in the past year (...) have you: done extra work on your own for school.
- How many times in the past year (...) have you: volunteered to do community service.

Higher mean scores on the *Prosocial Involvement* factor indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors because of more frequent involvement with prosocial activities. The overall mean was 0.34. Eleventh and twelfth grade students had a higher mean score than 9<sup>th</sup>/10<sup>th</sup> grade students (0.38 vs. 0.32) and females had a higher score than males (0.37 vs. 0.32). Hispanic students had the lowest mean score at 0.26 while students of *other racial/ethnic backgrounds* reported more prosocial involvement than the other racial/ethnic groups (0.39).

#### Peer Rewards for Prosocial Involvement

- What are the chances you would be seen as cool if you: worked hard at school?
- What are the chances you would be seen as cool if you: defended someone who was being verbally abused at school?
- What are the chances you would be seen as cool if you: regularly volunteered to do community service?
- What are the chances you would be seen as cool if you: made a commitment to stay drug-free?

Higher mean scores on the *Peer Rewards for Prosocial Involvement* factor indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors because they perceive peer rewards for participation in prosocial activities. The overall mean was 0.40. There was no difference by grade level. Female students had a higher mean score than males (0.44 vs. 0.37, respectively) indicating that more girls than boys believe they would be seen as cool if they participated in pro-social activities. The racial/ethnic groups with the highest mean scores were African-American students (0.47) and students of *other racial/ethnic backgrounds* (0.47) and the group with the lowest score was White students (0.37).

		Interact Prosoci	tion with ial Peers	Pros Involv	social vement	Peer Rev Pros Involv	wards for social rement
		n	Mean	n	Mean	n	Mean
NJ High So	chool Students	7206	0.53	7245	0.34	7180	0.40
Grade						-	
	9 <sup>th</sup> /10 <sup>th</sup>	3546	0.55	3571	0.32	3538	0.40
	11 <sup>th</sup> /12 <sup>th</sup>	3660	0.50	3674	0.38	3642	0.41
Sex							
	Male	3142	0.50	3168	0.32	3141	0.37
	Female	3876	0.55	3888	0.37	3853	0.44
Ethnicity							
	White	4065	0.52	4087	0.37	4056	0.37
	African-American	707	0.56	711	0.32	695	0.47
	Hispanic	1409	0.50	1416	0.26	1403	0.42
	Other	950	0.59	955	0.39	950	0.47

## Table 48: Peer-Individual Domain Protective Factor Demographics – Interaction with Prosocial Peers, Prosocial Involvement, and Rewards for Prosocial Involvement

#### **School Domain Protective Factors**

The School Domain Protective Factor is defined by students who have positive relationships with teachers; have opportunities to make decisions in class; and/or receive rewards, recognition, or praise for such success both in and out of school. The School Domain Protective Factor scores by demographic subgroup are presented in Table 49.

#### **School Opportunities for Prosocial Involvement**

- In my school, students have lots of chances to help decide things like class activities and rules.
- Teachers ask me to work on special classroom projects.
- There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.
- There are lots of chances for students in my school to talk with a teacher one-on-one.
- There are lots of chances to be part of class discussions or activities.

Higher mean scores on the *School Opportunities for Prosocial Involvement* factor indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors because are school opportunities for prosocial involvement. The overall mean was 0.63. There were no notable differences by grade level or gender. By race/ethnicity, there was also little variation. African-American students had the highest mean of 0.65 while Hispanic students had the lowest mean of 0.60.

#### School Rewards for Prosocial Involvement

- My teacher notices when I am doing a good job and lets me know about it.
- I feel safe at my school.
- The school lets my parents know when I have done something well.
- My teachers praise me when I work hard in school.

Higher mean scores on the *School Rewards for Prosocial Involvement* factor indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors because there are school rewards for prosocial involvement. The overall mean was 0.53. There was no difference by grade level or by gender and only small differences across racial/ethnic groups. Hispanic students had the lowest mean score (0.50) and students of *other racial/ethnic backgrounds* had the highest mean on this factor (0.55).

## Table 49: School Domain Protective Factor Demographics – School Opportunities for Prosocial Involvement and School Rewards for Prosocial Involvement

		Sci Oppor for Pro Involv	hool tunities osocial rement	School for Pro Involv	Rewards osocial vement
		n	Mean	n	Mean
NJ High Sc	hool Students	7244	0.63	7233	0.53
Grade					
	9 <sup>th</sup> /10 <sup>th</sup>	3569	0.64	3566	0.53
	11 <sup>th</sup> /12 <sup>th</sup>	3675	0.62	3667	0.52
Sex					
	Male	3171	0.63	3158	0.53
	Female	3886	0.63	3886	0.53
Ethnicity					
	White	4088	0.63	4084	0.53
	African-American	712	0.65	706	0.53
	Hispanic	1413	0.60	1410	0.50
	Other	955	0.63	956	0.55

#### C. Statewide Risk and Protective Factor Averages

Table 50 presents the average score for all 20 risk factors and all five protective factors. Overall, little variation is observed between demographic subgroups.

Average of the Risk Factors: Higher mean scores indicate that the group is at greater risk for using drugs and participating in antisocial behaviors. The overall mean was 0.27. Overall, there were minor differences between demographic subgroups. The 11<sup>th</sup>/12<sup>th</sup> grade student mean was 0.29, which was slightly higher than the 9<sup>th</sup>/10<sup>th</sup> grade mean of 0.25. There was no notable difference between males and females (0.28 versus 0.26). By race/ethnicity, African-American (0.28), Hispanic (0.28), and White (0.27) students had very similar means while students of other racial/ethnic backgrounds had only a slightly smaller mean score (0.24). Table A4 indicates that the average county level risk factor score ranged from a low of 0.23 in Mercer County\* to a high of 0.29 in Cumberland County\*.

Average of the Protective Factors: Higher mean scores indicate that the group has a greater chance for being protected from using drugs and participating in antisocial behaviors. The overall mean was 0.49. There was no difference by grade level and only a very small difference by gender. The mean score for female students was slightly higher than the mean score for males (0.50 versus 0.47). By race/ethnicity, students of other racial/ethnic backgrounds had the highest mean (0.53) and Hispanic students had the lowest mean (0.46). The average county level protective factor score (Table A4) ranged from a low of 0.46 in Middlesex\* to a high of 0.52 in Mercer County\*. Hunterdon County (0.51) and Salem County\* (0.51) also had high protective factor scores.

		R. Fac	isk tors	Prote Fac	ective tors		
		n	Mean	n	Mean		
NJ High Sc	hool Students	7095	0.27	7249	0.49		
Grade							
	9 <sup>th</sup> /10 <sup>th</sup>	3480	0.25	3572	0.49		
	11 <sup>th</sup> /12 <sup>th</sup>	3615	0.29	3677	0.49		
Sex							
	Male	3091	0.28	3169	0.47		
	Female	3825	0.26	3891	0.50		
Ethnicity							
	White	4037	0.27	4091	0.49		
	African-American	687	0.28	711	0.50		
	Hispanic	1361	0.28	1414	0.46		
	Other	935	0.24	957	0.53		

#### Table 50: Average of the Risk and Protective Factors by Demographic Subgroups

#### D. Impact of Average Risk Factor Score on Substance Use

In order to better interpret the risk factor mean scores, four categories were calculated – *very low, low, high,* and *very high*. These categories were based on a normal distribution of scores, such that 68% of the scores are within one standard deviation of the mean. Risk categories were determined by examining the mean and standard deviations of the average risk factor score (0.27). Each quartile division of the following graphs was created using standard deviations. The *low* division represents one standard deviation *below* the mean while the *high* division represents scores more than one standard deviation *below* the mean. Similarly, the *very high* division includes scores more than one standard deviation *above* the mean.

Once risk factor categories were established, the interaction of these categories with the prevalence of tobacco, alcohol, and other drug use was analyzed. The relationships between the average risk factor score and the rate of substance use are illustrated in Figures 2 through 5 below. As shown, as risk scores increase, lifetime, past year, and past 30 days ATOD use increases.



Figure 2: Prevalence of Cigarette Smoking by Risk Factor Groupings

**Risk Factor Grouping** 

**Cigarette Smoking** 

As shown, as risk scores increase, use of tobacco increases. It is important to note that only about two in 100 students (1.7%) of *very low* risk are likely to have experimented with tobacco in their lifetime, as compared to seven in ten students of *very high* risk (74.4%). Further, there are striking increases in cigarette smoking between those at *low* and *high* risk (16.7% vs. 47.7%) and between those at *high* and *very high* risk (47.7% vs. 74.4%). This pattern is seen in past year and use in the past 30 days as well.

Figure 3: Prevalence of Alcohol Consumption by Risk Factor Groupings



As shown, as risk scores increase, alcohol consumption increases. There is a dramatic difference in prevalence rates for all time periods (lifetime, past year and past 30 days) between those of *very low* risk and those of *low* risk – percentages of use increase 2.5 to 4 times between these two risk categories. Increases in prevalence rates are smaller between the other risk categories. Nine in ten students in the *high* (89.0%) or *very high* (95.1%) risk categories have tried alcohol at some point in their lives

Figure 4: Prevalence of Marijuana Use by Risk Factor Groupings



**Risk Factor Grouping** 

As shown, as risk scores increase, use of marijuana increases. Only five in 1,000 students (0.5%) of *very low* risk has used marijuana in their lifetime, as compared to more than four in 10 students of *high* risk (43.6%) and more than seven of 10 students of *very high* risk (75.1%). Between *low and high* risk, marijuana use more than triples and between *high* and *very high* risk, marijuana use increase by more than 1.5 times. Three quarters (75.1%) of students at very high risk have tried marijuana in their lifetime and two thirds (66.8%) have used it in the past year.





As shown, as risk scores increase, use of other illicit drugs (all illicit drugs excluding marijuana, inhalants and prescription drugs) increases. Approximately 2% or less of students of *low* or *very low* risk has ever used other illicit drugs. It is important to note that one in 10 students (10.9%) of *high* risk has used other illicit drugs in their lifetime, as compared to four in 10 students of *very high* risk (39.0%). There is a dramatic increase in prevalence rates between *high* and very high risk groups at all time periods.

#### E. Impact of Average Protective Factor Score on Substance Use

In order to better interpret the protective factor mean scores, student protective scores were divided into four categories – *very low, low, high*, and *very high*. These categories were based on a normal distribution of scores, such that 68% of the scores are within one standard deviation of the mean. Protective categories were determined by examining the mean and standard deviations of the average protective factor scores (0.49). Each quartile division of the following graphs was created using standard deviations. The *low* division represents one standard deviation *below* the mean while the *high* division represents scores one standard deviation *below* the mean. The *very low* division represents scores more than one standard deviation *below* the mean. Similarly, the *very high* division includes scores more than one standard deviation *above* the mean.

The relationship between average protective factor score and substance use is illustrated in Figures 6 through 9 below. It is important to note that these are inverse relationships. In summary, as the protective factor scores increase, lifetime, past year, and past 30 days ATOD use decrease.





#### **Cigarette Smoking**

**Protective Factor Grouping** 

As shown, as protective scores increase, use of tobacco decreases. Increases in protective scores result in decreases of tobacco use at all levels of risk and for all time periods. However, slightly larger decreases in tobacco use are seen as protective scores increase from *very low* to *low*.

Figure 7: Prevalence of Alcohol Consumption by Protective Factor Groupings



**Protective Factor Grouping** 

As shown, as protective scores increase, alcohol consumption decreases. Despite *very high* protective scores, more than half (56.9%) of students still consumed alcohol in their lifetime. This may indicate that adolescents are likely to experiment with alcohol even with an arsenal of protective factors. There is a moderate change in lifetime alcohol use as protective factors increase – a total of 22.4%.

Figure 8: Prevalence of Marijuana Use by Protective Factor Groupings



**Protective Factor Grouping** 

As shown, as protective scores increase, use of marijuana decreases. Notably, fifteen percent (15.8%) of students with *very high* protective scores has used marijuana in their lifetime, as compared to nearly half (46.1%) of students with *very low* protective scores. Change in prevalence rates is fairly similar between each level of risk, indicating that increasing protective scores at all levels has roughly the same effect on decreasing use of marijuana.



Figure 9: Prevalence of Other Illicit Drug Use by Protective Factor Groupings

As shown, as protective scores increase, use of other illicit drugs (excluding marijuana, inhalants, and prescription drugs) decreases. The greatest change occurs between students with *very low* and *low* protective scores (20.8% vs. 12.5%) and between students with *low* and *high* protective scores (12.5% vs. 5.4%) where reported lifetime other illicit drugs use decreases by half (5.5% vs. 2.3%). There is very little change in use of other illicit drugs as protective scores move from high to very high. This same pattern is seen for all time periods.

APPENDIX A: Prevalence Summaries Disaggregated by County

### Table A1: Prevalence Summaries of Selected Substance Use by New Jersey High School Students, by County \*

2008		Atlantic	Bergen*	Burlington	Camden	Cape May*	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
		- %	- %	- %	- %	. %	. %	%	· % ·	%	- %	%	. %	%	%	%	- %	. %	- %	. %	- %	- %	%
Alcohol	Lifetime	69.2	76.4	69.2	70.5	72.0	70.0	65.1	74.4	72.7	73.5	66.2	69.9	80.2	74.9	78.1	66.4	68.6	73.3	71.6	71.9	76.6	72.1
	Past Year	61.0	67.9	60.4	64.4	65.1	59.2	49.0	69.6	58.4	64.2	60.4	60.3	74.2	68.8	69.6	58.9	59.4	62.4	62.3	59.7	70.7	63.1
	Past 30 Days	40.7	55.0	42.4	47.9	49.1	41.5	31.4	55.4	41.4	47.9	45.7	40.7	59.2	53.0	49.9	42.2	39.4	39.2	45.0	40.2	56.3	45.9
Cigarettes	Lifetime	28.9	33.9	27.5	23.5	40.4	32.1	34.0	33.7	37.0	34.2	21.8	34.8	40.1	37.9	35.8	29.8	33.2	34.4	33.6	22.9	30.2	32.4
	Past Year	19.9	25.4	21.5	18.8	31.8	22.1	24.9	26.9	25.6	29.1	18.9	29.4	35.9	30.4	30.6	19.5	23.9	28.5	25.4	16.3	26.5	25.4
	Past 30 Days	13.4	18.1	16.0	11.8	24.6	14.2	16.2	19.5	18.0	20.0	12.8	20.2	28.4	21.3	23.9	12.1	19.1	17.2	19.0	9.5	20.9	17.8
Marijuana	Lifetime	29.7	; 33.2	; 21.8	29.5	; 37.6	27.2	26.2	29.5	26.7	; 32.2	29.6	31.2	39.6	27.7	36.7	21.2	25.3	25.5	38.0	; 27.9	26.7	29.7
	Past Year	25.0	29.8	18.2	28.3	30.8	20.0	20.3	24.5	20.9	28.7	27.4	22.5	35.3	20.6	32.8	18.7	20.4	18.2	30.7	22.1	24.8	24.9
Casalina	Past 30 Days	19.4	20.4	11.8	20.8	22.0	11.7	11.9	13.7	13.5	14.9	17.0	17.4	23.4	17.1	22.5	10.4	10.7	11.2	19.1	13.4	17.6	16.6
Cocaine	Lifetime Deet Veer	3.5	5.2	1.4	2.4	4.9	1.9	0.3	4.3	2.7	2.0	2.1	4.5	4.9	5.3	6.1 E 1	2.4	4.5	8.9	7.4	1.9	2.1	3.7
	Past 1 edi	2.2	3.0	0.5	0.5	4.4	0.0	0.1	2.9	2.1	1.9	1.0	4.0	4.0	4.0	3.1	1.0	2.0	1.4	0.3	1.5	1.7	2.9
Procerintian Drugs	Lifetime	. 20.2	12.0	17.5	. 12.4	2.0	. 115	10.7	. 15.7	1.0	. 17.4	0.7	. 127	3.2	2.7	1.7	1.2	. 17.0	1.2	+./	0.9	167	14.0
w/o Proportion		: 20.2	: 13.2	: 17.5	: 10.4	: 21.9	14.5	10.7	10.7	0.0	: 17.4	11.3	10.7	10.0	10.9	10.7	10.0	: 17.0	: 17.3	: 17.1	; 9.0	: 10.7	14.0
Wo Prescription	Past rear	15.7	9.8	14.1	10.4	14.8	10.8	8.0	14.0	9.6	13.9	9.4	10.9	15.5	14.5	16.2	11.7	10.5	13.4	14.4	0.3	14.5	11.8
wetnampnetamines	Lifetime Bost Voor	1.3	0.4	0.2	0.7	0.5	. 1.1	0.6	0.8	0.8	0.2	0.4	0.4	0.2	0.3	1.5	0.6	2.0	0.0	1.1	0.8	0.7	0.6
	Past 1 edi	1.2	0.2	0.0	0.5	0.0	0.9	0.4	0.4	0.5	0.3	0.2	0.0	0.2	0.3	1.3	0.5	1.1	0.0	0.0	0.5	0.2	0.4
Amphotominos	Lifotimo	. 5.5	0.0	0.0	. 1.2	0.0	. 0.0	0.0	5.6	1.9	0.2	3.5	0.0	0.2	5.5	6.7	1.5	0.0	0.0	. 5.5	0.5	0.0	2.0
Amphetammes	Past Year	. 3.3 . 4.3	20	32	: 4.2	5.0	: 4.1 : 3.1	2.0	. 40	1.0	24.1	23	2.0	4.0	22	5.0	. 0.4	: 4.1 : 10	- 3.0 - 3.8	: 3.0	. 0.8	25	27
Sedatives	l ifetime	5.7	2.0	2.0	5.7	5.0	2.8	3.4	- 5.8	3.2	5.1	3.4	4.5	6.6	63	6.8	27	55	5.0	65	2.5	5.0	4.5
ocuatives	Past Year	- 47	1.8	2.0	- 42	44	2.0	19	4.5	1.3	3.6	12	31	59	5.0	5.5	14	20	3.8	39	2.0	25	3.2
Inhalants	Lifetime	3.8	5.5	5.8	1.2	80	5.5	2.8	3.0	5.6	6.0	37	5.5	6.9	5.4	5.5	· 41	- 49	7.8	- 46	19	59	4.8
initialanto	Past Year	2.1	3.8	3.1	1.0	4.3	2.6	2.6	1.4	3.4	3.8	1.4	2.8	4.8	0.8	3.2	2.4	1.3	2.9	2.5	0.9	2.0	2.6
Hallucinogens	Lifetime	3.9	2.5	1.1	3.1	5.8	2.5	1.1	3.4	0.8	3.1	2.0	2.2	3.8	3.8	4.4	0.6	4.5	3.7	4.8	1.4	3.2	2.6
June	Past Year	2.8	2.1	0.8	2.1	4.8	2.3	0.9	2.9	0.7	2.0	1.3	1.2	3.5	2.7	3.7	0.5	3.0	3.4	2.7	0.9	3.0	2.0
Heroin	Lifetime	1.7	0.0	0.8	0.5	0.4	0.8	0.0	· 1.2 ·	0.2	0.4	0.8	0.4	2.2	0.7	0.9	0.2	2.5	1.2	· 1.9	0.9	0.8	0.7
	Past Year	1.2	0.0	0.5	0.3	0.4	0.4	0.0	0.9	0.0	0.4	0.6	0.0	2.0	0.7	1.1	0.0	1.7	1.2	0.8	0.3	0.8	0.5
Steroids	Lifetime	0.9	0.4	0.8	0.7	2.5	0.8	3.5	1.7	1.0	0.3	0.0	0.5	0.7	1.4	1.6	1.8	2.6	1.6	0.2	0.5	0.6	1.1
	Past Year	0.3	0.2	0.7	0.1	1.0	0.8	3.5	0.9	0.3	0.0	0.0	0.5	0.3	0.3	0.9	1.1	1.3	1.5	0.2	0.0	1.1	0.7
Ecstasy	Lifetime	3.6	5.6	1.0	1.8	2.8	1.7	3.0	2.5	3.2	3.4	1.4	3.1	8.2	4.9	3.1	2.3	3.6	4.3	3.3	2.3	1.7	3.5
-	Past Year	2.7	4.6	1.0	0.7	2.4	1.7	2.9	2.5	2.5	1.8	1.1	2.6	7.6	4.2	2.5	1.6	1.8	1.7	2.3	1.7	1.7	2.8
OxyContin	Lifetime	4.3	4.1	3.4	3.5	4.8	2.3	0.2	5.7	1.5	4.6	2.0	4.5	7.8	4.7	10.8	1.4	5.4	3.6	7.8	1.1	3.5	4.0
	Past Year	2.8	3.8	2.8	3.1	3.3	1.9	0.2	4.5	1.1	3.9	1.7	3.3	7.1	3.3	10.1	1.5	3.4	3.6	5.6	0.2	2.3	3.3
Club Drugs	Lifetime	1.8	1.5	0.9	0.3	0.9	0.3	0.0	0.5	1.4	0.9	0.7	1.6	1.5	0.9	0.2	0.5	2.4	4.1	3.1	0.8	1.7	1.1
	Past Year	1.4	1.2	0.1	0.3	0.4	0.3	0.0	0.3	0.6	0.6	0.4	1.2	0.6	0.9	0.0	0.5	0.2	0.3	1.7	0.3	1.5	0.6
Any Illicit Drugs	Lifetime	11.8	10.4	8.9	9.3	15.0	7.4	7.5	11.2	7.1	11.1	7.1	8.9	14.9	11.0	17.6	7.8	9.9	13.7	13.0	6.2	10.8	10.2
	Past Year	9.8	7.7	7.1	8.0	11.6	6.3	6.9	8.5	6.0	8.9	3.8	6.6	13.1	8.0	14.9	5.6	7.4	7.1	11.0	4.4	8.3	8.0
Denne of V-1110		378	- 476	388	456	210	297	257	453	498	406	351	178	296	147	412	330	280	239	297	367	226	
to Question	ent Responses 1 Item	390	500	407	477	216	317	277	512	- 514	417	363	188	310	153	429	349	291	251	312	389	235	
		•	•	•	•	•	•				•						•	•	•	•	•		

\* County response rate is below the state mean response rate

2008	Atlantic	Bergen*	Burlington	Camden	Cape May*	Cumberland*	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Attacking Someone with Intent to Harm	13.3	10.8	10.3	10.4	12.5	16.9	11.4	12.4	11.8	5.9	10.4	10.9	12.6	8.0	10.1	9.9	9.9	14.7	9.3	11.7	11.0	11.1
Attempting to Steal a Vehicle	3.5	1.0	1.2	3.3	2.1	2.6	1.0	2.0	3.4	0.8	1.0	2.6	2.2	0.6	0.9	0.9	3.0	1.7	3.5	1.8	0.5	1.9
Being Arrested	8.7	6.2	4.6	6.5	12.7	8.3	4.6	6.8	7.1	2.2	2.7	8.2	8.5	7.4	7.6	4.5	10.1	7.0	4.5	5.6	4.8	6.5
Being Drunk or High at School	19.0	14.0	13.4	13.2	18.9	13.5	10.9	12.6	15.4	8.1	6.5	13.3	20.5	14.2	18.8	10.3	11.2	13.4	14.8	12.2	14.4	13.9
Carrying a Handgun	3.4	1.4	1.9	4.7	1.3	6.0	2.7	2.4	4.3	0.7	0.9	2.4	1.2	1.7	2.1	1.2	3.9	4.6	2.2	2.8	1.3	2.5
Getting Suspended	18.2	. 13.1	15.6	16.6	11.2	24.3	26.4	13.0	18.9	4.6	6.0	16.6	11.5	7.8	12.2	22.3	15.1	12.8	10.1	15.4	7.7	15.2
Selling Drugs	12.9	7.3	4.8	8.0	10.7	7.2	6.6	9.2	6.5	5.4	5.0	6.7	10.5	10.7	11.4	4.5	6.2	10.9	9.9	6.1	6.9	7.9
Taking a Handgun to School	0.3	0.1	0.9	0.2	0.0	0.6	0.0	0.0	0.2	0.0	0.5	0.6	0.6	0.0	0.2	0.0	2.3	0.1	0.0	0.6	0.5	0.4
In a Gang, With or Without a name	6.8	2.2	3.7	5.2	3.3	10.8	4.3	5.1	7.6	1.0	3.2	5.1	3.0	2.1	2.3	6.6	8.0	10.0	1.2	8.1	4.2	4.7
Range of Valid Student	350	439	365	418	183	266	219	432	447	364	319	160	265	137	384	308	260	225	283	328	216	-
Responses to Question Item	390	497	406	477	216	317	277	473	514	417	364	188	310	153	429	349	291	251	312	387	234	-

#### Table A2: Prevalence Summaries of Selected Delinquent Behaviors by New Jersey High School Students, by County

\* County response rate is below the state mean response rate

#### Table A3: Prevalence Summaries in the Past Year of Gambling Behaviors by New Jersey High School Students, by County

	2008	Atlantic	Bergen*	Burlington	Camden	Cape May* Cumberland*	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
		: %	%	%	% :	% : %	: %	: %	- %	%	%	%	%	%	%	%	: %	: %	: %	%	%	%
Played the lottery	Never/Before, not past year	70.2	60.0	61.5	72.4	61.5 64.2	2 68.4	61.1	71.7	59.4	64.5	56.3	47.4	46.2	42.3	65.1	65.7	63.6	46.4	70.2	48.2	60.3
or scratch-off	Past Year – A few times	23.9	28.1	27.1	19.6	32.2 24.7	18.4	29.7	22.4	29.7	27.6	30.7	37.2	43.4	41.0	26.0	23.9	27.6	42.2	23.0	36.4	28.8
tickets?	Past Year – Monthly/Greater	6.0	11.8	11.4	7.9	6.3 11.7	7 13.2	9.1	5.9	10.9	8.0	13.0	15.3	10.4	16.6	8.9	10.4	8.8	11.3	6.8	15.5	10.8
Bet on team	Never/Before, not past year	84.2	75.4	78.0	75.0	82.8 75.3	8 78.9	76.5	79.3	80.6	75.2	82.2	67.9	77.1	77.3	77.8	83.9	71.2	78.0	76.6	85.3	77.0
sports for money	Past Year – A few times	10.7	19.0	16.1	12.2	13.0 13.4	4 14.2	16.1	12.0	15.8	20.9	9.4	21.3	18.9	14.5	14.8	8.4	17.2	18.1	15.6	8.5	15.4
or possessions?	Past Year – Monthly/Greater	5.0	5.6	5.9	12.8	4.2 11.3	3 7.0	7.2	8.6	3.7	3.8	8.3	10.8	3.9	8.2	7.3	7.7	11.7	4.0	7.8	6.2	7.6
Played cards for	Never/Before, not past year	78.9	72.9	76.0	69.6	80.5 74.5	5 71.1	67.5	79.3	75.5	74.7	78.3	70.3	77.0	69.2	78.0	77.2	68.5	74.2	74.8	76.1	73.9
money or	Past Year – A few times	15.2	20.0	15.9	19.3	11.8 16.4	18.1	21.5	13.5	17.5	18.4	14.4	17.7	16.8	21.7	15.9	16.2	18.0	19.4	13.6	16.9	17.3
possessions?	Past Year – Monthly/Greater	6.0	7.1	8.0	11.2	7.7 9.1	10.8	11.0	7.2	7.0	7.0	7.3	12.0	6.2	9.0	6.1	6.5	13.5	6.5	11.6	7.1	8.8
Bet on pool, darts or bowling?	Never/Before, not past year Past Year – A few times Past Year – Monthly/Greater	84.4 10.2 5.5	86.4 9.6 4.0	83.3 11.2 5.5	82.1 7.6 10.3	85.9         78.6           9.3         12.4           4.8         9.0	6 85.5 6.6 8.1	80.3 14.0 5.7	84.0 11.1 4.9	85.8 9.0 5.3	84.5 12.0 3.5	87.4 7.2 5.4	75.9 15.2 8.9	86.0 9.9 4.1	83.5 10.6 5.9	88.0 7.2 4.9	84.9 8.8 6.4	78.6 12.0 9.5	87.9 7.4 4.7	86.0 10.1 3.9	84.8 11.5 3.6	84.0 10.0 6.0
Bet money or	Never/Before, not past year	87.2	88.3	85.5	83.4	92.8 80.3	8 - 83.5	86.0	79.4	90.7	86.8	86.9	81.2	92.9	86.4	84.6	84.2	88.9	93.1	83.5	89.7	85.8
possessions on	Past Year – A few times	7.9	6.1	6.8	7.2	3.6 8.0	- 4.6	8.8	12.2	6.1	8.7	5.1	11.8	4.0	5.8	8.4	6.0	4.3	4.0	10.3	4.3	7.2
video games?	Past Year – Monthly/Greater	4.9	5.6	7.7	9.4	3.6 11.6	6 - 11.9	5.1	8.5	3.2	4.5	8.0	7.0	3.2	7.7	7.1	9.7	6.7	2.9	6.2	6.1	7.1
Played bingo for	Never/Before, not past year	94.8	92.3	90.1	91.8	95.7 93.	92.9	93.6	94.0	93.3	93.5	90.9	91.5	97.5	93.9	90.2	92.8	95.3	95.1	93.5	93.9	92.9
money or	Past Year – A few times	4.3	6.9	7.6	5.9	3.7 2.6	6.0	5.2	3.5	4.8	5.7	6.1	6.4	2.5	4.3	7.8	4.7	3.5	3.4	4.6	5.5	5.4
possessions?	Past Year – Monthly/Greater	1.0	0.7	2.4	2.1	0.5 4.2	1.1	1.3	2.5	1.9	0.9	3.0	2.1	0.0	2.0	2.1	2.6	1.3	1.4	1.9	0.7	1.7
Bet on dice	Never/Before, not past year	91.6	90.1	88.3	91.3	91.1 84.2	2 91.2	87.2	87.0	95.5	90.0	89.6	85.6	89.0	89.8	94.5	93.0	90.8	97.7	90.1	93.7	90.0
games such as	Past Year – A few times	5.3	7.5	6.0	5.0	4.6 10.8	3 4.6	8.6	5.9	2.4	6.9	5.9	8.7	6.5	7.5	4.1	1.7	7.7	1.6	5.9	4.1	6.2
craps?	Past Year – Monthly/Greater	3.1	2.4	5.8	3.8	4.3 4.9	4.2	4.1	7.0	6.7	3.1	4.5	5.7	4.6	2.7	1.3	5.3	1.5	0.8	3.9	2.1	3.9
Bet on horse races?	Never/Before, not past year	96.6	97.9	95.7	97.8	97.1 96.9	9 98.2	96.7	96.1	96.0	95.7	90.7	86.1	97.5	92.0	96.9	95.6	92.5	97.2	95.4	94.3	95.0
	Past Year – A few times	2.7	0.7	3.6	1.5	2.9 2.1	0.9	2.9	2.6	2.2	3.1	6.5	11.3	1.3	6.2	2.6	3.5	6.9	1.8	3.8	5.6	3.7
	Past Year – Monthly/Greater	0.6	1.4	0.8	0.8	0.0 1.1	1.0	0.4	1.2	1.8	1.1	2.7	2.6	1.2	1.9	0.5	0.9	0.5	1.0	0.8	0.0	1.2
Gambled on the internet?	Never/Before, not past year	96.6	94.7	94.9	95.9	97.6 96.3	95.5	95.6	96.7	97.0	97.8	95.1	90.3	96.8	94.7	95.9	97.4	93.3	96.3	96.6	97.0	95.3
	Past Year – A few times	1.8	3.5	1.7	2.3	1.3 0.8	2.4	2.5	1.3	1.4	1.0	2.2	5.5	3.2	2.2	0.9	1.9	4.1	2.9	1.0	0.7	2.4
	Past Year – Monthly/Greater	1.6	1.9	3.5	1.8	1.0 2.9	2.1	1.8	2.0	1.6	1.2	2.6	4.2	0.0	3.2	3.2	0.7	2.6	1.2	2.4	2.3	2.3
Gambled at a casino?	Never/Before, not past year	99.0	96.7	98.0	98.3	98.9 97.4	96.6	98.3	98.8	98.9	98.1	96.1	95.5	97.8	97.1	98.6	99.2	99.3	98.9	98.5	99.4	97.6
	Past Year – A few times	0.6	2.8	1.5	1.7	1.0 2.6	2.2	1.4	0.6	0.7	1.1	1.7	3.8	2.2	2.3	0.7	0.3	0.3	0.4	1.1	0.6	1.7
	Past Year – Monthly/Greater	0.4	0.5	0.5	0.0	0.0 0.0	1.2	0.3	0.6	0.4	0.8	2.2	0.8	0.0	0.6	0.8	0.5	0.4	0.7	0.4	0.0	0.6
Range of Valid Stu	udent Responses to Question Item	387 	491 - 496	403 406	470	215 311 216 316	270 275	469 473	507 511	411 - 414	358 - 361	186 - 187	305 - 308	150 - 152	424 - 427	345 - 349	284 - - 287	248 	310 311	384 387	231 - - 232 -	

\* County response rate is below the state mean response rate

APPENDIX B: Risk and Protective Factor Averages
	2008	Atlantic	Bergen*	Burlington	Camden	Cape May*	Cumberland'	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
	Community Domain	0.39	0.35	0.37	0.37	0.38	0.44	0.44	0.36	0.42	0.33	0.33	0.37	0.37	0.35	0.34	0.39	0.40	0.37	0.39	0.37	0.37	0.37
s	Family Domain	0.22	0.23	0.20	0.20	0.22	0.21	0.18	0.20	0.19	0.21	0.17	0.19	0.24	0.22	0.23	0.20	0.19	0.22	0.24	0.20	0.22	0.21
Risk Factor	School Domain	0.35	0.41	0.36	0.37	0.38	0.37	0.36	0.37	0.37	0.36	0.34	0.41	0.39	0.38	0.39	0.38	0.34	0.38	0.38	0.35	0.37	0.38
	Peer- Individual Domain	0.19	0.21	0.18	0.19	0.22	0.20	0.18	0.20	0.20	0.19	0.17	0.20	0.22	0.19	0.21	0.18	0.19	0.19	0.21	0.19	0.20	0.20
	Average Risk Factor Score	0.27	0.28	0.26	0.27	0.28	0.29	0.28	0.27	0.28	0.25	0.23	0.27	0.29	0.26	0.27	0.26	0.27	0.26	0.29	0.26	0.27	0.27
	School Domain	0.58	0.57	0.59	0.58	0.58	0.56	0.58	0.60	0.59	0.59	0.58	0.58	0.58	0.58	0.60	0.55	0.60	0.53	0.56	0.59	0.57	0.58
Protective Factors	Peer- Individual Domain	0.43	0.43	0.42	0.43	0.40	0.42	0.43	0.43	0.40	0.46	0.47	0.39	0.40	0.44	0.40	0.43	0.45	0.48	0.42	0.45	0.45	0.43
	Average Protective Factor Score	0.49	0.49	0.49	0.49	0.48	0.47	0.49	0.50	0.47	0.51	0.52	0.46	0.47	0.50	0.48	0.48	0.51	0.50	0.47	0.50	0.50	0.49

## Table B1: County-wide Risk and Protective Factor Averages by Domain

\* County response rate is below the state mean response rate

## Table B2: Risk and Protective Factor Averages by Domain

					PROTECTIVE FACTORS									
		Comr Dor	nunity main	Family	Domain	Schoo	l Domain	Peer-In Doi	dividual main	School	Domain	Peer-Individua Domain		
		n	Mean	n	Mean	n	Mean	n	Mean	n	Mean	n	Mean	
NJ High School Students		6999	0.37	7118	0.21	7011	0.38	7021	0.20	7221	0.58	7116	0.43	
Grade														
9 <sup>th</sup> /	'10 <sup>th</sup>	3438	0.36	3501	0.18	3426	0.37	3445	0.18	3557	0.58	3498	0.42	
11 <sup>tr</sup>	<sup>h</sup> /12 <sup>th</sup>	3561	0.40	3617	0.23	3585	0.38	3576	0.22	3664	0.57	3618	0.43	
Sex														
Mal	le	3063	0.37	3115	0.22	3053	0.39	3057	0.21	3157	0.58	3105	0.40	
Fen	nale	3761	0.38	3822	0.20	3778	0.36	3786	0.18	3877	0.58	3826	0.45	
Ethnicity														
Wh	ite	4002	0.35	4049	0.22	4011	0.38	3999	0.20	4079	0.58	4022	0.42	
Afri	ican-American	677	0.44	689	0.17	669	0.37	670	0.18	705	0.59	687	0.45	
His	panic	1325	0.41	1368	0.20	1341	0.39	1358	0.20	1407	0.55	1393	0.39	
Oth	ner	923	0.34	937	0.18	916	0.34	920	0.16	954	0.59	941	0.48	

## Table B3: Individual Risk Factor Averages by County

	2008	Atlantic	Bergen*	Burlington	Camden	Cape May*	Cumberland	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
	Laws and Norms Favorable to Drug Use	0.52	0.49	0.52	0.48	0.54	0.57	0.50	0.51	0.49	0.53	0.47	0.53	0.53	0.52	0.51	0.51	0.52	0.51	0.56	0.49	0.54	0.51
Community	Community Transitions and Mobility	0.37	0.27	0.34	0.34	0.32	0.36	0.38	0.28	0.36	0.25	0.30	0.30	0.25	0.28	0.29	0.33	0.35	0.27	0.29	0.35	0.25	0.31
	Low Neighborhood Attachment	0.39	0.35	0.37	0.40	0.37	0.43	0.46	0.36	0.40	0.33	0.34	0.38	0.37	0.33	0.33	0.39	0.42	0.37	0.41	0.34	0.37	0.38
	Perceived Availability of Drugs	0.57	0.58	0.53	0.54	0.58	0.57	0.56	0.57	0.56	0.58	0.51	0.56	0.62	0.56	0.57	0.57	0.57	0.57	0.60	0.53	0.60	0.56
	Community Disorganization	0.24	0.26	0.25	0.26	0.22	0.36	0.44	0.25	0.38	0.13	0.15	0.26	0.25	0.21	0.22	0.34	0.32	0.23	0.24	0.29	0.21	0.27
	Perceived Availability of Handguns	0.28	0.17	0.21	0.19	0.23	0.37	0.31	0.19	0.29	0.17	0.18	0.19	0.19	0.18	0.14	0.24	0.24	0.26	0.22	0.21	0.25	0.22
Family	Poor Family Management	0.33	0.35	0.33	0.33	0.33	0.35	0.31	0.31	0.32	0.31	0.28	0.31	0.35	0.33	0.32	0.32	0.30	0.34	0.33	0.34	0.31	0.33
	Parental Attitudes Favorable Toward Antisocial Behavior	0.17	0.17	0.15	0.15	0.17	0.15	0.12	0.16	0.14	0.16	0.12	0.16	0.18	0.18	0.18	0.16	0.15	0.15	0.20	0.14	0.16	0.16
	Parental Attitudes Favorable Toward Drug Use	0.15	0.16	0.13	0.12	0.16	0.14	0.11	0.14	0.10	0.16	0.11	0.12	0.19	0.15	0.18	0.12	0.13	0.15	0.17	0.12	0.17	0.14
lo	Low Commitment to School	0.39	0.46	0.41	0.41	0.41	0.41	0.38	0.41	0.40	0.42	0.40	0.42	0.45	0.43	0.44	0.40	0.37	0.44	0.44	0.39	0.42	0.42
Scho	Academic Failure	0.32	0.36	0.31	0.34	0.35	0.33	0.35	0.33	0.35	0.30	0.29	0.40	0.33	0.33	0.34	0.36	0.31	0.32	0.34	0.31	0.33	0.34
	Perceived Risks of Drug Use	0.26	0.33	0.29	0.32	0.34	0.30	0.24	0.31	0.26	0.34	0.29	0.30	0.34	0.29	0.34	0.25	0.28	0.27	0.32	0.30	0.32	0.30
	Favorable Attitudes Toward Antisocial Behavior	0.22	0.24	0.23	0.24	0.26	0.20	0.17	0.21	0.23	0.24	0.21	0.23	0.25	0.26	0.26	0.21	0.21	0.22	0.26	0.20	0.26	0.23
	Peer Rewards for Antisocial Behavior	0.20	0.23	0.21	0.23	0.23	0.23	0.24	0.24	0.23	0.23	0.21	0.26	0.23	0.24	0.21	0.23	0.19	0.20	0.24	0.24	0.23	0.23
idual	Favorable Attitudes Toward Drug Use	0.25	0.34	0.28	0.29	0.32	0.25	0.22	0.29	0.26	0.33	0.25	0.28	0.36	0.30	0.34	0.25	0.25	0.25	0.32	0.26	0.32	0.29
Indiv	Early Initiation of Drug Use	0.21	0.21	0.18	0.18	0.24	0.21	0.19	0.21	0.21	0.20	0.16	0.21	0.24	0.21	0.23	0.18	0.20	0.21	0.22	0.18	0.20	0.20
Peer-	Friends' Use of Drugs	0.30	0.36	0.29	0.28	0.37	0.30	0.27	0.34	0.30	0.32	0.26	0.34	0.39	0.31	0.35	0.26	0.29	0.28	0.36	0.29	0.33	0.32
	Early Initiation of Antisocial Behavior	0.10	0.07	0.08	0.08	0.09	0.12	0.11	0.09	0.10	0.04	0.04	0.08	0.06	0.05	0.07	0.08	0.12	0.09	0.05	0.09	0.05	0.08
	Gang Involvement	0.06	0.03	0.04	0.04	0.04	0.10	0.05	0.05	0.08	0.01	0.03	0.05	0.03	0.02	0.03	0.07	0.07	0.07	0.02	0.08	0.03	0.05
	Interaction with Antisocial Peers	0.10	0.07	0.08	0.09	0.09	0.12	0.12	0.08	0.12	0.04	0.04	0.09	0.10	0.06	0.09	0.10	0.09	0.07	0.09	0.09	0.06	0.09

\* County response rate is below the state mean response rate

## Table B4: Individual Protective Factor Averages by County

	2008	Atlantic	Bergen*	Burlington	Camden	Cape May*	Cumberland*	Essex	Gloucester	Hudson	Hunterdon	Mercer*	Middlesex*	Monmouth	Morris*	Ocean	Passaic	Salem*	Somerset*	Sussex*	Union	Warren*	Statewide
School	School Opportunities for Prosocial Involvement	0.61	0.62	0.64	0.63	0.64	0.62	0.65	0.65	0.65	0.64	0.64	0.63	0.63	0.63	0.64	0.61	0.65	0.59	0.61	0.64	0.61	0.63
	School Rewards for Prosocial Involvement	0.55	0.52	0.53	0.52	0.53	0.50	0.52	0.55	0.52	0.55	0.52	0.53	0.53	0.53	0.56	0.48	0.54	0.48	0.51	0.53	0.53	0.53
Peer- Individual	Interaction with Prosocial Peers	0.51	0.53	0.53	0.54	0.50	0.51	0.51	0.54	0.52	0.56	0.57	0.51	0.48	0.55	0.50	0.54	0.56	0.58	0.51	0.56	0.55	0.53
	Peer Rewards for Prosocial Involvement	0.47	0.41	0.40	0.39	0.40	0.43	0.45	0.39	0.42	0.38	0.43	0.38	0.36	0.37	0.35	0.43	0.42	0.44	0.37	0.42	0.42	0.40
	Prosocial Involvement	0.29	0.36	0.35	0.37	0.31	0.31	0.31	0.37	0.26	0.43	0.41	0.28	0.35	0.41	0.34	0.33	0.36	0.42	0.37	0.35	0.39	0.34

\* County response rate is below the state mean response rate



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