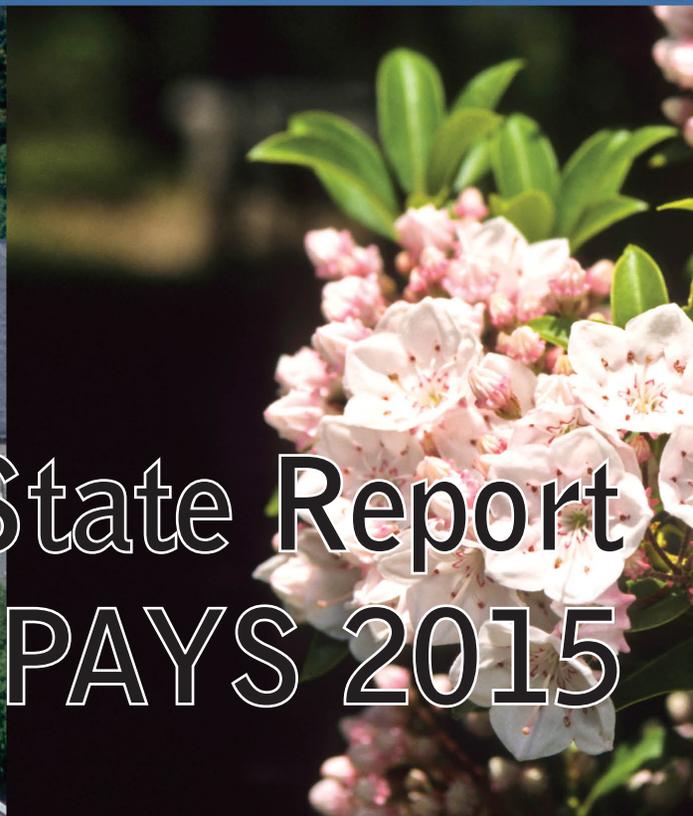


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# Pennsylvania Youth Survey (PAYS)



Sponsored by:

Pennsylvania Commission  
on Crime and Delinquency

Pennsylvania Department  
of Drug and Alcohol  
Programs

Pennsylvania Department  
of Education

# State Report PAYS 2015

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# Pennsylvania Youth Survey

## State Report 2015

Sponsored by:

Pennsylvania Commission on Crime and Delinquency  
Pennsylvania Department of Drug and Alcohol Programs  
Pennsylvania Department of Education

Conducted by:

Bach Harrison, L.L.C.  
The Pennsylvania State University



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The Pennsylvania Commission on Crime and Delinquency (PCCD), the Pennsylvania Department of Drug and Alcohol Programs (DDAP), and the Pennsylvania Department of Education (PDE) would like to thank Bach Harrison, L.L.C. and Dr. Rose Baker of the Prevention Research Center at The Pennsylvania State University for their contributions and guidance during the administration of the 2015 Pennsylvania Youth Survey.

Additionally, a great deal of thanks for the leadership of this survey needs to go to the PCCD Resource Center Steering Committee, who provided guidance and oversight to this effort.

The administration of the survey would not have been a success without the contributions of the PAYS Advisory Group (PAYSAG), whose tireless efforts and ideas helped make this year’s PAYS the most widely administered survey since Pennsylvania has been administering the tool.

Finally, the success of the 2015 PAYS could not have been achieved without the support and participation of school superintendents, administrators, principals, prevention coordinators, and teachers throughout the state. We extend our appreciation to the students who responded to the survey. Their thoughtful participation resulted in a wealth of information that can be used to improve the circumstances in which they live and learn.

We hope schools and communities find this year’s data useful for their planning purposes. We invite ALL schools in Pennsylvania to participate in the 2017 survey. If interested, please contact Geoff Kolchin at PCCD at (717) 265-8483.

# Executive Summary

The “Pennsylvania Youth Survey” or “PAYS” has been conducted every other year in the Commonwealth of Pennsylvania since 1989. The biennial, odd-numbered year survey focuses on students in grades 6, 8, 10, and 12 and exists to gather information about youth knowledge, attitudes, and behaviors towards alcohol, tobacco, and other drug use. Beginning with the 2013 administration, PAYS was offered at no charge to any school or district (public, private, charter, and parochial) courtesy of funding provided by the Pennsylvania Department of Education (PDE), the Pennsylvania Department of Drug and Alcohol Programs (DDAP), and the Pennsylvania Commission on Crime and Delinquency (PCCD).

The 2015 PAYS was the thirteenth biennial administration (1989-2015). Comparisons in this report were made between the results of the 2011, 2013, and 2015 surveys, as well as comparisons to youth nationwide. Readers who are interested in the results from earlier surveys can consult past reports. Please note that this report does not contain data from all survey questions. To access and analyze data from the entire survey dataset, please visit [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Over the last several survey administrations, PAYS has added additional questions about problem behaviors based on areas of interest to State and local leaders. These include questions around: illegal prescription drug use, gambling, depression/suicidal ideation, violence on school property, bullying (physical and online), gang involvement, and students’ sources of obtaining alcohol and/or prescription drugs. After each survey administration, Pennsylvania stakeholders review the survey instrument to determine if there are additional areas of importance that should be included in the next cycle or if some items have outlived their value and should be removed.

Questions are asked across four domains (community, school, family, and peer/individual) to help determine where the strengths of a community are that can be brought to bear to assist students. The questions also help determine where potential problems may exist outside of school that can have an impact on a student’s readiness to learn when they arrive at their school each morning. This includes questions on having enough food, student homelessness, or loss of a close family member or friend.

PAYS is administered in the individual school buildings, using either paper/pencil or online tool at the school’s discretion. The survey is voluntary – youth are able to skip any questions they do not wish to answer or to opt out of the survey entirely. Additionally, students are made aware that their responses will remain anonymous and confidential. No individual student-level data can be obtained from the data set, and the results are reported in aggregate at the local, county, and State levels.

PAYS is a primary tool in Pennsylvania’s prevention approach of using data to drive decision making. By looking not just at rates of problem behaviors but also at the root causes of those behaviors, PAYS allows schools and communities to address root causes (such as a lack of commitment to school) rather than only looking at the symptoms after the fact (like poor grades). This approach has been repeatedly shown in national research studies to be the most effective in helping youth develop into healthy, productive members of their society.

## Participation by Pennsylvania Youth

An attempt was made to survey all of the students in grades 6, 8, 10, and 12 in Pennsylvania, and additional focus was devoted toward securing participation from school and grade combinations chosen for the Statewide

The PAYS has been administered to youth 13 times – in the Fall of odd-numbered years, beginning in Fall 1989.

Sample (the results of which are presented in this State Report). Offering the survey to the entire State in the form of a census is incredibly helpful for supplying community-level data. Program planning often requires knowledge of substance use, antisocial behavior, and risk and protective factors for various subpopulations, such as youth in a specific community, a grade in school, or from single-parent homes. Having a good sample of students throughout the State (in addition to participation secured through the State's sample) allows the State to have a hearty dataset in which to generate profile reports at the school district, county, and community levels.

A total of 229,845 public and private school students throughout the State participated in the Fall 2015 Pennsylvania Youth Survey. After odd-grade and invalid/dishonest surveys were removed, a total of 216,916 surveys were represented in final local-level reports. The results featured in this report stem from the PAYS Statewide Sample, which was designed to gather data most representative of the State. Community-level summary reports were issued to nearly 400 school districts and counties.

There were 960 schools that chose to participate in the 2015 PAYS. 2014-2015 PDE enrollment figures show that there were a total of 308,217 public school students in grades 6, 8, 10, and 12 enrolled in these schools and eligible to participate in the survey. An attempt was made to survey all eligible Pennsylvania students, resulting in 216,916 valid participants in grades 6, 8, 10, and 12 (a participation rate of 70.4%), represented evenly across the State.

For PAYS, there was nearly an equal number of males and females who took the survey in all grades (49.7% female, 50.3% male). In terms of ethnicity, 90.4% of participants were non-Hispanic and 9.6% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (72.8%), Black/African American (8.3%), or left their race unmarked (7.6%). The other race groups accounted for 11.2% of the respondents.

See Survey Methods section of this report for further information about analysis of data provided by survey participants.

## The Risk and Protective Factor Framework

Pennsylvania has been using the Risk and Protective Framework to guide prevention efforts aimed at reducing youth problem behaviors. Risk factors are characteristics of school, community, and family environments, as well as characteristics of students and their peer groups that are known to predict increased likelihood of drug use, delinquency, school dropout, teen pregnancy, and violent behavior among youth. Dr. J. David Hawkins, Dr. Richard F. Catalano, and their colleagues at the University of Washington, Social Development Research Group have investigated the relationship between risk and protective factors and youth problem behaviors. For example, they have found that children who live in families with high levels of conflict are more likely to become involved in problem behaviors such as delinquency and drug use than children who live in families with low levels of family conflict.

Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. Protective factors identified through research reviewed by Drs. Hawkins and Catalano include bonding to family, school, community and peers; healthy beliefs and clear standards for behavior; and individual characteristics. For bonding to serve as a protective influence, it must occur through involvement with peers and adults who communicate healthy values and set clear standards for behavior.

Research on risk and protective factors has important implications for prevention efforts. The premise of the Risk and Protective Factor Model is that in order to promote positive youth development and prevent problem behaviors, it is necessary to address those factors that predict the problem behaviors. By measuring risk and protective factors in a population, prevention programs can be implemented that will reduce the elevated risk factors and increase the protective factors. For example, if academic failure is identified as an elevated risk factor in a community, then mentoring, tutoring, and increased opportunities and rewards for classroom participation can be provided to improve academic performance.

In order to make the results of the 2015 PAYS more usable, risk and protective summary profiles were developed that show the percentage of youth at risk and the percentage of youth with protection on each scale. Please note that PAYS is only one source of data for prevention and that some of the risk and protective factors can be measured with data from other sources. Being able to gather risk and protective factor data from other sources is important as it allows the PAYS form to be as brief as possible and also allows room on the survey form for additional questions to be asked related to other prevention strategies/projects.

Table ES-1 displays levels of risk in the four domains. The best strategy for analyzing risk factor scale scores is to compare State values to the Bach Harrison Norm values, which are calculated to represent a national average (See Section 2 for more information on the BH Norm). For an overwhelming majority of risk factor scale values, Pennsylvania youth in all grades had lower levels of risk in comparison to the Bach Harrison Norm. The only risk factor scales in PA that were higher than the BH Norm in 2015 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (9.7% to 12.5% higher than the BH Norm in each grade) and Parental Attitudes Favorable to Drug Use (1.3% to 3.1% higher than the BH Norm in each grade).

Table ES-2 displays levels of protection for all four domains. Again, the best strategy for analyzing protective factor scale scores is to compare State values to the Bach Harrison Norm. In general, Pennsylvania protection tended to be higher than the BH Norm for most scales. Two scales in which the Pennsylvania protection scores were lower than the BH Norm for all grades were for Community Rewards for Prosocial Involvement (1.2% to 2.2% lower in each grade) and the Religiosity scale (6.9% to 8.4% lower in each grade).

Additional risk and protective factor data can be seen in Tables ES-1 and ES-2. Further, Section 2 of the State Report has thorough data on levels of risk and protection.

## Substance Use Rates

Throughout the 2015 Report, tables are also used to show data for lifetime and 30-day use. Examples of these tables are displayed in Tables ES-3 through ES-10 in this Executive Summary. Lifetime use is a measure of the percentage of students who tried the particular substance at least once in their life and is used to show the level of experience with a particular substance. Past-month (or 30-day) use is a measurement of any use in the past 30 days, and is used to demonstrate more regular substance use. When comparable, the results of the Pennsylvania survey are compared to a national survey that is conducted each year by the University of Michigan called Monitoring the Future (MTF). MTF also only surveys students in the 8th, 10th, and 12th grades.

When looking at the Pennsylvania and MTF lifetime survey results, lifetime alcohol use was higher in Pennsylvania for the 8th grade (7.8% higher in Pennsylvania compared to the national MTF rates), 10th grade (7.1% higher in Pennsylvania compared to the nation), and 12th grade (7.0% higher in Pennsylvania). In regards to tobacco use, the rate of lifetime cigarette use in Pennsylvania was higher than the nation in the 12th grade (32.7% for PA, 31.1% for MTF) and lifetime smokeless tobacco use in Pennsylvania was higher than the nation in the 12th grade (18.1% for Pennsylvania, 13.2% for MTF). Narcotic prescription drug use was also higher than the national rate for the 8th grade (4.3% lifetime 8th grade use for PA, 2.3% use for the MTF) and the 12th grade (12.1% lifetime 12th grade use for PA, 8.4% lifetime 12th grade use for MTF). For all other substances, State use rates were lower than, or equal to, the national rates.

PAYS data also show that rates of lifetime alcohol use decreased significantly in the 8th, 10th, and 12th grades (a decrease of 1.2% percentage points in the 8th grade, a decrease of 7.3% in the 10th grade, and a decrease of 3.2% in the 12th grade) since the 2013 survey; lifetime cigarette use rate decreased 2.9% in the 10th grade, 2.5% in the 12th grade, and 1.3% for all grades combined; in 2013; lifetime smokeless tobacco use decreased 1.1% in the 10th grade; lifetime marijuana use decreased 3.8% in the 10th grade and 2.1% in the 12th grade; lifetime inhalant use rates decreased in each grade and 1.6%

for all grades combined since 2013; lifetime prescription narcotics decreased 1.6% for the 10th grade since 2013. The only lifetime substance use rate to show a significant increase (i.e., increase of roughly 0.9% or more) since the 2013 survey was lifetime 6th grade alcohol use (2.5% increase, from 13.3% in 2013 to 15.8% in 2015).

As with lifetime use, there are very few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. The rate of past month alcohol use is higher for Pennsylvania 12th graders than for students in the same grade in the national sample (37.6% past-month use in PA, 35.3% past-month use in MTF). Past-month cigarette use is also slightly higher for Pennsylvania 12th graders (3.2% higher). Pennsylvania 12th graders also indicated a past-month smokeless tobacco use rate that was 3.1% higher than the national rate. 2015 was the first PAYS administration to gather past-month e-cigarette use data; and this data shows significantly higher use for PA students in comparison to the nation (2.2% higher 8th grade use in PA vs.

the MTF, 6.4% higher 10th grade use in PA vs. the MTF, and 10.8% higher 12th grade use in PA vs. the MTF).

In regard to data changes from 2013 to 2015, many decreases were seen for the most commonly-used substances. Past-month alcohol use decreased 3.9% in the 10th grade (from 26.2% in 2013 to 22.3% in 2015), 3.0% in the 12th grade (from 40.6% in 2013 to 37.6% in 2015), and 2.1% for all grades combined (from 20.3% in 2013 to 18.2% in 2015). Past-month cigarette use decreased 3.1% in the 10th grade (from 9.9% in 2013 to 6.8% in 2015), 2.4% in the 12th grade (from 17.0% in 2013 to 14.6% in 2015), and 1.6% for all grades combined (from 8.0% in 2013 to 6.4% in 2015). Past-month marijuana use decreased 2.4% in the 10th grade (14.4% in 2013 to 12.0% in 2015) and 1.0% in the 12th grade (21.8% in 2013 to 20.8% in 2015). Past-month inhalant use decreased 1.0% in the 8th grade (from 2.5% in 2013 to 1.5% in 2013).

**Table ES-1**  
**Risk Factor Scales**

	6th				8th				10th				12th				All Grades			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
<b>Community</b>																				
Low neighborhood attachment	39.8	36.2	39.2	41.9	30.5	29.4	35.2	34.0	37.1	39.6	42.0	41.5	43.0	43.3	49.7	45.9	37.5	37.3	41.7	40.7
Perceived availability of drugs	48.7	31.7	32.9	45.3	48.6	29.1	26.0	45.4	47.5	33.3	30.1	47.5	45.2	32.6	34.4	41.0	47.5	31.7	30.8	44.8
Perceived availability of handguns	28.6	13.8	15.9	26.3	41.5	25.1	24.9	36.7	46.6	33.7	31.1	45.0	50.2	39.7	39.9	50.4	42.1	29.0	28.6	40.7
Laws & norms favorable to drug use	48.7	37.7	39.8	49.0	36.6	29.6	30.7	38.3	46.5	42.3	39.2	43.0	48.6	40.8	39.1	40.8	45.0	37.8	37.2	42.4
<b>Family</b>																				
Family history of antisocial behavior	36.9	37.6	37.8	48.0	41.3	34.6	33.3	46.3	37.7	37.0	30.3	47.8	41.2	35.8	30.9	45.1	39.2	36.2	32.9	46.7
Poor family management	43.7	40.1	39.7	48.3	45.4	36.6	36.7	47.3	49.8	39.2	39.2	49.3	40.5	34.6	33.7	40.6	45.2	37.6	37.3	46.3
Parental attitudes favorable to drug use	8.7	11.6	14.5	11.4	18.1	23.9	25.7	23.7	35.5	39.9	40.9	39.6	39.2	42.1	42.8	40.3	25.8	30.2	31.6	29.8
Parental attitudes favorable to antisocial behavior	38.1	39.2	48.3	37.7	29.1	33.9	40.1	30.4	34.7	43.0	47.3	34.9	37.6	43.6	47.0	34.5	34.8	40.0	45.7	34.1
Family conflict	31.0	31.4	34.9	38.9	33.6	28.6	31.8	35.3	36.3	35.6	36.3	39.9	37.1	35.3	38.1	38.0	34.9	32.8	35.3	38.0
<b>School</b>																				
Academic failure	29.6	28.1	29.9	38.1	32.5	32.5	35.3	41.1	36.6	35.9	34.7	42.5	35.7	33.4	34.6	37.9	33.7	32.8	33.8	40.1
Low commitment to school	36.7	30.4	33.3	42.8	40.9	39.6	41.7	46.2	47.0	44.0	45.5	48.7	43.2	39.6	44.6	43.8	42.1	38.8	41.5	45.6
<b>Peer and Individual</b>																				
Rebelliousness	27.9	25.4	25.7	39.6	24.2	21.3	21.7	34.5	31.0	29.7	25.7	39.8	31.1	33.4	31.1	37.7	28.6	27.6	26.1	35.5
Gang Involvement	8.1	8.2	10.4	9.1	9.3	7.4	10.3	11.2	10.3	9.1	11.5	12.4	11.5	12.8	15.6	13.2	n/a	n/a	12.0	11.7
Perceived risk of drug use	44.0	42.2	43.0	44.5	34.3	30.0	39.3	37.9	41.1	42.1	43.9	40.1	50.1	52.3	55.7	47.4	42.3	41.7	45.6	42.2
Attitudes favorable to drug use	16.4	14.7	19.1	18.9	42.9	36.6	38.0	43.7	49.5	44.5	43.1	45.3	53.9	48.8	47.4	46.9	41.3	37.1	37.4	40.0
Attitudes favorable to antisocial behavior	34.5	28.9	32.4	40.0	28.8	26.7	28.3	34.7	39.8	38.5	35.6	41.0	37.4	38.6	39.4	39.0	35.2	33.5	34.0	38.5
Sensation seeking	41.5	32.1	39.1	n/a	38.1	30.6	33.0	n/a	41.8	34.5	34.3	n/a	41.0	31.8	32.2	n/a	40.6	32.3	34.5	n/a
Rewards for antisocial behavior	15.8	16.4	15.2	20.7	33.1	35.1	31.2	43.2	37.7	43.5	35.2	46.7	46.0	45.4	41.7	51.5	33.6	36.1	31.4	41.5
Friends use of drugs	15.0	8.9	10.2	19.7	41.1	29.4	28.4	47.9	42.0	35.4	31.0	48.1	45.2	37.8	32.8	44.7	36.3	28.9	26.1	41.7
Interaction with antisocial peers	21.3	18.1	18.3	33.6	30.3	22.8	25.4	44.8	36.8	28.2	26.3	45.5	38.6	32.3	29.2	43.7	32.0	25.8	25.0	42.6
Depressive symptoms	23.7	23.3	28.9	30.3	29.7	32.4	35.9	34.8	34.1	39.1	39.9	37.8	32.2	36.6	41.5	33.3	30.1	33.3	36.7	34.2
<b>Total</b>																				
Total Risk	40.3	32.1	36.2	n/a	46.4	39.1	40.2	n/a	42.8	41.9	39.2	n/a	46.4	45.0	43.8	n/a	44.0	39.7	39.8	n/a

Table ES-2

**Protective Factor Scales**

	6th				8th				10th				12th				All Grades			
	State 2011	State 2013	State 2015	BH Norm																
<b>Community</b>																				
Rewards for prosocial involvement	55.6	51.5	49.4	51.6	56.4	51.8	49.9	52.1	51.1	43.9	43.5	45.2	48.5	42.9	43.3	44.5	52.8	47.2	46.4	48.4
<b>Family</b>																				
Family attachment	67.7	69.5	66.1	58.2	61.2	67.1	62.9	54.8	60.4	66.5	63.8	57.1	57.6	64.4	60.3	57.9	61.2	66.8	63.2	56.9
Opportunities for prosocial involvement	66.4	65.3	58.6	59.6	66.4	69.7	67.0	62.5	58.8	60.6	63.0	56.2	55.4	57.3	58.9	56.2	61.1	63.0	61.9	58.5
Rewards for prosocial involvement	60.4	66.3	61.7	54.9	67.9	72.5	69.1	61.9	60.7	62.7	60.8	54.3	54.1	58.7	56.2	54.0	60.5	64.9	61.9	56.4
<b>School</b>																				
Opportunities for prosocial involvement	68.8	62.8	61.6	59.5	59.6	56.9	52.3	51.6	54.6	50.2	47.0	50.8	52.9	52.2	46.5	53.1	58.7	55.1	51.4	53.2
Rewards for prosocial involvement	68.3	66.1	64.1	56.9	65.8	59.2	56.9	52.8	61.7	49.4	47.9	49.0	61.2	53.9	48.5	52.4	64.1	56.6	53.9	52.5
<b>Peer and Individual</b>																				
Belief in the moral order	55.1	56.6	53.3	51.1	56.3	62.9	61.7	52.1	56.2	61.9	63.2	54.6	54.1	61.4	60.1	55.6	55.4	60.9	59.8	53.6
Religiosity	46.6	51.4	47.9	54.8	48.9	49.0	46.2	53.7	45.7	42.0	40.0	48.4	37.2	37.4	35.4	42.9	44.5	44.5	42.2	49.8
<b>Total</b>																				
Total Protection	49.3	60.6	56.7	n/a	50.3	66.4	58.8	n/a	51.8	59.6	58.9	n/a	44.9	59.7	55.1	n/a	49.1	61.6	57.4	n/a

Table ES-3 **Alcohol Use: Lifetime, Past-Month, Binge Drinking**

Grade	Alcohol (Lifetime Use)				Alcohol (30-Day Use)				Binge drinking			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	14.9	13.3	15.8	n/a	4.0	3.0	3.3	n/a	1.5	1.3	1.3	n/a
8th	36.7	35.1	33.9	26.1	14.1	9.6	9.5	9.7	5.1	3.1	3.2	4.6
10th	53.2	61.5	54.2	47.1	28.9	26.2	22.3	21.5	15.0	11.7	8.4	10.9
12th	68.4	74.2	71.0	64.0	44.2	40.6	37.6	35.3	26.9	21.8	18.0	17.2
All	44.0	46.9	43.9	n/a	23.3	20.3	18.2	n/a	12.4	9.7	7.8	n/a

Table ES-4 **Tobacco Use: Lifetime and Past-Month Cigarette and Smokeless Tobacco Use**

Grade	Cigarettes (Lifetime Use)				Cigarettes (30-Day Use)				Smokeless tobacco (Lifetime Use)				Smokeless tobacco (30-Day Use)				E-Cigarettes (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	4.2	2.4	2.9	n/a	0.7	0.5	0.8	n/a	1.7	1	1.2	n/a	0.5	0.3	0.4	n/a	n/a	n/a	2.6	n/a
8th	15.6	10.2	11.0	13.3	5.3	3.9	3.5	3.6	6.5	4.6	4.5	8.6	3.1	1.9	1.8	3.2	n/a	n/a	11.7	9.5
10th	28.5	21.2	18.3	19.9	11.7	9.9	6.8	6.3	13.4	10.9	9.8	12.3	7.3	5.8	4.9	4.9	n/a	n/a	20.4	14
12th	43.1	35.2	32.7	31.1	19.4	17	14.6	11.4	23.6	18.9	18.1	13.2	11.4	10.3	9.2	6.1	n/a	n/a	27.0	16.2
All	23.3	17.6	16.3	n/a	9.5	8	6.4	n/a	11.5	9	8.4	n/a	5.7	4.7	4.1	n/a	n/a	n/a	15.5	n/a

Table ES-5 **Marijuana Use: Lifetime and Past-Month**

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.7	0.8	1.2	n/a	0.5	0.4	0.6	n/a
8th	7.9	6.4	7.3	15.5	4.5	3.3	3.8	6.5
10th	24.9	25.8	22.0	31.1	14.9	14.4	12.0	14.8
12th	40.5	40.3	38.2	44.7	21.9	21.8	20.8	21.3
All	19	18.9	17.3	n/a	10.7	10.3	9.4	n/a

Table ES-6 **Inhalant Use: Lifetime and Past-Month**

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	6.6	5.3	3.3	n/a	4.7	2.2	1.7	n/a
8th	10.5	6.9	4.8	9.4	6.4	2.5	1.5	2
10th	8.7	6.4	4.7	7.2	4	1.3	1.1	1.2
12th	8.6	5.9	5.2	5.7	3.2	1	0.7	0.7
All	8.6	6.1	4.5	n/a	4.5	1.7	1.3	n/a

Table ES-7 **Prescription Drugs: Lifetime Use**

Grade	PEDs & Steroids				Narcotic prescription drugs				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.4	0.4	0.7	n/a	1.1	2.1	1.9	n/a	0.1	0.2	0.3	n/a	0.2	0.2	0.6	n/a	n/a	n/a	2.6	n/a
8th	0.6	0.7	0.6	1	3.7	4.1	4.3	2.3	1.1	0.8	0.8	3	1.2	1.1	1.0	6.8	n/a	n/a	2.5	n/a
10th	0.8	1.2	1.2	1.2	8.1	8.3	6.7	6.8	3.1	2.7	2.6	5.8	4.4	3.9	3.3	9.7	n/a	n/a	4.2	n/a
12th	1.4	2	1.6	2.3	13.1	12.1	12.1	8.4	6.1	5.9	5.3	6.9	8.2	9.1	9.7	10.8	n/a	n/a	6.5	n/a
All	0.8	1.1	1.0	n/a	6.7	6.8	6.3	n/a	2.7	2.5	2.3	n/a	3.6	3.7	3.7	n/a	n/a	n/a	4.0	n/a

Table ES-8 **Prescription Drugs: Past-Month Use**

Grade	PEDs & Steroids				Narcotic prescription drugs				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.2	0.2	0.3	n/a	0.8	1	1.0	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.2	n/a	n/a	n/a	1.4	n/a
8th	0.6	0.2	0.2	0.3	3.3	1.5	1.6	0.7	0.9	0.2	0.3	0.8	1.1	0.4	0.4	1.9	n/a	n/a	1.2	n/a
10th	0.4	0.5	0.4	0.4	6	2.6	2.0	1.7	2	0.9	0.8	1.7	2.9	1	1.4	3.1	n/a	n/a	1.6	n/a
12th	0.9	0.5	0.4	1	7.9	3	3.0	2.1	3.2	1.4	1.4	2	4.9	2.8	3.2	3.2	n/a	n/a	1.4	n/a
All	0.5	0.4	0.3	n/a	4.6	2.1	1.9	n/a	1.6	0.7	0.7	n/a	2.3	1.1	1.3	n/a	n/a	n/a	1.4	n/a

Table ES-9 **Other Illegal Drugs: Lifetime Use**

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0	0.1	0.2	n/a	0.1	0.2	0.3	n/a	0.1	0.1	0.2	n/a	n/a	1.1	1.5	n/a	0.1	0.2	0.3	n/a	0.1	0.2	0.2	n/a	0.1	0.1	0.3	n/a
8th	0.2	0.3	0.3	0.5	0.9	0.9	0.7	2	0.7	0.6	0.7	2.3	n/a	1.5	1.8	n/a	0.5	0.6	0.5	1.6	0.5	0.4	0.4	1	0.3	0.4	0.4	0.8
10th	0.3	0.9	0.6	0.7	3.2	3.8	3.4	4.6	2	2.6	2.0	3.8	n/a	4	2.6	n/a	1.5	1.5	1.3	2.7	0.5	0.9	0.6	1.1	0.4	0.8	0.6	1.3
12th	1	1.4	1.4	0.8	6.1	7.6	6.9	6.4	5.5	5.7	5.4	5.9	n/a	6.9	4.8	n/a	4	3.1	3.8	4	1.2	1.3	0.9	1.7	1.1	1.2	1.0	1
All	0.4	0.7	0.6	n/a	2.5	3.2	2.8	n/a	2.1	2.3	2.1	n/a	n/a	3.4	2.7	n/a	1.6	1.4	1.5	n/a	0.6	0.7	0.5	n/a	0.5	0.7	0.5	n/a

Table ES-10 **Other Illegal Drugs: Past-Month Use**

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0	0	0.1	n/a	0	0.1	0.0	n/a	0.1	0	0.1	n/a	n/a	0.4	0.8	n/a	0	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a
8th	0.1	0.1	0.1	0.1	0.9	0.3	0.2	0.6	0.5	0.2	0.3	0.5	n/a	0.5	0.5	n/a	0.4	0.2	0.2	0.5	0.5	0.1	0.2	0.3	0.2	0.2	0.1	0.3
10th	0.1	0.3	0.2	0.2	1.7	1	0.8	0.9	0.8	0.7	0.4	0.9	n/a	0.9	0.7	n/a	0.8	0.4	0.3	0.8	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.3
12th	0.6	0.4	0.3	0.3	2.4	1.4	1.5	1.6	2.4	1.5	1.3	1.1	n/a	0.8	0.5	n/a	1.4	0.6	0.8	1.1	0.5	0.3	0.1	0.6	0.5	0.3	0.2	0.4
All	0.2	0.2	0.2	n/a	1.3	0.7	0.6	n/a	1	0.6	0.6	n/a	n/a	0.6	0.6	n/a	0.7	0.3	0.3	n/a	0.3	0.2	0.1	n/a	0.3	0.2	0.1	n/a

In the 2015 administration of PAYS, 960 schools participated. The results featured in this report stem from the PAYS Statewide Sample, which was designed to gather data most representative of the Commonwealth. Findings for each of the report sections are summarized below:

## Risk Factor Profiles

For an overwhelming majority of risk factor scale values, Pennsylvania youth in all grades had lower levels of risk in comparison to the Bach Harrison Norm. The only risk factor scales in PA that were higher than the BH Norm in 2015 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (9.7% to 12.5% higher than the BH Norm in each grade) and Parental Attitudes Favorable to Drug Use (1.3% to 3.1% higher than the BH Norm in each grade).

## Protective Factor Profiles

In general, Pennsylvania protection tended to be higher than the BH Norm for most scales. Two scales in which the Pennsylvania protection scores were lower than the BH Norm for all grades were for Community Rewards for Prosocial Involvement (1.2% to 2.2% lower in each grade) and the Religiosity scale (6.9% to 8.4% lower in each grade).

## Substance Use for Pennsylvania

When looking at the Pennsylvania and MTF lifetime survey results, lifetime alcohol use was higher in Pennsylvania for the 8th grade (7.8% higher in Pennsylvania compared to the national MTF rates), 10th grade (7.1% higher in Pennsylvania compared to the nation), and 12th grade (7.0% higher in Pennsylvania). In regards to tobacco use, the rate of lifetime cigarette use in Pennsylvania was higher than the nation in the 12th grade (32.7% for PA, 31.1% for MTF) and lifetime smokeless tobacco use in Pennsylvania was higher than the nation in the 12th grade (18.1% for Pennsylvania, 13.2% for MTF). Narcotic prescription drug use was also higher than the national rate for the 8th grade (4.3% lifetime 8th grade use for PA, 2.3% use for the MTF) and the 12th grade (12.1% lifetime 12th grade use for PA, 8.4% lifetime 12th grade use for MTF). For all other substances, State use rates were lower than, or equal to, the national rates.

As with lifetime use, there are very few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. The rate of past month alcohol use is higher for Pennsylvania 12th graders than for students in the same grade in the national sample (37.6% past-month use in PA, 35.3% past-month use in MTF). Past-month cigarette use is also slightly higher for Pennsylvania 12th graders (3.2% higher). Pennsylvania 12th graders also indicated a past-month smokeless tobacco use rate that was 3.1% higher than the national rate. 2015 was the first PAYS administration to gather past-month e-cigarette use data, and this data shows significantly higher use for PA students in comparison to the nation (2.2% higher 8th grade use in PA vs. the MTF, 6.4% higher 10th grade use in PA vs. the MTF, and 10.8% higher 12th grade use in PA vs. the MTF).

## Substance Use by Gender

Although being female is generally considered a protective factor for most problem behaviors, it can be seen that males and females are very similar in their use of most substances and generally have substance use rates that are less than three percent of each other. One area in which males are significantly higher users is with smokeless tobacco use, in which males in all grades use much more smokeless tobacco — three times higher for all grades combined (0.2% to 14.1% higher for males in each grade). When it comes to past-month substance use, it is interesting to note differences in male/female use across the grades. In the 6th grade, substance use is quite similar across all substances for males and females, with males having equal or slightly higher use rates for 13 of the 18 substances. In the 8th, however, females become more dominant users; 8th grade females indicate slightly higher use over males in 14 of the 18 substance categories. While use rates in these categories are still very similar for both genders, a higher percentage of females are using. When students enter high school, males reclaim status as higher users, and in the 10th grade, females indicate slightly higher use for only 4 categories; and in the 12th grade, only one category.

## Perceived Harmfulness of ATODs:

Of the seven substance use categories, students perceived the greatest risk in smoking one or more packs of cigarettes per day (81.1% perceived moderate or great risk overall) and using prescription drugs not prescribed to them (82.4% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (46.3% of students perceived moderate or great risk) and smoking marijuana once or twice a week (61.4% of students perceived great or moderate risk).

## Sources of Obtaining Alcohol

While a large percentage of alcohol-using 6th graders (64.5%) and 8th graders (48.3%) indicated they used alcohol as “part of a family or religious celebration,” 10th and 12th graders most often indicated “friends, brothers, or sisters provided it to me” (36.3% of 10th graders and 44.0% of 12th graders).

For all grades combined, 36.6% of alcohol-using youth indicated they had alcohol as part of a family/religious celebration; 4.9% had bought it at a store; 3.8% had bought it at a restaurant, bar, or club; 3.5% had bought it at a public event such as a concert or sporting event; 23.1% had given someone money to buy it for them; 26.0% had received it from parents or friends’ parents who provided it; 33.7% had received it from friends, brothers, or sisters; 13.2% had received it from other relatives; 18.2% had gotten it from another source; and 24.4% had taken it without permission, stole it, or found it.

## Sources of Obtaining Prescription Drugs

For all grades combined, 41.0% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 41.8% indicated that a friend or family member gave them to the student, 26.9% indicated that they bought them from someone, 14.1% indicated they took them from someone not related to them, 12.9% indicated they took them from relatives who were not living in their home, and 8.3% indicated they ordered them over the Internet.

## Antisocial Behavior by Grade and Gender

In comparison to the BH Norm (used to provide a comparison to a more national average), Pennsylvania youth indicate antisocial behavior rates that are lower than the BH Norm for most items. Rates of attacking someone to seriously harm them are 3.3% to 6.0% lower in Pennsylvania vs. the BH Norm in each grade, and 5.1% lower for all grades combined (6.2% in Pennsylvania, 11.3% in the BH Norm). Illegal drug sale rates were 2.0% lower in PA than the BH Norm for all grades combined. As for reports of being drunk or high at school, rates in PA were 1.8% to 7.6% lower in each grade and 5.3% lower for all grades combined in comparison to the BH Norm rates. The all-grade PA rate for reported arrest (2.5%) was much lower than the BH rate (4.9%). In looking at the data by gender, some of the largest differences were in being suspended from school (10.1% for males compared to 5.5% for females), driving a vehicle after smoking marijuana (4.3% for males, 2.7% for females), and being arrested (3.2% for males compared to 1.8% for females).

## School-Related Violence and Drug Behaviors

Of all students surveyed, 20.3% indicate having been threatened at school at least once in the past year, and 4.0% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 8.4% of all students indicated having been attacked at school, and 1.6% indicated having been attacked with a weapon at school. In the past month, 1.6% of students in the State sample indicated that they brought a weapon (such as a gun, knife, or club) to school at least one time.

## Bullying and Internet Safety

While 92.0% of students in the State sample indicated that they think it is wrong or very wrong to bully someone, and 95.2% of students indicated their parents felt it was wrong or very wrong to bully, 16.9% of students said they were bullied two or more times a week, 16.3% of students said they had been electronically bullied in the past year and 5.3% said they had stayed at home from school because they were worried about being bullied. Rates of being electronically bullied were highest in the 8th grade (18.9% of 8th graders reported having been electronically bullied). Students were also asked “In the past 12 months, did anyone on the Internet ever try to get you to talk online about sex, look at

sexual pictures, or do something else sexual?” Of all students, 20.3% marked “yes” to this question and 10th graders reported the highest response to this question (26.9% marked “yes”).

### Gang Involvement

PAYS gathers some basic data regarding youth gang involvement. In 2015, 5.2% of all students indicated that they had belonged to a gang at some point in their life — up from 4.4% of students in 2013.

### Gambling

The individual activities most often participated in during the past year were playing the lottery (21.8% of all students, a grade-level peak of 23.3% in the 10th grade), betting on personal games of skill (18.5% of all students, a grade-level peak of 19.8% peak in the 8th grade), and betting on sports (14.1% of all students, a grade-level peak of 16.0% in the 10th grade).

### Dangerous Driving Behaviors

PAYS data show that 2.4% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 6.4% of that grade. More students reported driving after smoking marijuana in the past year (3.5% of the total survey sample population, and 10.7% of 12th grade respondents).

### Mental Health and Suicide Indicators

The following are some key findings from these mental health-related data:

- The survey data show that 38.3% of all students indicated (via responding “YES!” or “yes” to the statement) that they had felt depressed or sad most days in the past 12 months; 23.9% of all students indicated that they sometimes thought life is not worth it; 34.7% of all students indicated that “at times I think I am no good at all” and 19.9% indicated that they felt that they were a failure. Further 19.9% of students (all grades combined) indicated harming themselves (without wanting to die — i.e., burning, cutting, etc.) at least one time in the past year.

- For the depressive symptoms measures, there has been a general increase in the percent of students responding to those questions/statements in the affirmative. The percent of students indicating they have felt depressed for most days in the past year increased 6.6% since 2013, the percent indicating they often felt like life was not worth it increased 1.3% since 2013, the percent indicating that at times they thought they were no good at all increased 2.0% since 2013, and the percent that felt they were a failure increased 2.5% since 2013.
- 40.3% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 13.7% indicated having the stress of worrying that food at home would run out; and 6.6% indicated the stress of having to skip a meal due to a lack of money.
- 16.0% of students in all grades combined indicated that they had considered suicide in their lifetime. The grade-level rates for this question were as follows: 8.7% of 6th graders, 15.4% of 8th graders, 19.2% of 10th graders, and 19.5% of 12th graders indicated they had considered suicide in their lifetime.
- 12.7% of students in all grades combined indicated that they had gone so far as to create a suicide plan at least once in their lifetime. The grade-level rates for this question were as follows: 6.2% of 6th graders, 12.7% of 8th graders, 15.1% of 10th graders, and 15.8% of 12th graders indicating they had created a suicide plan.
- In regard to those students who indicated they had attempted suicide in their lifetime, 5.8% of 6th graders, 10.1% of 8th graders, 10.5% of 10th graders, 11.2% of 12th graders, and 9.5% of all students indicated that they had attempted suicide at least one time in their lifetime.

### Depressive Symptoms and Substance Use

PAYS data show a strong link between youth who report depressive symptoms and ATOD use. When compared to the non-depressed group, the youth with high depressive symptoms indicate 30-day alcohol use rates that are nearly three times higher than non-depressed students. Depressed students indicate use rates that are seven times higher for past-month cigarette use and three times higher for past month marijuana use in comparison to non-depressed students.

## Bullying and Mental Health

PAYS Survey data for two bullying measures (skipping school due to bullying fears and being cyberbullied in the past year) show a strong relationship between being bullied and suicide ideation. For example, of students who indicated they hadn't been cyberbullied in the past year, 15.8% reported that they felt so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities. Of students who indicated they had been bullied in the past year, 51.0% indicated feeling so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities. Of students that indicated they had been cyberbullied in the past year, nearly 40% had considered suicide in the past year, nearly 30% had made a suicide plan in the past year, and 27% had attempted suicide in the past year.

## Parents' Rules and Expectations Regarding Substance Use

Of the students marking "YES!" or "yes" to the statement "My family has clear rules about alcohol and drug use," 40.3% indicated they had used alcohol in their lifetime and 15.4% indicated they had used alcohol in the past month. In contrast, of students who marked "NO!" or "no" to that statement, 71.3% indicated they had used alcohol in their lifetime and 38.6% indicated they had used alcohol in the past month. These data reinforce the idea that parents must set clear rules and expectations regarding substance use.

## Academic Performance and Substance Use

Of the youth who report getting better grades, fewer have tried ATODs and fewer are currently using ATODs than those who report poorer grades. Failing (D or F) youth indicate past month alcohol use rates that are nearly two times higher than "A" students' alcohol use rates, past month marijuana use rates that are four times higher than the "A" students' use rates, and past month cigarette use rates that are seven times higher than the use rate of "A" students. Similar and more dramatic differences can be seen for individual drugs.

## Family Financial Stress and Substance Use

PAYS data show a strong relationship between family financial stress and drug use, with more regular worry about food supplies corresponding with higher levels of youth drug use. For example, in Pennsylvania, of youth who said that they "never" worried about food at home, 8.5% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (8.7%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 13.7%. Of youth who indicated they worried about food once a month or more, 16.2% of those youth indicated regular marijuana use.

## Perceived Parental Acceptability and Substance Use

A large majority of parents are perceived to disapprove of substance use. Of all students, 93.0% indicated their parents felt it was "Wrong" or "Very wrong" to use tobacco, 90.9% perceived parental disapproval of marijuana use, 89.2% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.2% perceived parental disapproval of prescription drug use. Relatively few students (9.7% lifetime, 4.1% 30-day) use marijuana when their parents think it is "Very Wrong" to use it. In contrast, when a student believes that their parents agree with use somewhat (i.e., the parent only believes that it is "Wrong," not "Very Wrong"), use increases to 39.1% for lifetime use and 21.4% for 30-day use. Rates of use continue to increase as the perceived parental acceptability increases.

## Perceived Peer Acceptability and Substance Use

As with perceived parental acceptability, the slightest perceived peer acceptability seriously increases the chance that a student will use ATODs. In this section, lifetime and 30-day marijuana use results are looked at in relation to what youth thought were their chances of being seen as cool if they used marijuana. When youth thought there was "No or very little chance" that they would be seen as cool if they used marijuana, only 8.7% had tried marijuana in their lifetime and

only 4.1% had used it in the last month. However, when youth thought that there was even a “Little chance” that they would be seen as cool, marijuana use rates were over three times higher for lifetime use (28.6%) and over three times higher for past-month use (14.5%). Youth who thought that there was a “Very good chance” they would be seen as cool were nearly seven times more likely to use marijuana in the past month than youth who perceive that marijuana use was not cool.

### Transitions/Mobility and Substance Use

PAYS found that a majority of youth in the Commonwealth had not moved in the past year or two years. Of all students, 16.0% indicated having moved one or more times in the past year, and 25.7% indicated having moved one or more times in the past three years. The results indicate that higher numbers of moves are linked to higher substance use rates. For example, of students who indicated that they had not moved in the past three years, 15.8% of them had used marijuana in their lifetime; whereas of the students who indicated they had moved 3 or more times in the past three years, 29.1% had used marijuana in their lifetime. Similar trends are seen for lifetime and past month use of all substances, with use rates gradually increasing upwards as the number of moves increases to 3 or more moves in the past three years.

# Section 1: Survey Methods

This Survey Methods section discusses the survey questionnaire, how it was administered, the demographics of total survey participants, State sampling strategies and weighting, and validation measures.

## Survey Questionnaire

The original risk and protective factor survey questionnaire was developed through the combined efforts of six states and the Social Development Research Group at the University of Washington. The collaborative survey development process was a Center for Substance Abuse Prevention (CSAP) project called the Six-State Consortium. The goal of the Consortium was to develop a survey that provided scientifically sound information about the levels of risk and protection in a community. The survey has been further refined through the Diffusion Consortium Project that involved seven states and was funded by four Federal Agencies: the National Institute of Drug Abuse (NIDA), Safe and Drug Free Schools Program, Office of Juvenile Justice and Delinquency Prevention, and CSAP. The PAYS questionnaire was created by The Pennsylvania State University (formatted and printed by Bach Harrison, L.L.C.) to better meet the needs of Pennsylvania. See the PAYS Portal ([www.pays.pa.gov](http://www.pays.pa.gov)) to see a copy of the questionnaire.

Risk and protective factors are characteristics of a community that are reported by the youth who complete the survey. Besides measuring risk and protective factors, the survey also assesses the current prevalence of ATOD use. The substances that were measured by the survey include: 1) alcohol, 2) cigarettes, 3) e-cigarettes, 4) smokeless tobacco, 5) marijuana, 6) inhalants, 7) heroin, 8) hallucinogens, 9) ecstasy, 10) synthetic drugs, 11) cocaine,

12) crack, 13) methamphetamines, 14) Performance Enhancing Drugs (PEDs)/steroids, 15) prescription narcotics, 16) prescription tranquilizers, and 17) prescription stimulants. The questions that ask about substance use are similar to those used in the national survey, Monitoring the Future, in order that comparisons between the two surveys can be made easily.

There were a total of 21 risk factor scales and 8 protective factor scales that were measured by the 2015 survey. Appendix A provides a complete list of the risk and protective factors and the corresponding risk and protective factor scales within the Risk and Protective Factor Model.

The scales of the survey were originally developed between 1994 and 1997 through extensive testing with over 100,000 students. Work through the Diffusion Consortium Project has resulted in changes to several risk factor scales and the development of cut-points for each scale that can be used to classify a youth as being at-risk on risk factor scales or having protection on protective factor scales.

Before the percentage of youth at risk on a given scale could be calculated, a scale value or cut-point needed to be determined that would separate the at-risk group from the not-at-risk group. Because the risk and protective factor survey had been given to over 200,000 youth nationwide, it was possible to select two groups of youth, one group that was more at risk for problem behaviors and another group that was less at risk. A cut-point score was then determined for each risk and protective factor scale that best divided the youth from the two groups into their appropriate group, more at-risk or less at-risk. The criteria for selecting the more at-risk and the less at-risk groups included academic grades (the more at-risk group received “D” and “F”

Besides measuring risk and protective factors, the survey also assesses the current prevalence of alcohol, tobacco, and other drug use.

grades, the less at-risk group received “A” and “B” grades), ATOD use (the more at-risk group had more regular use, the less at-risk group had no drug use and use of alcohol or tobacco on only a few occasions), and antisocial behavior (the more at-risk group had two or more serious delinquent acts in the past year, the less at-risk group had no serious delinquent acts). In an effort to keep the cut-points current, in 2014 researchers at Bach Harrison, L.L.C. recalculated the risk and protective factor cutpoints using data from 11 statewide surveys across the nation. The surveys were conducted in 2010-11, contained completed questionnaires from approximately 657,000 students in grades 6, 8, 10, and 12, and included data from the 2011 PAYS. These cut-points were used to calculate the percentages of youth at-risk and youth with-protection presented in this report.

The 2015 PAYS consisted of three forms — a Form A with 107 questions, a Form B with 105 questions, a Form C with 103 questions, and a Spanish form with 112 questions. Each form consisted of various combinations of question groupings, with all three forms containing question group X first, with Form A including question groupings d, b, e, and c; with Form B including question groupings b, e, c, f, and a; and with Form C including question groupings c, f, a, d, and b. The Spanish form contained all groupings — x, as well as a through f. Because many of the questions have multiple components, a total of 230 questions were asked of students across all four forms. The questions were printed in three test booklets that were machine scoreable. See the PAYS Portal at <http://www.pays.pa.gov/> for complete copies of the questionnaire and an item dictionary.

Please note that PAYS is only one source of data for prevention and that some of the risk and protective factors can be measured with data from other sources. Being able to gather risk and protective factor data from other sources is important as it allows the PAYS form to be as brief as possible and also allows room on the survey form for additional questions to be asked related to other prevention strategies/projects.

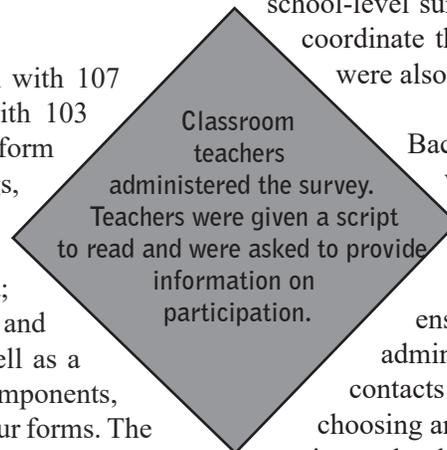
## Administration

Prior to recruitment, the 2015 PAYS State Sample was drawn at the school and grade levels (see State Sample subsection for more information). All districts, charter schools, and private schools with students in grades 6, 8, 10, and 12 in Pennsylvania were notified by mail in April 2015 that the survey was scheduled to be administered in the fall of 2015 and they were given information about the survey and the advantages of having their students participate. Districts were given the opportunity to indicate whether they preferred to administer the survey in paper/pencil format or via an online survey platform, and were also asked to name one district/school-level survey coordinator with which Bach Harrison could work to coordinate the survey. Through this mailing, sampled districts/schools were also notified about their inclusion in the State’s sample.

Bach Harrison, survey contractor, followed up on this mailing with emails and phone calls to increase participation — particularly with sampled districts/schools.

During September and October, Bach Harrison, L.L.C. ensured that the required surveys, survey materials, and administration instructions were mailed to established survey contacts in school districts or schools. In the case of districts choosing an online administration, district-level contacts were emailed unique school-level URLs to be used for the survey administration as well as survey proctor instructions.

The period of early October to early December was established for survey administration. In most schools, the teachers in the classroom administered the survey via paper/pencil surveying, though over 20% of schools administered the survey online. Teachers/Survey Proctors were given a script to read and also asked to provide information on how many students took the survey, how many were absent from school, and how many refused to take the survey.



Every effort was made to ensure the confidentiality of students' responses. For online surveying, proctors were instructed to ensure that students kept their eyes on their computer and hit an end-of-survey "Submit" button prior to the next student taking the survey. In regard to paper/pencil surveying, when students completed their questionnaires, they placed them in an envelope that was passed around the classroom. The envelope was then sealed and a student and the teacher took the envelope to the school office where it was placed with other class envelopes and mailed to the office of Bach Harrison, L.L.C. The staff at Bach Harrison, L.L.C. logged the completed paper surveys, scanned the questionnaires, prepared the final database of completed paper and online surveys for analysis, and created summary profile reports at the county and AUN (district, charter, or private school) levels.

### PAYS Census-Effort Project Completion Rate

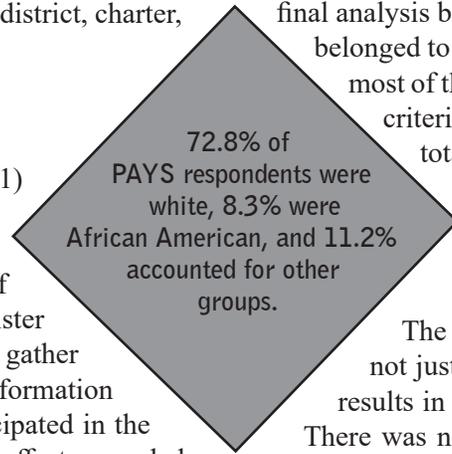
The survey goals for the 2015 PAYS were twofold — 1) to gather a valid statewide sample (the results of which are presented in this report), and 2) to offer the survey to districts and schools across the State (a census of students in grades 6, 8, 10, and 12) in order to administer enough surveys to provide local-level results. Efforts to gather a valid State sample were successful (see subsequent information regarding that sample), and while not all students participated in the PAYS census portion of the survey, the success of that effort exceeded expectations.

A total of 229,845 public and private school students throughout the State participated in the Fall 2015 Pennsylvania Youth Survey. After invalid/dishonest/odd-grade surveys were removed, a total of 216,916 surveys were represented in final local-level reports.

Enrollment figures from the 2014-2015 PDE Public School Enrollment Reports web site show that for the 2014-2015 school year (the most current enrollment available through project planning reporting) the total enrollment in grades 6, 8, 10, and 12 was 537,782. The enrollment in those grades for the school districts, charter schools, and private schools

that signed on to administer the 2015 PAYS was 308,217. A total of 216,916 honest/valid student surveys from grades 6, 8, 10, and 12 were included in the final local-level analysis of the 2015 PAYS. A Statewide Sample was drawn to provide the data for this State Report and to use as a State-level comparison in local-level reports. There were 24,257 students surveyed within that Statewide Sample. Full discussion of that Statewide Sample is provided in this Survey Methods Section.

It should be noted that not all of the surveys gathered through the administration process contained valid information. Although 229,845 completed surveys were returned to Bach Harrison for processing, some were eliminated from the final analysis because students were deemed not truthful in their responses; belonged to a grade outside of grades 6, 8, 10, or 12; or did not complete most of the questions (see **Validity of the Data** section for the validity criteria). After invalid questionnaires were eliminated, there were a total of 216,916 valid surveys completed by students in grades 6, 8, 10, and 12.



### Total PAYS Project Survey Participants

The characteristics of the youth who took the survey (all students, not just those in the State Sample) are presented in Table 1-2. The results in this State Report are completed for grades 6, 8, 10, and 12. There was nearly an equal number of males and females who took the survey in all grades (49.7% female, 50.3% male). In terms of ethnicity, 90.4% of participants were non-Hispanic and 9.6% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (72.8%), Black/African American (8.3%), or left their race unmarked (7.6%). The other race groups accounted for 11.2% of the respondents.

### The Statewide Sample: Sample Design

The results contained in this State Report are provided from the State's sample; State-level data provided in county-level reports and local-level reports also stem from the State's sample. The following subsections will describe the PAYS Statewide sample design, strategy, and success.

The target population of the 2011, 2013, and 2015 PAYS statewide samples (the results of which are presented in this report) was 6th, 8th, 10th and 12th grade students enrolled in public schools across Pennsylvania. A single-stage design was used, with stratification by grade level, and with the sampling unit defined as grade levels within schools. Schools selected for the statewide sample were instructed to survey all students in the selected grade level. The selection methodology for the 2015 statewide sample continued and improved upon the 2011 and 2013 statewide sample to ensure continuity. Bach Harrison worked with the 2013 sample to update it based on current school availability and grade ranges.

The schools involved in the 2013 and 2015 samples were originally selected in the 2011 PAYS administration. In 2011, specialized sampling software, PCSample, was used to select a representative sample of public schools. The software is designed for stratified systematic sampling with random starts. To ensure a good distribution of schools by geographic location and enrollment size, schools were sorted by county and in descending order of grade enrollment before sampling. Within each stratum, schools were selected with probability proportional to size, with size being the grade enrollment of the school. While most selected schools were only asked to survey one grade level, a small set of schools had two grade levels selected for participation in the statewide sample. The sample is designed to yield a self-weighting sample within strata so that every eligible student has an equal chance of selection. A self-weighting sample is desirable because it tends to improve the precision of the estimates. Using this design, 253 school-grade combinations were selected from the sample frame for the 2011 survey. Bach Harrison reviewed the 2011 sample frame and adjusted it in 2013 and 2015 to account for schools that had either closed or changed the range of grades that were housed at the school; in 2013, BH also expanded the sample frame to include urban districts and charter schools previously removed due to traditional non-participation in PAYS. The result for 2015

Of the 253 schools selected for the sample frame, 175 participated in the 2015 Statewide Sample.

was that there were 253 schools included in the 2015 sample frame. Of these combinations, 175 participated in the 2015 Statewide Sample.

### Determining the Number of School-Grade Combinations to be Included in the Statewide Sample

Sample size depends on the distribution of the variables to be measured, the desired precision of the estimates, and the statistical confidence desired. The level of precision is conveyed by providing the survey estimate plus or minus its margin of error. The sample size also needs to be adjusted by a design effect to account for the stratified sample design of the Pennsylvania Youth Survey. The design effect is the ratio of the variance of the estimate obtained from a complex sample design to the variance of the estimate obtained from a simple random sample of the same size. For a population size N, the sample size needed to achieve a +/- d% margin of error for an estimated proportion p, given a design effect (deff) for p, is given by:

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

Sample sizes were computed to yield a margin of error of less than 3.9%, within each grade level, for prevalence estimates of 50.0%. Assuming a design effect of 5.0, a sample size of approximately 3,200 completed questionnaires per stratum (grade level) is needed to produce this level of statistical precision.

Given an average school-grade enrollment of about 160 students, and projected participation rates of 45.0% for schools and 70.0% for students, approximately 253 schools would need to be selected (some including multiple grades) to reach the final desired sample size.

## Preparing to Draw the Sample Frame

Prior to drawing the 2011 sample frame that lies at the heart of the 2013/2015 administrations, a list of all Pennsylvania public schools with grade level enrollment data were provided by the Pennsylvania Department of Education. These enrollment data were the starting point for the development of the sampling frame. The frame cleaning process involved the following tasks:

- All schools with no enrollment in grades 6, 8, 10, or 12 were removed.
- Special schools that were unable to participate in the survey administration process—such as cyber schools, distance learning schools, juvenile detention centers, adult education centers, special education, and alternative schools—were removed.
- School-grade combinations with enrollments of fewer than 50 students were removed. This was done to avoid recruitment and administration costs associated with surveying a large number of small schools. In addition, past recruitment efforts have shown that small schools are less likely to join the survey effort due to the special requirements of their academic programs.
- NOTE: In 2011, all schools from Allegheny County and the Philadelphia School District were removed from the frame. In 2013 and 2015, Allegheny County schools and charter schools from Philadelphia County were reintegrated back into the sample.

## The Statewide Sample Participation

Previously in this Survey Methods section, total PAYS Project participation was discussed. In this subsection, Statewide Sample participation will be reviewed.

- School Participation: 253 schools (some with multiple grades) were included in the sample. Out of these, 175, or 69.2%, participated in the survey (higher than the 63.3% participation in 2013 and the 63.2% participation in the 2011 administration).
- Student Participation: The 175 participating schools had enrollments totaling 33,621 students. Out of these, 24,257, or 72.1%, returned usable survey responses for the appropriate grade levels.
- Overall Participation:  $69.2\% * 72.1\% = 49.8\%$ .

## Weighting the Statewide Sample

The same weighting strategies that were used in previous PAYS administrations were applied to 2015 data to maintain consistency.

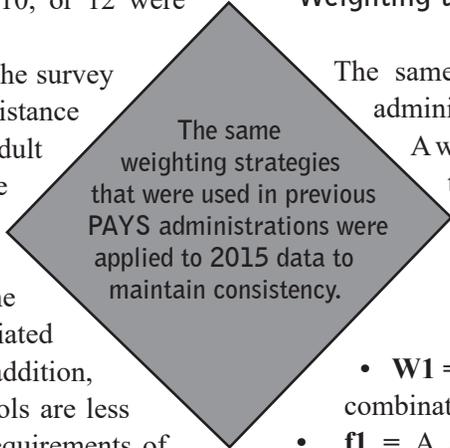
A weight has been associated with each response record to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

$$W = W1 * f1 * f2 * f3$$

- **W1** = The inverse of the probability of selecting the school/grade combination.
- **f1** = A school-level nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools.
- **f2** = A student-level nonresponse adjustment factor calculated by school.
- **f3** = A post-stratification adjustment factor calculated by grade. With this factor applied, the distribution of the sample across grade levels matches the grade distribution in the statewide enrollment figures.

## Statewide Sample Confidence Intervals

When reviewing survey results people often ask, “What is the margin of error?” This is referred to as the “confidence interval,” and it reflects the



The same weighting strategies that were used in previous PAYS administrations were applied to 2015 data to maintain consistency.

precision of a statistical estimate. For example, a confidence interval of  $\pm 3.0$  points for a drug use prevalence rate of 50.0% means that there is a 95% chance that the true score is between 47.0% and 53.0%.

Table 1-1 below presents confidence intervals for both grade-level and overall estimates for this State data. Note that these confidence intervals are for prevalence rates of 50%. For less prevalent behaviors, such as heroin use and bringing a weapon to school, the confidence interval narrows substantially. These calculations include a finite population correction and a design effect of 2.0.

### Validity of PAYS Data: Census Survey

The information presented in this report is based entirely on the truthfulness, recall, and comprehension of the youth who participated in the survey. Many studies have shown that most adolescents are truthful in their responses to the questions on similar surveys. For example, ATOD trends for repeated national and state surveys are very similar. Also, the changes reported by youth parallel the changes during the same period in adolescent admissions to treatment for substance abuse. Finally, the relationships between different kinds of behaviors and the problems adolescents report is very consistent over a wide range of studies. This study was carefully designed to ensure honest responses from participants.

The confidentiality of the survey was stressed through the instructions and administration procedures. Participants were assured that the survey was voluntary, anonymous, and confidential. They were told that no one would see their answers and that there was no way that a survey could be traced back to an individual student. Because the survey was anonymous, most of the reasons to exaggerate or deny behaviors were eliminated. However, several checks were built into the analysis to minimize the impact of students who were not truthful in their responses. Students whose surveys were deemed not truthful were eliminated.

**Table 1-1**  
**Confidence Intervals for Sample**

	Enrollment for State Sample		Sample		Confidence Interval
	Number	Percent	Number	Percent	Number
All Grades	440,465	100.0	24,257	100.0	$\pm 0.9\%$
<b>Survey Respondents by Grade</b>					
6	107,375	24.4%	5,699	23.5%	$\pm 1.8\%$
8	111,436	25.3%	7,955	32.8%	$\pm 1.5\%$
10	113,470	25.7%	5,746	23.7%	$\pm 1.8\%$
12	108,470	24.6%	4,857	20.0%	$\pm 2.0\%$

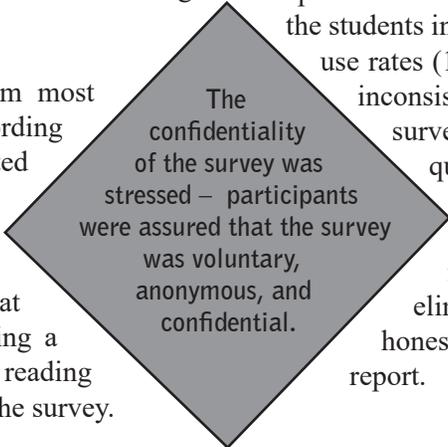
Note: Rounding can produce totals that do not equal 100%. The total sample size in this table does not include respondents who did not report their grade level.

Of all PAYS respondents (includes ALL respondents, whether a part of the Statewide sample or not), there were a total of 229,845 survey questionnaires completed and returned to Bach Harrison for scanning analysis. However, not all of the questionnaires contained valid information for reporting in this State Report. Of these surveys, 7,584 (3.3%) were eliminated due to students either meeting a validity check or not responding to enough questions to assess validity. Surveys deemed to be dishonest were eliminated because of five predetermined dishonesty indicators – 1) the students indicated that they had used the non-existent drug metaclorazoles (3,311 surveys); 2) the students reported an impossibly high level of multiple drug use (2,284 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (1,526 surveys); 4) the students reported an age that was inconsistent with their grade or their school (698 surveys); and 5) the survey did not have enough questions completed to assess honesty (3,417). These surveys were not included in the final analyses.

Because the results reported in this State report and in the profile reports focus on data from the 6th, 8th, 10th, and 12th grades, 4,428 additional students in the 7th, 9th, and 11th grades were also eliminated from these State level results. These 7th, 9th, and 11th graders took the survey because they were attending a class that was largely made up of students in the even grades or the school chose to survey students in the odd grades for a more complete description of their students. An additional 692 surveys were eliminated from students marking a grade level that was inconsistent from the school level (i.e., an elementary school student marking the 12th grade). Further, 215 surveys were eliminated due to students not reporting a grade level, and 10 surveys were eliminated due to students marking multiple grades.

A total of 12,929 questionnaires were eliminated from most analyses. This is less than the sum of those eliminated according to the criteria cited above because many of those eliminated met more than one criteria for elimination.

Other measures to reduce response bias included carefully pretesting the questionnaire to ensure that students understood the meaning of each question, using a well developed and tested administration protocol, and reading the same instructions to all students who participated in the survey.



The confidentiality of the survey was stressed – participants were assured that the survey was voluntary, anonymous, and confidential.

## Validity of PAYS Data: Statewide Sample Only

In regard to only the students who belong to the statewide sample, there were a total of 24,257 survey questionnaires completed within school-grade combinations in the sample frame. However, not all of the questionnaires contained valid information for reporting in this State Report. Of these surveys, 465 (1.9%) were eliminated because respondents were determined to be dishonest. Surveys deemed to be dishonest were eliminated because of four predetermined dishonesty indicators – 1) the students indicated that they had used the non-existent drug (362 surveys); 2) the students reported an impossibly high level of multiple drug use (237 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (164 surveys); and 4) the students reported an age that was inconsistent with their grade or their school (65 surveys). These surveys were not included in the final analyses. A total of 465 questionnaires were eliminated from state-sample analysis due to dishonesty. This is less than the sum of those eliminated according to the criteria cited above because many of those eliminated met more than one criteria for elimination. See Table 1-2 for information regarding the honest/valid surveys that represent the state-sample in this State report.

Table 1-2

<b>Demographics of All 2015 PAYS Participants</b>						
	State 2011		State 2013		State 2015	
	Number	Percent	Number	Percent	Number	Percent
Total Survey Respondents	141,088	100.0	200,622	100.0	216,916	100.0
<b>Survey Respondents by Grade</b>						
6	35,903	25.4	48,034	23.9	53,532	24.7
8	40,429	28.7	57,088	28.5	61,222	28.2
10	35,239	25.0	52,042	25.9	56,128	25.9
12	29,517	20.9	43,458	21.7	46,034	21.2
<b>Survey Respondents by Gender</b>						
Male	66,315	49.6	99,487	49.9	106,472	50.3
Female	67,508	50.4	100,045	50.1	105,341	49.7
<b>Survey Respondents by Ethnicity</b>						
Yes, of Hispanic, Latino, or Spanish Origin	8,407	6.0	19,325	9.6	25,504	11.8
No, not of Hispanic, Latino, or Spanish origin	132,681	94.0	181,332	90.4	191,412	88.2
<b>Survey Respondents by Race</b>						
Black, African American	10,745	7.6	14,761	7.4	18,070	8.3
American Indian	1,227	0.9	1,875	0.9	3,326	1.5
Asian/Pacific Islander	4,028	2.9	7,572	3.8	9,915	4.6
White, Caucasian	106,391	75.4	157,628	78.6	157,967	72.8
Multi-racial	10,045	7.1	10,192	5.1	11,087	5.1
Race Unmarked	8,652	6.1	8,594	4.3	16,551	7.6

Figure 1-1

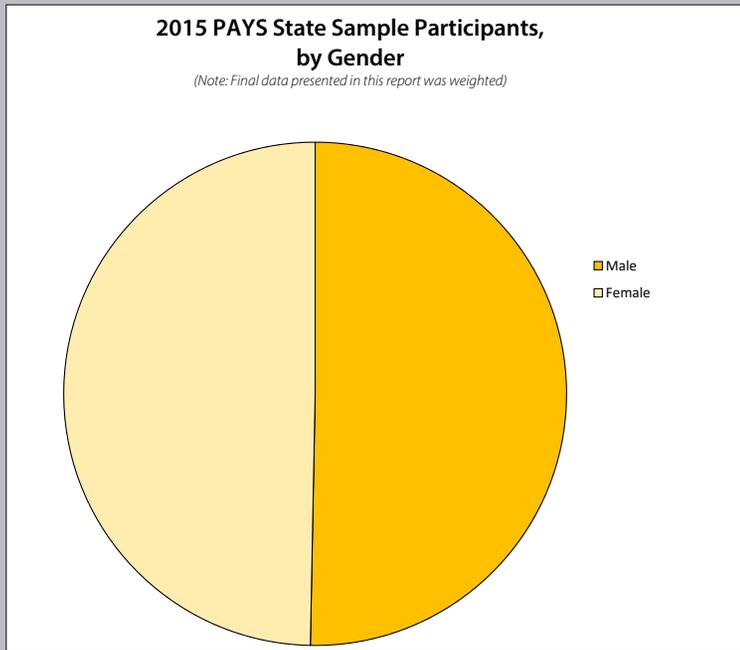


Figure 1-2

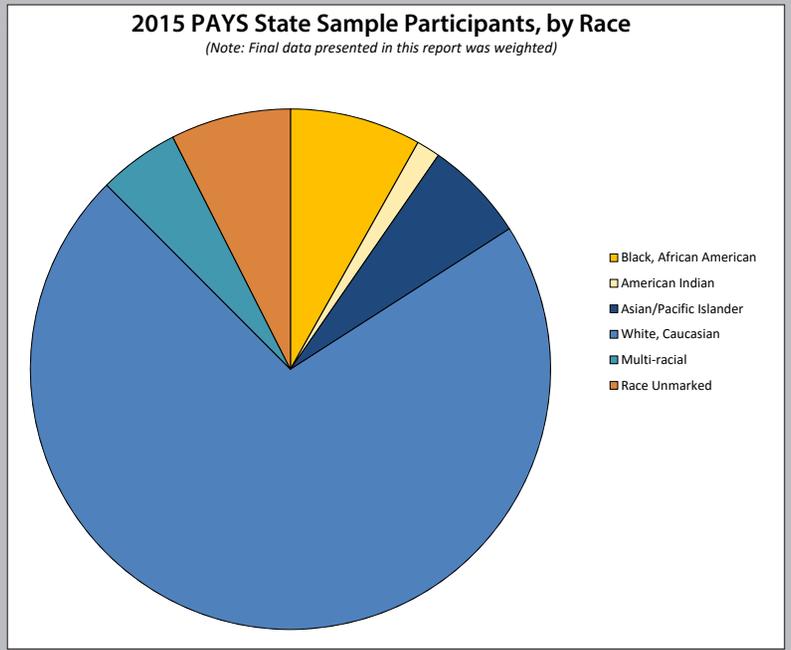
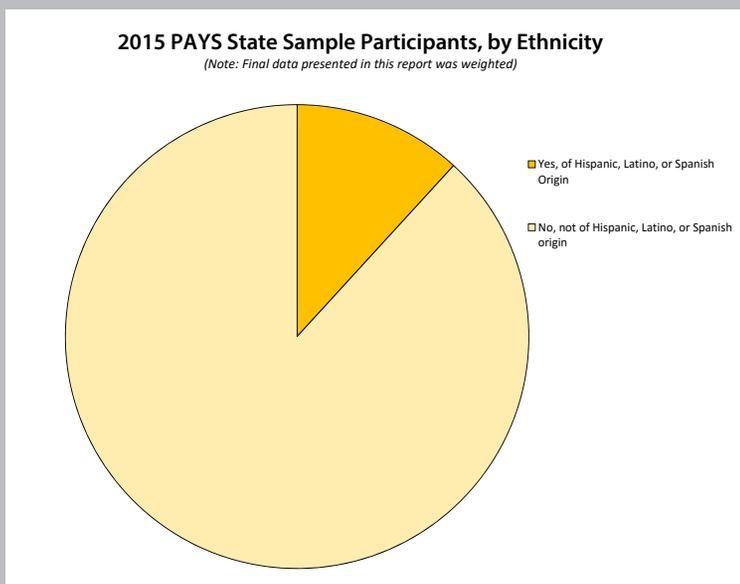


Figure 1-3



# Section 2: Risk and Protective Factors for Substance Use and Other Problem Behaviors

## The History and Importance of Risk and Protective Factors

PAYS is based upon the Risk and Protective Factor Model of Substance Abuse Prevention. In medical research, risk factors have been found for heart disease and other health problems. Through media campaigns to inform the general public about the risk factors for heart disease, most people are now aware that behaviors such as eating high fat diets, smoking, high cholesterol, being overweight, and lack of exercise, place them at risk for heart disease. Just as medical research discovered the risk factors for heart disease, social scientists have defined a set of risk factors that place young people at risk for the problem behaviors of substance abuse, delinquency, violence, teen pregnancy, and school dropout. They have also identified a set of protective factors that help to buffer the harmful effects of risk.

Dr. J. David Hawkins, Dr. Richard F. Catalano, and their colleagues at the University of Washington have reviewed more than 30 years of existing work on risk factors from various fields and have completed extensive work of their own to identify risk factors for youth problem behaviors. They identified risk factors in important areas of daily life: 1) the **community**, 2) the **family**, 3) the **school**, and 4) within **individuals** themselves and their **peer** interactions. Many of the problem behaviors faced by youth – delinquency, substance

abuse, violence, school dropout, and teen pregnancy – share many common risk factors. Programs designed to reduce those common risk factors will have the benefit of reducing several problem behaviors.

Using the Risk and Protective Factor Model, Drs. Hawkins and Catalano and their colleagues developed an approach that communities can use to reduce youth problem behavior. An overview of the risk factors and protective factors that have been shown to be related to youth problem behavior and their link to PAYS will be provided.

The risk and protective factors have been organized into the four important areas of a young person's life – community, family, school, and peer/individual. The remainder of this section of the report is organized according to the four domains. For each domain, the definition of each risk factor is presented and then risk and protective results for Pennsylvania are provided by grade. Charts providing a comparison of levels of risk and protection for the past three administrations of PAYS are presented by grade in this section on pages 2-17 through 2-21. On the following page is more information about how to read and interpret the data in this section. This information provides instruction on how risk and protective factor scores were developed, and how to analyze the results.

Just as medical research discovered the risk factors for heart disease, social scientists have defined risk factors that place youth at risk for problem behaviors.

## How to Read the Risk and Protective Factor Data in This Section

It is important that the reader gain an understanding of the cut-points that are used to create the risk and protective factor scale scores presented in this section, and to understand how to interpret and analyze these results.

### What are Cut-Points?

A cut-point helps to define the level of responses that are at or above a standard/normal level of risk, or conversely at or below a standard/normal level of protection. Rather than randomly determining whether a youth may be at risk or protected, a statistical analysis is completed that helps to determine at what point on any particular scale that the risk or protective factor is outside the normal range. In this way, when you are provided a percentage for a particular scale, you will know that this percentage represents the population of your youth who are either at greater risk or lower protection than the national cut-point level. Cut points also provide a standard for comparisons of risk and protection over time.

The PAYS questionnaire was designed to assess adolescent substance use, antisocial behavior, and the risk and protective factors that predict these adolescent problem behaviors. However, before the percentage of youth at risk or with protection on a given scale could be calculated, a scale value or cut-point needed to be determined that would separate the at-risk group from the group that was not at-risk. Because surveys measuring the risk and protective factors had been given to thousands of youth across the United States through federally funded research projects, it was possible to select two groups of youth, one that was more at-risk for problem behaviors and another group that was less at-risk. A cut-point score was then determined for each risk and protective factor scale that best divided the youth into their

appropriate group, more at-risk or less at-risk. The criteria for selecting the more at-risk and the less at-risk groups included academic grades (the more at-risk group received “D” and “F” grades, the less at-risk group received “A” and “B” grades); alcohol, tobacco, and other drug use (the more at-risk group had more regular use, the less at-risk group had no drug use and use of alcohol or tobacco on only a few occasions); and antisocial behavior (the more at-risk group had two or more serious delinquent acts in the past year, the less at-risk group had no serious delinquent acts).

As was stated earlier in this report, in an effort to keep the cut-points current, researchers at Bach Harrison, L.L.C. recalculated the risk and protective factor cutpoints using data from 11 statewide surveys across the nation. The surveys were conducted in 2010-11, contained completed questionnaires from approximately 657,000 students in grades 6, 8, 10, and 12, and included data from the 2011 PAYS. These cut-points were used to calculate the percentages of youth at risk and youth with protection presented in this report.

### How to use Cut-Points

The scale cut-points that were recently updated by Bach Harrison researchers to classify youth into more at-risk and less at-risk groups were used to produce the profiles in this report and will remain constant for future PAYS. Because the cut-points for each scale will remain fixed, the percentage of youth above the cut-point on each of the risk and protective factor scales provides a method for evaluating the progress of prevention programs over time. For example, if the percentage of youth at risk for family conflict in a community prior to implementing a community-wide family/parenting

How to Read the Risk and Protective Factor Data in This Section, Cont.

program was 60% and then decreased to 50% one year after the program was implemented, the program could be viewed as helping to reduce family conflict.

### How does using Cut-Points affect my data?

Risk and Protective Factor data from the 2011 PAYS have been re-analyzed using the scale cut-points discussed above in order that the results from the past PAYS can be compared to the results from the 2013/2015 PAYS. Instead of the percentile scores used previously, percentage of youth at-risk and with protection are presented in the 2015 report. For example:

- If your Community Laws and Norms Favorable toward Drug Use, Firearms, and Crime risk factor scale for 8th graders is at 35%, this means that 35% of 8th graders are at risk for engaging in problem behaviors due to Community Laws and Norms Favorable toward Drug Use, Firearms, and Crime.
- If your School Opportunities for Prosocial Involvement protective factor scale is at 60% for your 10th graders, the interpretation of this is that 60% of your 10th graders are protected against engaging in problem behaviors due to School Opportunities for Prosocial Involvement.

### What is the Bach Harrison Norm and how do I use it?

The Bach Harrison Norm was developed by Bach Harrison, L.L.C. to provide states and communities with the ability to compare their results on risk, protection, and antisocial measures with more national results. Survey participants from 11 statewide surveys were combined into a database of

approximately 657,000 students in grades 6, 8, 10, and 12. The results were weighted by state and grade to make each state's contribution more in line with the state's student population. Bach Harrison analysts then calculated rates for antisocial behavior and for students at risk and with protection. The results appear on the charts as BH Norm. In order to keep the Bach Harrison Norm relevant, it is updated approximately every two years as new data become available.

Information about other students in the state and the nation can be helpful in determining the seriousness of a given level of problem behavior in your community. Scanning across the charts, it is important to observe the factors that differ the most from the Bach Harrison Norm. This is the first step in identifying the levels of risk and protection that are higher or lower than the national sample.

The risk factors that are higher than the Bach Harrison Norm and the protective factors that are lower than the Bach Harrison Norm are probably the factors that your community should consider including in prevention planning programs. The Bach Harrison Norm is especially helpful when reviewing scales with a small percentage of youth at-risk such as the Rebelliousness scale. For example, even though a small percentage of youth are at-risk within this scale, if you notice that the percentage at risk on your Rebelliousness scale is higher than the Bach Harrison Norm, then that is probably an issue that should be considered for an intervention in your community. As you look through your data, we would encourage you to circle or mark risk scales that are higher than the BH Norm and protective factor scales that are lower than the BH Norm and add these items to your list of possible areas to tackle with prevention efforts.

# Community Risk and Protective Factors

When looking at the community domain, it is important to consider other factors beyond how members of a community interact with the youth of the community. Youth benefit from living in an area where neighbors and community members show concern for them, offer them support, and give encouragement and praise. However, youth also benefit from living in a community that functions in a socially healthy manner. What is the community like? Are drugs and guns readily available? Is there an active presence of law enforcement officers in the community? Is the community lacking in economic resources? Do community members, businesses, or police turn a blind eye toward drug use and antisocial behaviors, or condone such behaviors? Is there a sense of community disorganization or do members of the community work together toward common goals?

All of these community issues, and more, play significant roles in shaping the behaviors of the youth who live within a particular community. By understanding how youth perceive their neighborhood, Pennsylvania communities can get a better sense of how they need to change in order to reduce the risk that youth will participate in problem behaviors.

Definitions of all community domain risk factors, as well as scale scores for the community domain are provided on the next pages. The table below shows the links between the community risk factors and the six problem behaviors. The check marks have been placed in the chart to indicate where at least two well-designed, published research studies have shown a link between the risk factor and the problem behavior.

Table 2-1

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
<b>Community Risk Factors</b>						
Availability of Drugs	✓				✓	
Availability of Firearms		✓			✓	
Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	✓	✓			✓	
Low Neighborhood Attachment and Community Disorganization	✓	✓			✓	

## Perceived Availability of Drugs (Linked to Substance Abuse and Violence)

The more available drugs are in a community, the higher the risk that young people will abuse drugs in that community. Perceived availability of drugs is also associated with risk. For example, in schools where youth just *think* drugs are more available, a higher rate of drug use occurs.

## Perceived Availability of Firearms (Linked to Delinquency and Violence)

Firearm availability and firearm homicide have increased together since the late 1950s. If a gun is present in the home, it is much more likely to be used against a relative or friend than an intruder or stranger. Also, when a firearm is used in a crime or assault instead of another weapon or no weapon, the outcome is much more likely to be fatal. Although a few studies report no association between firearm availability and violence, more studies show a positive relationship. Given the lethality of firearms, the increase in the likelihood of conflict escalating into homicide when guns are present, and the strong association between availability of guns and homicide rates, firearm availability is included as a risk factor.

## Laws and Norms Favorable Toward Drug Use, Firearms, and Crime (Linked to Substance Abuse, Delinquency, and Violence)

Community norms, the attitudes and policies a community holds about drug use and crime, are communicated in a variety of ways: through laws and written policies, through informal social practices, and through the expectations parents and other community members have of young people. Research has shown that legal restrictions on alcohol and tobacco use, such as raising the legal drinking age,

restricting smoking in public places, and increased taxation have been followed by decreases in consumption. Moreover, national surveys of high school seniors have shown that shifts in normative attitudes toward drug use have preceded changes in prevalence of use.

### **Low Neighborhood Attachment and Community Disorganization (Linked to Substance Abuse, Delinquency, and Violence)**

Higher rates of drug problems, juvenile delinquency, and violence occur in communities or neighborhoods where people have little attachment to the community, where the rates of vandalism are high, and where there is low surveillance of public places. These conditions are not limited to low-income neighborhoods; they can also be found in wealthier neighborhoods. The less homogeneous a community (in terms of race, class, religion, and even the mix of industrial to residential neighborhoods), the less connected its residents may feel to the overall community, and the more difficult it is to establish clear community goals and identity. The challenge of creating neighborhood attachment and organization is greater in these neighborhoods.

Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in their own lives. If the key players in the neighborhood – such as merchants, teachers, police, and human services personnel – live outside the neighborhood, residents' sense of commitment will be less. Lower rates of voter participation and parental involvement in schools also indicate lower attachment to the community.

# Community Risk Factor Scales

## Risk Factor Scale Results

Table 2-2 contains the percentage of students at risk on each of the four 2015 PAYS risk factor scales in the community domain. The highest risk scale score for the 6th grade was Laws and Norms Favorable to Drug Use (39.8% at risk in the 6th grade) while the highest risk scale score for the 8th, 10th, and 12th grades was Low Neighborhood Attachment (35.2% at risk in the 8th grade, 42.0% at risk in the 10th grade, and 49.7% at risk for the 12th grade). In comparison to the BH Norm, Pennsylvania youth in all grades were less at risk than the national norm for all scales but Low Neighborhood Attachment. For that scale, a higher percentage of Pennsylvania youth were at risk for Low Neighborhood Attachment in the 8th grade (1.2 percentage points higher) and 12th grade (3.8 percentage points higher). All other scale scores within the community domain are significantly lower in Pennsylvania in comparison to the BH Norm.

## Protective Factor Scale Results

The 2015 PAYS collected data for one community domain protective factor scale — Community Rewards for Prosocial Involvement. Protective factor scale scores ranged from as low as 43.3% for the 12th grade up to 49.9% for the 6th grade.

## Comparisons to 2013 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Data for 2011 were recalculated so that they could be comparable to 2013 and 2015 data. Since the 2013 survey, scale scores for the 6th grade increased consistently across all scales (increases of 1.2 percentage points to 3.0 percentage points for each scale). In contrast, scale scores for the 10th grade significantly decreased in three of the four community domain scales (all scales except Low Neighborhood Attachment). See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

To see risk and protective factor data at the county level, please visit the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 2-2

### Community Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
<b>Community Risk Factor Scales</b>																				
Low neighborhood attachment	39.8	36.2	39.2	41.9	30.5	29.4	35.2	34.0	37.1	39.6	42.0	41.5	43.0	43.3	49.7	45.9	37.5	37.3	41.7	40.7
Perceived availability of drugs	48.7	31.7	32.9	45.3	48.6	29.1	26.0	45.4	47.5	33.3	30.1	47.5	45.2	32.6	34.4	41.0	47.5	31.7	30.8	44.8
Perceived availability of handguns	28.6	13.8	15.9	26.3	41.5	25.1	24.9	36.7	46.6	33.7	31.1	45.0	50.2	39.7	39.9	50.4	42.1	29.0	28.6	40.7
Laws & norms favorable to drug use	48.7	37.7	39.8	49.0	36.6	29.6	30.7	38.3	46.5	42.3	39.2	43.0	48.6	40.8	39.1	40.8	45.0	37.8	37.2	42.4
<b>Community Protective Factor Scales</b>																				
Rewards for prosocial involvement	55.6	51.5	49.4	51.6	56.4	51.8	49.9	52.1	51.1	43.9	43.5	45.2	48.5	42.9	43.3	44.5	52.8	47.2	46.4	48.4

# Family Risk and Protective Factors

For the family domain, one must consider more than parents' personal interaction with their children. Youth benefit from being bonded with their family, and from belonging to a family in which their parents offer support, encouragement, and praise. Other important factors that can contribute to youth problem behaviors are whether or not the youth's parents or siblings have used substances, approve of the use of substances, or have participated in antisocial behaviors. If a youth's living situation is full of conflict (fights and arguments) and disorganization (lack of family communication or parents' not knowing the whereabouts or doings of their children), the youth is also at risk for problem behaviors.

Definitions of all family domain risk factors, as well as scores for the family domain are provided on the following pages. The table below shows the links between the family risk factors and the six problem behaviors. The check marks have been placed in the chart to indicate where at least two well designed, published research studies have shown a link between the risk factor and the problem behavior.

Table 2-3

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
<b>Family</b>						
Family History of the Problem Behavior	✓	✓	✓	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	✓
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement In the Problem Behavior	✓	✓			✓	

## Family History of the Problem Behavior (Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, Violence, and Depression/Anxiety)

If children are raised in a family with a history of addiction to alcohol or other drugs, the risk of their having alcohol and other drug problems themselves increases. If children are born or raised in a family with a history of criminal activity, their risk of juvenile delinquency increases. Similarly, children who are raised by a teenage mother are more likely to become teen parents, and children of dropouts are more likely to drop out of school themselves.

## Poor Family Management (Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, Violence, and Depression/Anxiety)

Poor family management practices include lack of clear expectations for behavior, failure of parents to monitor their children (knowing where they are and who they are with), and excessively severe or inconsistent punishment.

## Family Conflict (Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, Violence, and Depression/Anxiety)

Persistent, serious conflict between primary care givers or between care givers and children appears to enhance risk for children raised in these families. Conflict between family members appears to be more important than family structure. Whether the family is headed by two biological parents, a single parent, or some other primary care giver, children raised in families high in conflict appear to be at risk for all of the problem behaviors.

## Favorable Parental Attitudes and Involvement in the Behavior (Linked to Substance Abuse, Delinquency, and Violence)

Parents influence the attitudes and behavior of their children, including their perceptions on drug and alcohol use. For example, parental approval of moderate drinking, even under parental supervision, substantially increases the likelihood of the young person using alcohol. Further, in families where parents involve children in their own drug or alcohol behavior, there is an increased likelihood that their children will use drugs in adolescence. Similarly, children of parents who excuse their children for breaking the law are more likely to develop problems with juvenile delinquency. In families where parents display violent behavior toward those outside or inside the family, there is an increase in the risk that a child will become violent. Further, in families where parents involve children in their own drug or alcohol behavior, for example, asking the child to light the parent's cigarette or to get the parent a beer, there is an increased likelihood that their children will become drug abusers in adolescence.

# Family Risk Factor Scales

## Risk Factor Scale Results

Table 2-4 contains the percentage of students at risk on each of the five risk factor scales in the family domain. In all grades, the highest scaled score was Parental Attitudes Favorable to Antisocial Behavior (48.3% at risk in the 6th grade, 40.1% at risk in the 8th grade, 47.3% at risk in the 10th grade, and 47.0% at risk in the 12th grade). In comparison to the BH Norm, Pennsylvania students in all grades indicated lower risk within the following scales: Family History of Antisocial Behavior (10.2% to 17.5% lower risk in each grade) and Poor Family Management (6.9% to 10.6% lower risk in each grade). In contrast, Pennsylvania students in all grades indicated higher risk than the BH Norm for Parental Attitudes Favorable to Drug Use and Parental Attitudes Favorable to Antisocial Behavior.

## Protective Factor Scale Results

The 2015 PAYS collected data for the following family domain protective factor scales: Family Attachment, Family Opportunities for Prosocial Involvement, and Family Rewards for Prosocial Involvement. For the 6th, 10th, and 12th grades, protection was highest for the Family Attachment (66.1% with

protection in the 6th grade, 63.8% with protection in the 10th grade, 60.3% with protection in the 12th grade), while the 8th grade showed the highest protection for the Family Rewards for Prosocial Involvement scale (69.1% with protection). In comparison to the BH Norm, protection scale scores were higher for all grades in Pennsylvania for Family Attachment and the Family Rewards for Prosocial Involvement Scales.

## Comparisons to 2013 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Data for 2011 were recalculated so that they could be comparable to 2013 and 2015 data. Since the 2013 survey, the scale scores for Family History of Antisocial Behavior decreased 1.3% to 6.7% in grades 8, 10, and 12. In regard to protective factor scale scores, two scales showed significant increases since 2013 — Family Rewards for Prosocial Involvement decreased for all grades (decreases of 1.9% to 4.6%) and Family Attachment scale scores also decreased in all grades (decreases of 2.7% to 4.2%). See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

To see risk and protective factor data at the county level, please visit the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 2-4

## Family Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
<b>Family Risk Factor Scales</b>																				
Family history of antisocial behavior	36.9	37.6	37.8	48.0	41.3	34.6	33.3	46.3	37.7	37.0	30.3	47.8	41.2	35.8	30.9	45.1	39.2	36.2	32.9	46.7
Poor family management	43.7	40.1	39.7	48.3	45.4	36.6	36.7	47.3	49.8	39.2	39.2	49.3	40.5	34.6	33.7	40.6	45.2	37.6	37.3	46.3
Parental attitudes favorable to drug use	8.7	11.6	14.5	11.4	18.1	23.9	25.7	23.7	35.5	39.9	40.9	39.6	39.2	42.1	42.8	40.3	25.8	30.2	31.6	29.8
Parental attitudes favorable to antisocial behavior	38.1	39.2	48.3	37.7	29.1	33.9	40.1	30.4	34.7	43.0	47.3	34.9	37.6	43.6	47.0	34.5	34.8	40.0	45.7	34.1
Family conflict	31.0	31.4	34.9	38.9	33.6	28.6	31.8	35.3	36.3	35.6	36.3	39.9	37.1	35.3	38.1	38.0	34.9	32.8	35.3	38.0
<b>Family Protective Factor Scales</b>																				
Family attachment	67.7	69.5	66.1	58.2	61.2	67.1	62.9	54.8	60.4	66.5	63.8	57.1	57.6	64.4	60.3	57.9	61.2	66.8	63.2	56.9
Opportunities for prosocial involvement	66.4	65.3	58.6	59.6	66.4	69.7	67.0	62.5	58.8	60.6	63.0	56.2	55.4	57.3	58.9	56.2	61.1	63.0	61.9	58.5
Rewards for prosocial involvement	60.4	66.3	61.7	54.9	67.9	72.5	69.1	61.9	60.7	62.7	60.8	54.3	54.1	58.7	56.2	54.0	60.5	64.9	61.9	56.4

# School Risk and Protective Factors

In the school domain, the early years are important as far as creating or decreasing the level of risk for children. Academic failure in elementary school puts children at risk for substance use, delinquency, teen pregnancy, school drop out, and violence later in life. Further, a child with early and persistent antisocial behavior is at risk for substance use and other problems later in life.

These two factors (academic failure and early engagement in antisocial behavior) indicate that prevention programs should begin early in a student’s schooling. Programs that can effectively target the needs of the school population will help to decrease the level of risk, thereby decreasing problem behaviors later in school. The Pennsylvania data will be important for schools, in that it will help them target the problem behaviors and student populations which are at the greatest need for services.

As with the community and family domains, bonding at the school level also decreases risk and increases protection. When youth have healthy relationships with their teachers, when they feel as if they are able to play an active role in their classes and in their school, and when they receive encouragement and support, they are more bonded to their school and their commitment to school is less likely to falter.

Definitions of all school domain risk factors, as well as scores for the school domain are provided on the next pages. The table below shows the links between the school risk factors and the six problem behaviors. The check marks have been placed in the chart to indicate where at least two well designed, published research studies have shown a link between the risk factor and the problem behavior.

Table 2-5

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
School						
Academic Failure Beginning in Late Elementary School	✓	✓	✓	✓	✓	✓
Lack of Commitment to School	✓	✓	✓	✓	✓	

## Academic Failure in Elementary School (Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, Violence, and Depression/Anxiety)

Beginning in the late elementary grades, academic failure increases the risk of drug abuse, delinquency, violence, teen pregnancy, and school dropout. Youth fail for many reasons. It appears that *the experience of failure*, not necessarily the student’s ability, increases the risk of problem behaviors.

## Lack of Commitment to School (Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, and Violence)

Lack of commitment to school means the young person has ceased to see the role of student as a viable one. Young people who have lost this commitment to school are at higher risk for all five problem behaviors.

# School Risk and Protective Factor Scales

## Risk Factor Scale Results

There are two risk factor scales for the school domain – Academic Failure and Low Commitment to School (see Table 2-6). Scale scores for Academic Failure ranged from 29.9% at risk in the 6th grade to 35.3% at risk in the 8th grade, while scale scores for Low Commitment to School ranged from 33.3% at risk in the 6th grade to 45.5% at risk in the 10th grade. In comparison to the BH Norm, fewer Pennsylvania youth in all grades are at risk within both scales.

## Protective Factor Scale Results

There are also two protective factor scales for the school domain – School Opportunities for Prosocial Involvement and School Rewards for Prosocial Involvement (see Table 2-6). School Opportunities for Prosocial Involvement ranged from 46.5% with protection in the 12th grade to 61.6% with protection

in the 6th grade, and School Rewards for Prosocial Involvement ranged from 47.9% with protection in the 10th grade to 64.1% with protection in the 6th grade.

## Comparisons to 2013 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Data for 2011 were recalculated so that they could be comparable to 2013 and 2015 data. Since the 2013 survey, the scale scores for Low Commitment to School increased 1.5% to 5.0% in each grade; while scale scores for Academic Failure decreased 1.2% in the 10th grade, but increased in all other grades. Protection within the school domain continued to decrease for all grades and for both scales. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

To see risk and protective factor data at the county level, please visit the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 2-6

### School Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
<b>School Risk Factor Scales</b>																				
Academic failure	29.6	28.1	29.9	38.1	32.5	32.5	35.3	41.1	36.6	35.9	34.7	42.5	35.7	33.4	34.6	37.9	33.7	32.8	33.8	40.1
Low commitment to school	36.7	30.4	33.3	42.8	40.9	39.6	41.7	46.2	47.0	44.0	45.5	48.7	43.2	39.6	44.6	43.8	42.1	38.8	41.5	45.6
<b>School Protective Factor Scales</b>																				
Opportunities for prosocial involvement	68.8	62.8	61.6	59.5	59.6	56.9	52.3	51.6	54.6	50.2	47.0	50.8	52.9	52.2	46.5	53.1	58.7	55.1	51.4	53.2
Rewards for prosocial involvement	68.3	66.1	64.1	56.9	65.8	59.2	56.9	52.8	61.7	49.4	47.9	49.0	61.2	53.9	48.5	52.4	64.1	56.6	53.9	52.5

# Peer/Individual Risk and Protective Factors

The final domain of a student’s life — peer/individual — consists of much more than mere peer pressure. Although youth are at risk for problem behaviors when they have friends who are engaging in unfavorable behaviors; or their friends have favorable attitudes toward the behaviors (i.e., it is seen as “cool”); the peer/individual domain also consists of several factors which spring from the individual. For example, youth who are depressed, rebellious, or who feel alienation are more likely to use drugs and show antisocial behavior. Other constitutional factors also play a part in whether or not a student is at risk for ATOD use or antisocial behaviors.

Definitions of all peer/individual domain risk and protective factors, as well as a description of individual characteristics, bonding, and healthy beliefs and clear standards, are presented in this section. Also in this discussion of peer/individual risk factors, scores for the scales in this domain are provided in the form of tables and charts. The table below shows the links between the peer/individual risk factors and the six problem behaviors. The check marks have been placed in the chart to indicate where at least two well designed, published research studies have shown a link between the risk factor and the problem behavior.

**Table 2-7**

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance Abuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
<b>Individual/Peer Risk Factors</b>						
Rebelliousness	✓	✓	✓	✓	✓	
Friends Who Engage in a Problem Behavior	✓	✓	✓	✓	✓	
Favorable Attitudes Toward the Problem Behavior	✓	✓	✓	✓	✓	
Constitutional Factors	✓	✓			✓	✓

## **Alienation, Rebelliousness, and Lack of Bonding to Society (Rebelliousness Scale: Linked to Substance Abuse, Delinquency, and School Dropout)**

Young people who feel they are not part of society, are not bound by rules, don’t believe in trying to be successful or responsible, or who take an active rebellious stance toward society are at higher risk of drug abuse, delinquency, and school dropout.

## **Friends Who Engage in the Problem Behavior (Interaction with Antisocial Peers Scale, Rewards for Antisocial Behavior Scale, Friends Use of Drugs Scale — Linked to Substance Abuse, Delinquency, Teen Pregnancy, School Dropout, and Violence)**

Youth who associate with peers who engage in problem behaviors are much more likely to engage in the same problem behaviors. This is one of the most consistent predictors of youth problem behaviors that the research has identified. Even when young people come from well-managed families and do not experience other risk factors, just hanging out with those who engage in problem behaviors greatly increases their risks. However, young people who experience a low number of risk factors are less likely to associate with those who are involved in problem behaviors.

## **Favorable Attitudes Toward the Problem Behavior (Attitudes Favorable to Drug Use Scale, Attitudes Favorable to Antisocial Behavior Scale, Perceived Risk of Drug Use Scale — Linked to Substance Abuse, Delinquency, Teen Pregnancy, and School Dropout)**

During the elementary school years, children usually express anti-drug, anti-crime, pro-social attitudes. They have difficulty imagining why people use drugs, commit crimes, and drop out of school. In middle school, as others they know participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This places them at higher risk.

## Depressive Symptoms (Linked to Substance Abuse and Delinquency)

Young people who are depressed are overrepresented in the criminal justice system and are more likely to use drugs. Survey research and other studies have shown a link between depression and other youth problem behaviors. Because they are depressed, these individuals have difficulty in identifying and engaging in pro-social activities. They consequently do not gain recognition for demonstrating positive behaviors or develop attachments to their schools or communities. On this Pennsylvania survey, youth who scored highest on the items measuring depressive symptoms also scored significantly higher on all of the drug use questions.

## Constitutional Factors (Sensation Seeking Scale — Linked to Substance Abuse, Delinquency, Violence, and Depression/Anxiety)

Constitutional factors are factors that may have a biological or physiological basis. These factors are often seen in young people with behaviors such as sensation-seeking, low harm-avoidance, and lack of impulse control. These factors appear to increase the risk of young people abusing drugs, engaging in delinquent behavior, and/or committing violent acts.

Some young people who are exposed to multiple risk factors do not become substance abusers, juvenile delinquents, teen parents, or school dropouts. Balancing the risk factors are protective factors, those aspects of people's lives that counter risk factors or provide buffers against them. They protect by either reducing the impact of the risks or by changing the way a person responds to the risks. A key strategy to counter risk factors is to enhance protective factors that promote positive behavior, health, well-being, and personal success. Research indicates that protective factors fall into three basic categories: Individual Characteristics, Bonding, and Healthy Beliefs and Clear Standards.

## Protective Factors

Protective factors exert a positive influence and buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors.

### Individual Characteristics

Research has identified four individual characteristics as protective factors. These attributes are considered to be inherent in the youngster and are difficult, if not impossible, to change. They consist of:

**Gender.** Given equal exposure to risks, girls are less likely to develop health and behavior problems in adolescence than are boys.

**A Resilient Temperament.** Young people who have the ability to quickly adjust to or recover from misfortune or changes are at reduced risk.

**A Positive Social Orientation.** Young people who are good natured, enjoy social interactions, and elicit positive attention from others are at reduced risk.

**Intelligence.** Bright children are less likely to become delinquent or drop out of school. However, *intelligence does not protect against substance abuse.*

### Bonding

Research indicates that one of the most effective ways to reduce children's risk is to strengthen their bond with positive, pro-social family members, teachers, or other significant adults, and/or pro-social friends. Children who are *attached* to positive families, friends, schools, and their community, and

who are *committed* to achieving the goals valued by these groups, are less likely to develop problems in adolescence. Children who are bonded to others who hold healthy beliefs are less likely to do things that threaten that bond, such as use drugs, commit crimes, or drop out of school. For example, if children are attached to their parents and want to please them, they will be less likely to risk breaking this connection by doing things of which their parents strongly disapprove. Studies of successful children who live in high risk neighborhoods or situations indicate that strong bonds with a care giver can keep children from getting into trouble. Positive bonding makes up for many disadvantages caused by risk factors or environmental characteristics.

### Healthy Beliefs and Clear Standards

Bonding is only part of the protective equation. Research indicates that another group of protective factors falls into the category of healthy beliefs and clear standards. The people with whom children are bonded need to have *clear, positive standards for behavior*. The content of these standards is what protects young people. For example, being opposed to youth alcohol and drug use is a standard that has been shown to protect young people from the damaging effects of substance abuse risk factors. Children whose parents have high expectations for their school success and achievement are less likely to drop out of school. Clear standards against criminal activity and early, unprotected sexual activity have a similar protective effect.

The negative effects of risk factors can be reduced when schools, families, and/or peer groups teach young people healthy beliefs and set clear standards for their behavior. Examples of healthy beliefs include believing it is best for children to be drug and crime free and to do well in school. Examples of clear standards include establishing clear no drug and alcohol family rules, establishing the expectation that a youngster does well in school, and having consistent family rules against problem behaviors.

# Peer/Individual Risk and Protective Factor Scales

## Risk Factor Scale Results

The 2015 PAYS gathers data for ten risk factor scales in the Peer/Individual Domain. Risk factor results are presented in Table 2-8.

The highest risk score for youth in all grades was Perceived Risk of Drug Use (43.0% at risk in the 6th grade, 39.3% at risk in the 8th grade, 43.9% at risk in the 10th grade, and 55.7% at risk in the 12th grade). In comparison to the BH Norm, for an overwhelming majority of scales and grades, Pennsylvania youth indicated lower risk levels in comparison to the BH Norm. However, Pennsylvania high school youth in grades 8, 10, and 12 indicated higher risk for the following two scales: Perceived Risk of Drug Use (1.4% higher than the BH Norm for the 8th grade, 3.8% higher than the BH Norm for the 10th grade, and 8.3% higher for the 12th grade) and the Depressive Symptoms risk scale (1.1% higher than the BH Norm for the 8th grade, 2.1% higher than the BH Norm for the 10th grade, and 8.2% higher for the 12th grade). In contrast, the following are Peer/Individual domain scales in which a lower percentage of Pennsylvania youth in all grades (in comparison to the BH Norm) were at risk: Rebelliousness, Rewards Favorable to Antisocial Behavior, Friends' Use of Drugs, and Interaction with Antisocial Peers.

## Protective Factor Scale Results

There are two protective factor scales for the peer/individual domain. Protective factor results for this domain are presented in Table 2-8. For the Belief in the Moral Order scale, protection ranged from 53.3% with protection in the 6th grade up to 63.2% with protection in the 10th grade. Protective factor scale scores for Religiosity ranged from 35.4% with protection in the 12th grade up to 47.9% with protection for this scale in the 6th grade. In comparison to the BH Norm, a greater percentage of Pennsylvania youth in all grades indicated protection within the Belief in the Moral Order scale (2.2% to 9.6% higher in each grade), while a lower percentage of PA youth in all grades indicated protection within the Religiosity scale (6.9% to 8.4% lower protection in each grade).

## Comparisons to 2013 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Data for 2011 were recalculated so that they could be comparable to 2013 and 2015 data. Since the 2013 survey, the scale scores for Rewards for Antisocial Behavior decreased 1.2% to 8.3% in each grade; Depressive Symptoms scale scores increased 0.8% to 5.6% in each grade; and Religiosity scale scores decreased 2.0% to 3.5% in each grade. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

To see risk and protective factor data at the county level, please visit the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 2-8  
**Peer Domain Risk and Protective Factor Scales**

	6th				8th				10th				12th				All Grades			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
<b>Peer And Individual Risk Factor Scales</b>																				
Rebelliousness	27.9	25.4	25.7	39.6	24.2	21.3	21.7	34.5	31.0	29.7	25.7	39.8	31.1	33.4	31.1	37.7	28.6	27.6	26.1	35.5
Gang Involvement	8.1	8.2	10.4	9.1	9.3	7.4	10.3	11.2	10.3	9.1	11.5	12.4	11.5	12.8	15.6	13.2	n/a	n/a	12.0	11.7
Perceived risk of drug use	44.0	42.2	43.0	44.5	34.3	30.0	39.3	37.9	41.1	42.1	43.9	40.1	50.1	52.3	55.7	47.4	42.3	41.7	45.6	42.2
Attitudes favorable to drug use	16.4	14.7	19.1	18.9	42.9	36.6	38.0	43.7	49.5	44.5	43.1	45.3	53.9	48.8	47.4	46.9	41.3	37.1	37.4	40.0
Attitudes favorable to ASB	34.5	28.9	32.4	40.0	28.8	26.7	28.3	34.7	39.8	38.5	35.6	41	37.4	38.6	39.4	39.0	35.2	33.5	34.0	38.5
Sensation seeking	41.5	32.1	39.1	n/a	38.1	30.6	33.0	n/a	41.8	34.5	34.3	n/a	41.0	31.8	32.2	n/a	40.6	32.3	34.5	n/a
Rewards for ASB	15.8	16.4	15.2	20.7	33.1	35.1	31.2	43.2	37.7	43.5	35.2	46.7	46.0	45.4	41.7	51.5	33.6	36.1	31.4	41.5
Friends use of drugs	15.0	8.9	10.2	19.7	41.1	29.4	28.4	47.9	42.0	35.4	31.0	48.1	45.2	37.8	32.8	44.7	36.3	28.9	26.1	41.7
Interaction with antisocial peers	21.3	18.1	18.3	33.6	30.3	22.8	25.4	44.8	36.8	28.2	26.3	45.5	38.6	32.3	29.2	43.7	32.0	25.8	25.0	42.6
Depressive symptoms	23.7	23.3	28.9	30.3	29.7	32.4	35.9	34.8	34.1	39.1	39.9	37.8	32.2	36.6	41.5	33.3	30.1	33.3	36.7	34.2
<b>Peer And Individual Protective Factor Scales</b>																				
Belief in the moral order	55.1	56.6	53.3	51.1	56.3	62.9	61.7	52.1	56.2	61.9	63.2	54.6	54.1	61.4	60.1	55.6	55.4	60.9	59.8	53.6
Religiosity	46.6	51.4	47.9	54.8	48.9	49.0	46.2	53.7	45.7	42.0	40.0	48.4	37.2	37.4	35.4	42.9	44.5	44.5	42.2	49.8

# Risk and Protective Factor Scales: 6th Grade

Chart 2-1

**Risk factor scales, 6th grade, Statewide Sample 2015 PAYS**

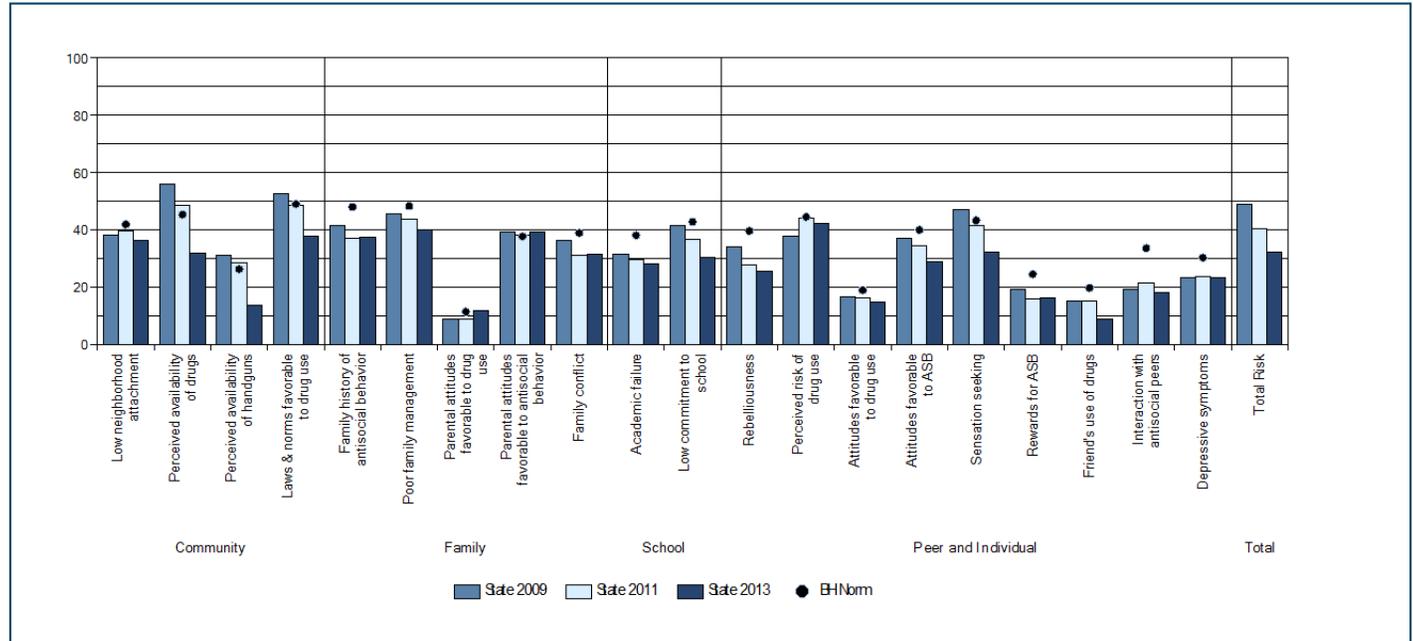
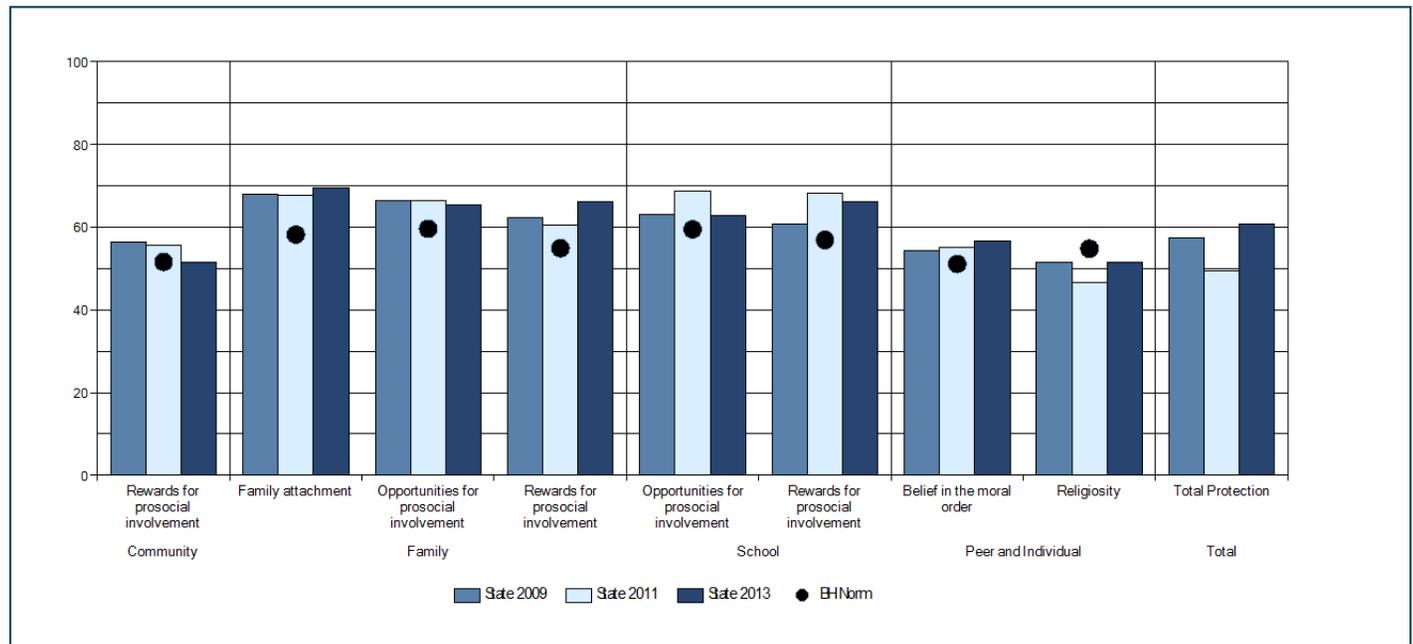


Chart 2-2

**Protective factor scales, 6th grade, Statewide Sample 2015 PAYS**



NOTE:

"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

# Risk and Protective Factor Scales: 8th Grade

Chart 2-3

## Risk factor scales, 8th grade, Statewide Sample 2015 PAYS

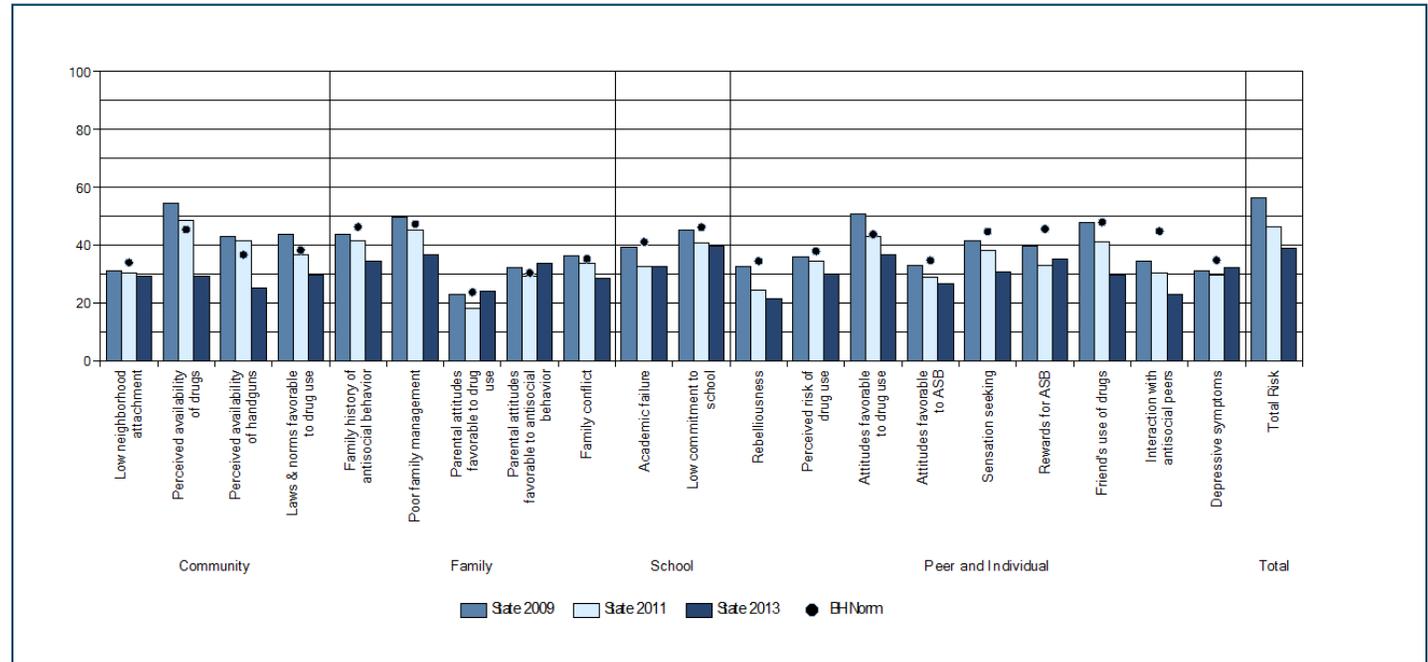
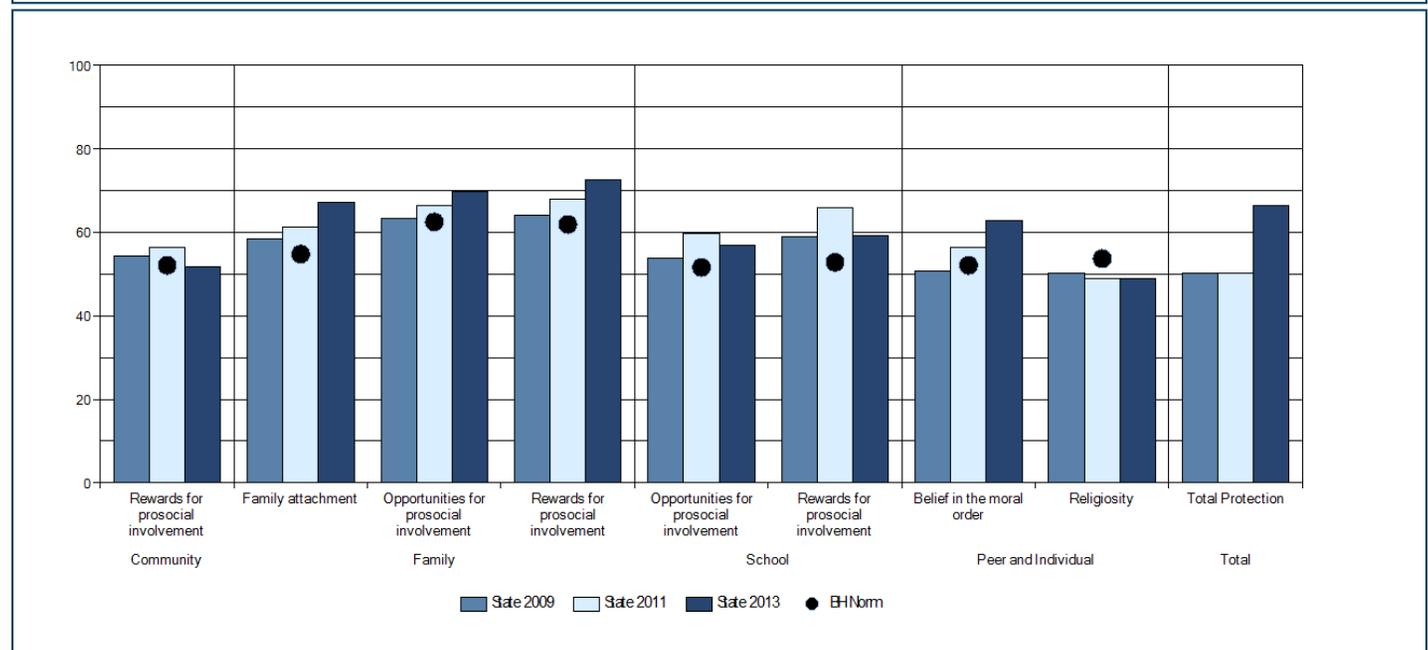


Chart 2-4

## Protective factor scales, 8th grade, Statewide Sample 2015 PAYS



NOTE:

"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

# Risk and Protective Factor Scales: 10th Grade

Chart 2-5

## Risk factor scales, 10th grade, Statewide Sample 2015 PAYS

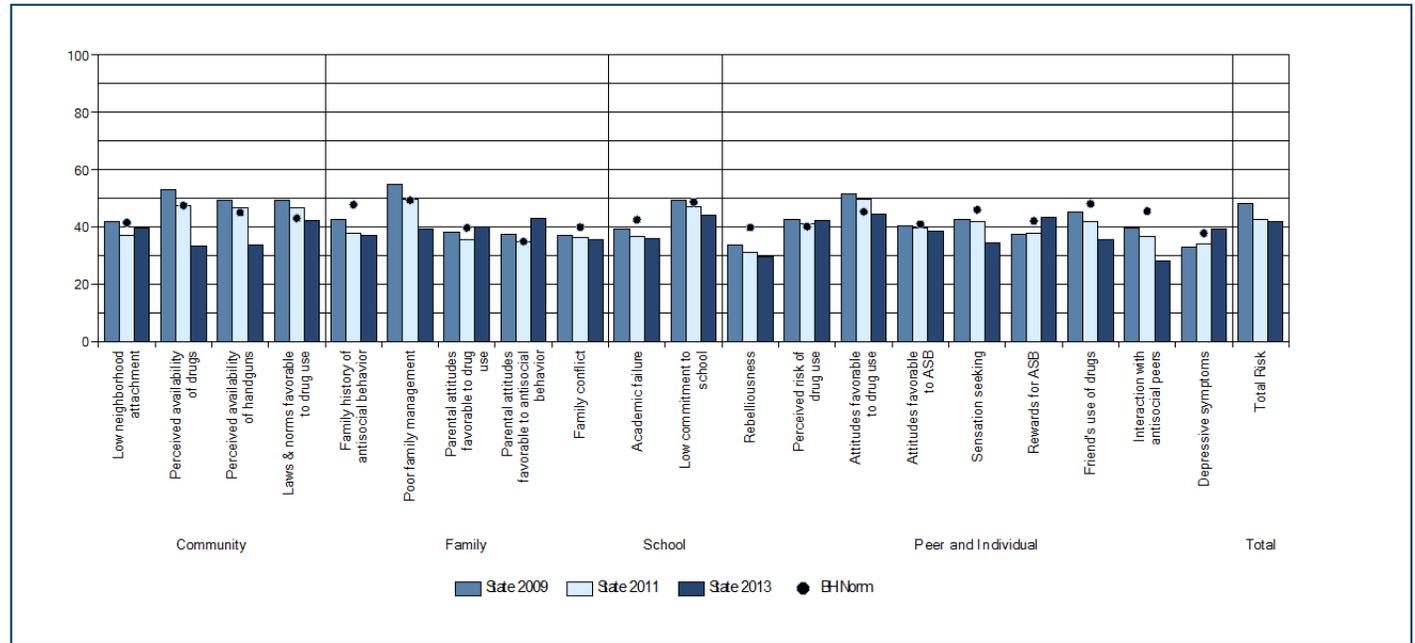
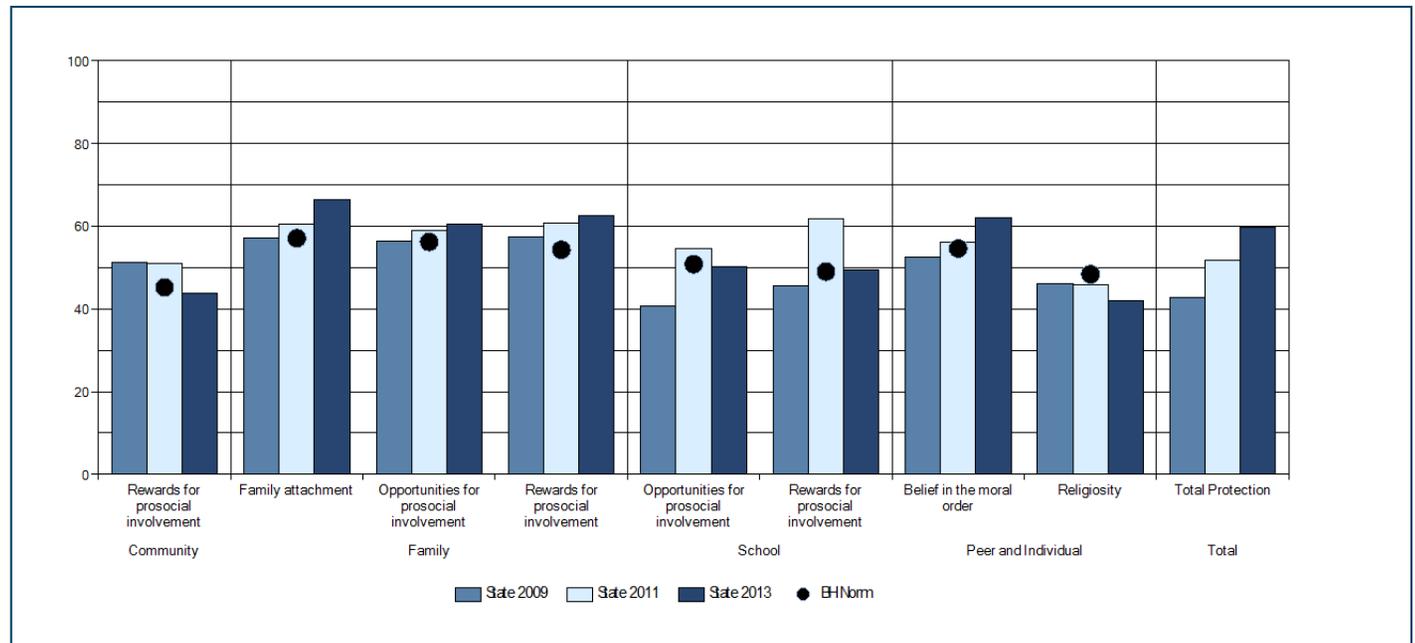


Chart 2-6

## Protective factor scales, 10th grade, Statewide Sample 2015 PAYS



NOTE:

"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

# Risk and Protective Factor Scales: 12th Grade

Chart 2-7  
**Risk factor scales, 12th grade, Statewide Sample 2015 PAYS**

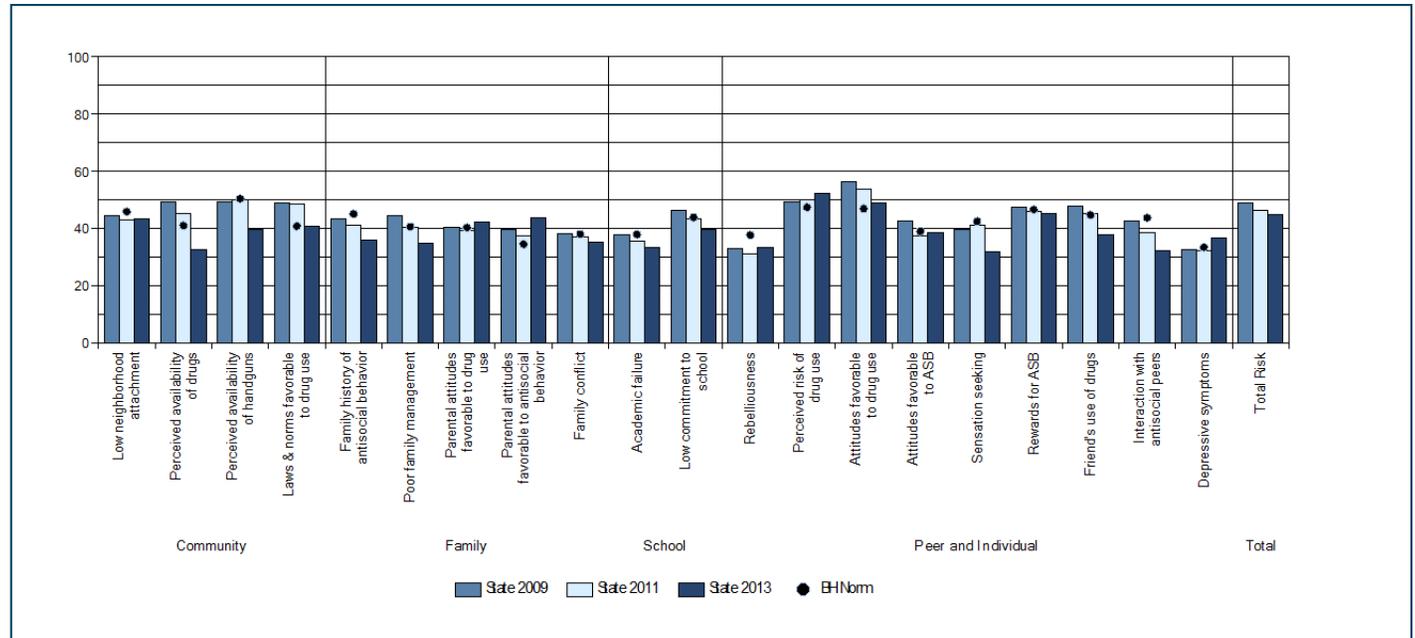
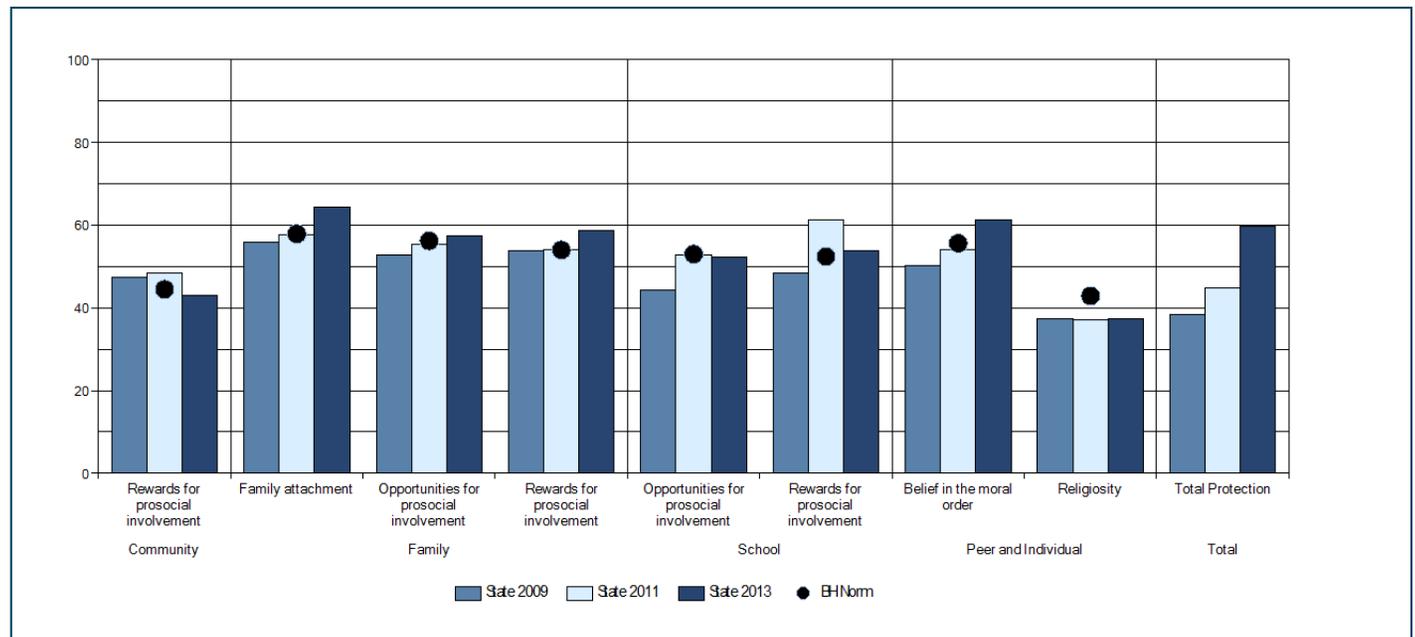


Chart 2-8  
**Protective factor scales, 12th grade, Statewide Sample 2015 PAYS**



NOTE:

"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

# Risk and Protective Factor Scales: All Grades Combined

Chart 2-9

**Risk factor scales, All Grades Combined, Statewide Sample 2015 PAYS**

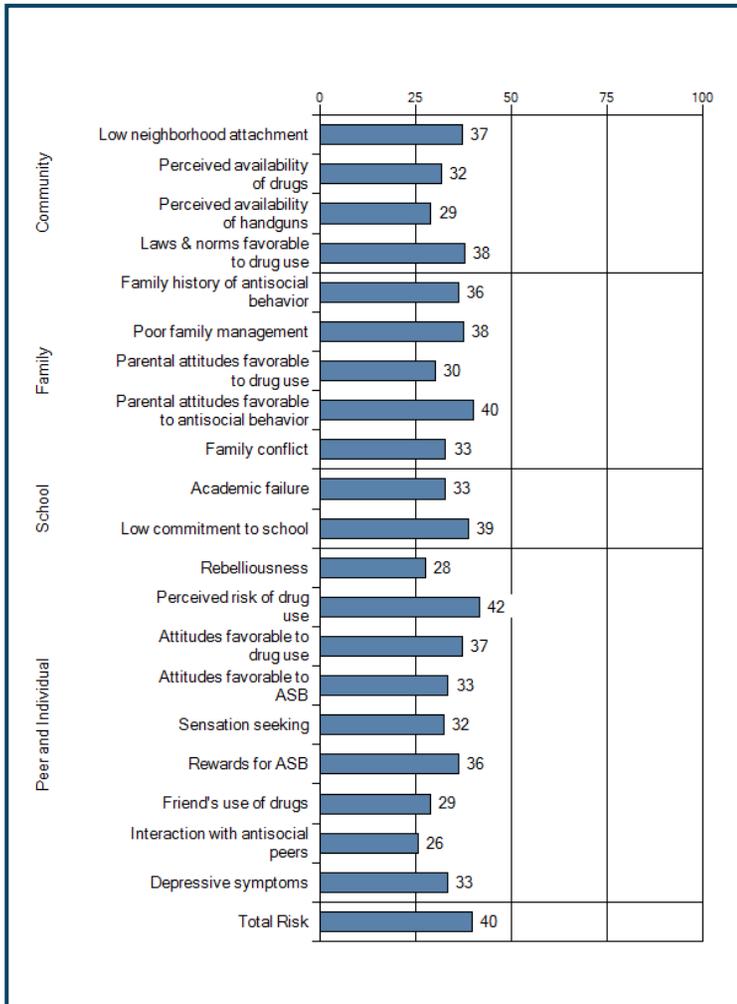
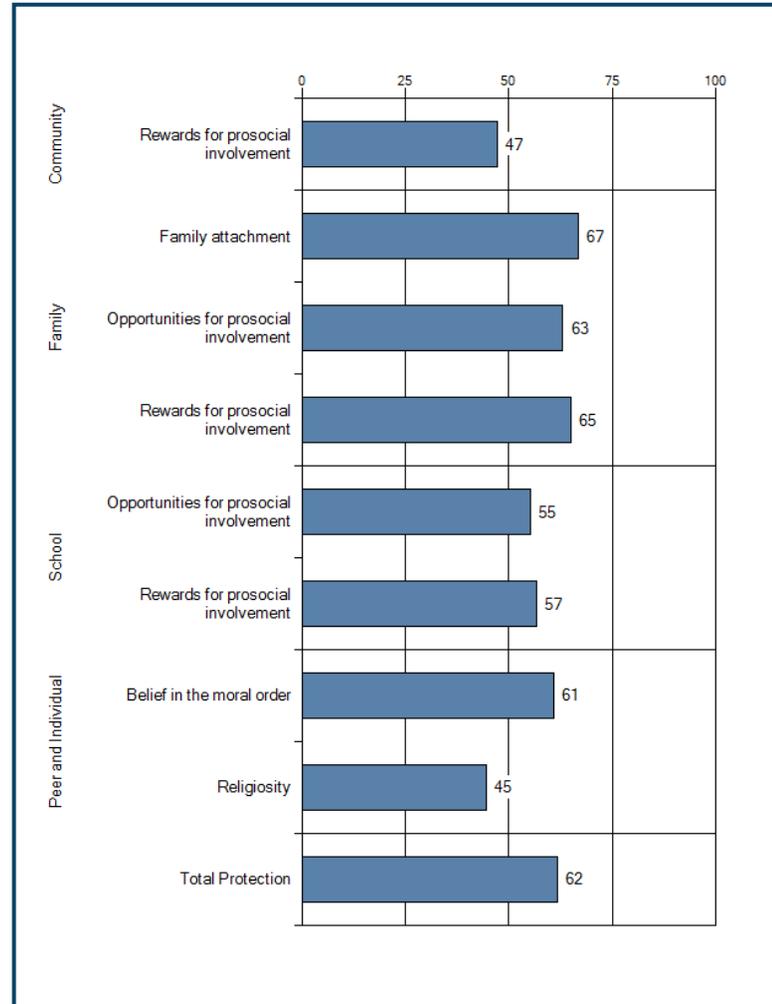


Chart 2-10

**Protective factor scales, All Grades Combined, Statewide Sample 2015 PAYS**



## Section 3: Substance Use Outcomes and Topics

**Section 3: Substance Use Outcomes**, describes ATOD use and other substance-use related measures (such as perceived risks and sources of obtaining ATODs) among Pennsylvania's youth. This section presents results on the current use (use in the 30 days prior to the survey) and use during the youth's lifetime of 16 different substances. These results are compared to the results of a national survey, Monitoring the Future (MTF), when comparable data are available. Use is presented by grade and gender. Results are presented

first for the high incidence/early initiation drugs – alcohol, tobacco, marijuana, and inhalants – and are then presented for prescription drugs, and other illicit drugs. Additional analyses in this section include substance use by gender, perceived harmfulness, and sources of obtaining alcohol

When accompanied by a copy of the 2015 PAYS State Report Executive Summary, each subsection found in Section 3, can be considered a self-standing piece that can be distributed to researchers, prevention specialists, and other interested parties.

## 3.1 Lifetime and 30-Day High Incidence/Early Initiation Drug Use: Alcohol

In the 2015 PAYS, Pennsylvania youth were asked to report if they had used alcohol in their lifetime or in the past 30-days. They were also asked to report if they had consumed five or more drinks in a row in the past two weeks. Results of students reporting that they drank alcohol at least once in the previously mentioned time frames (lifetime, past month, and binge drinking in the past two weeks) are reported in this section.

### Lifetime Alcohol Use

The 2015 PAYS results presented in Table 3.1-1 show that 43.9% of students in grades 6, 8, 10, and 12 have used alcohol at least once in their lifetime. By grade, 15.8% of 6th graders, 33.9% of 8th graders, 54.2% of 10th graders, and 71.0% of 12th graders have used alcohol in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.1-1), Pennsylvania youth in the all grades indicated higher lifetime alcohol use rates than youth in same grades in the national sample. Pennsylvania rates were 7.8% higher than national rates in the 8th grade (33.9% in Pennsylvania, compared to 26.1% in the national sample), 7.1% higher than national rates in the 10th grade (54.2% in Pennsylvania, compared to 47.1% in the national sample), and 7.0% higher than national rates in the 12th grade (71.0% in Pennsylvania and 64.0% in the national sample).

Since the 2013 survey, lifetime alcohol use increased 2.5% for the 6th grade, and decreased 1.2% for the 8th grade, 7.3% for the 10th grade, and 3.2% for the 12th grade. For all students combined, lifetime alcohol use decreased from 46.9% in 2013 to 43.9% in 2015.

### Past Month Alcohol Use

The 2015 PAYS results presented in Table 3.1-1 and Figure 3.1-1 show that 18.2% of students in grades 6, 8, 10, and 12 have used alcohol at least once in the past 30 days. In looking at past month use rates by grade level, 3.3% of 6th graders, 9.5% of 8th graders, 22.3% of 10th graders, and 37.6% of 12th graders in Pennsylvania have used alcohol in the past 30 days.

In comparison to data gathered through the national MTF Survey (see Figure 3.1-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated past month alcohol use rates that were similar to those of youth in same grades in the national sample. Pennsylvania rates were quite similar to MTF rates for the 8th and 10th grades, but 2.3% higher for the 12th grade (37.6% in Pennsylvania, compared to 35.3% in the national sample).

Since the 2013 survey, past month alcohol use decreased significantly in grades 10 and 12 — a decrease of 3.9% in the 10th grade, a decrease of 3.0% in the 12th grade, and a decrease of 2.1% for all grades combined.

### Binge Drinking

The 2015 PAYS results presented in Table 3.1-1 and Figure 3.1-1 show the percent of students in each grade reporting that they binge drank (consumed five or more drinks in a row) at least once in the past two weeks. The 2015 PAYS found that 7.8% of students in the 6th, 8th, 10th, and 12th grades reported binge drinking at least once in the past two weeks. By grade level, 1.3% of 6th graders, 3.2% of 8th graders, 8.4% of 10th graders, and 18.0% of 12th graders reported binge drinking.

Binge drinking rates have been gradually decreasing since 2011. For all grades combined, binge drinking has decreased 4.6% since 2011 (12.4% in 2011, 9.7% in 2013, 7.8% in 2015). In the past two years, 10th grade binge drinking decreased 3.3% (from 11.7% in 2013 to 8.4% in 2015) and 12th grade binge drinking decreased 3.8% (from 21.8% in 2013 to 18.0% in 2015).

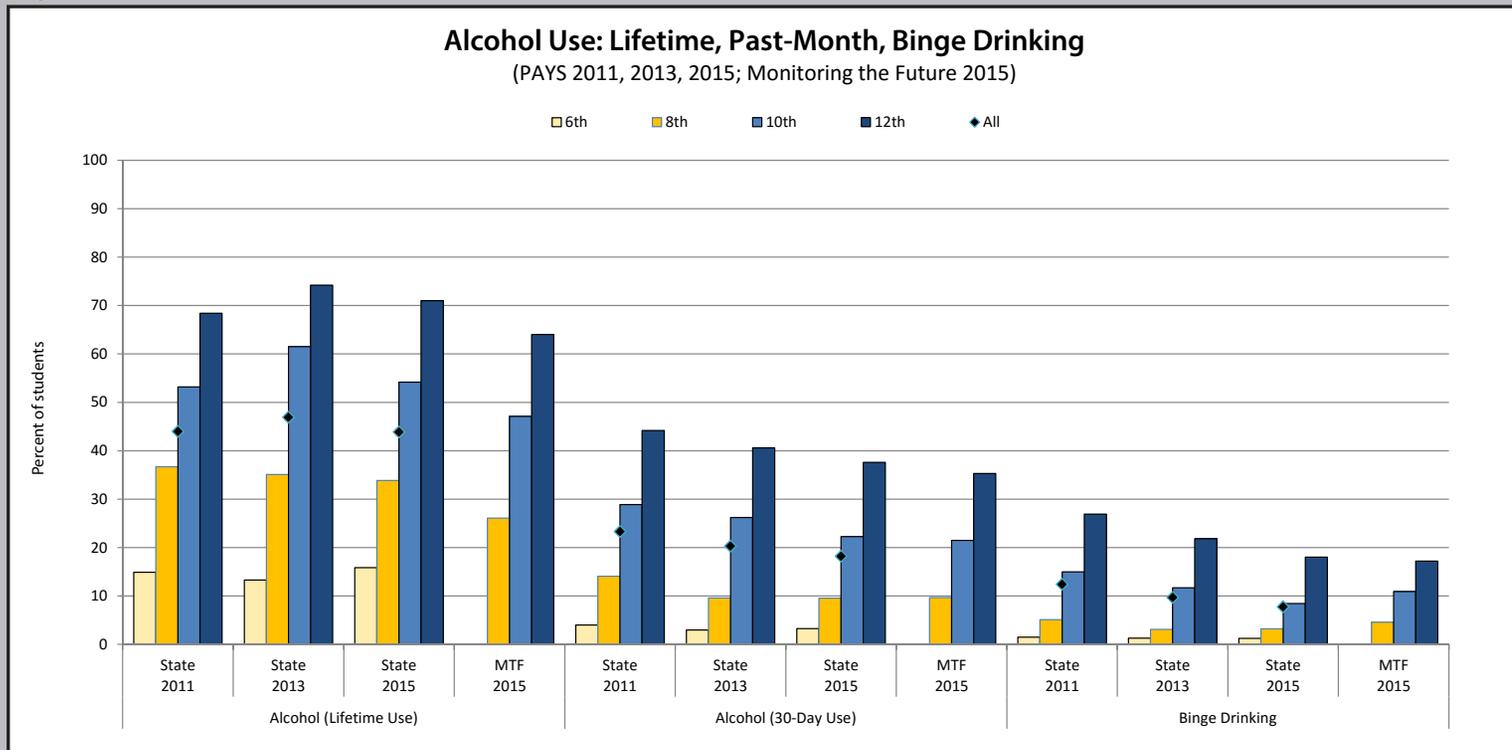
For data regarding lifetime alcohol use, 30-day alcohol use, and binge drinking by county and grade, please visit the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.1-1

**Alcohol Use: Lifetime, Past-Month, Binge Drinking**

Grade	Alcohol (Lifetime Use)				Alcohol (30-Day Use)				Binge Drinking			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	14.9	13.3	15.8	n/a	4.0	3.0	3.3	n/a	1.5	1.3	1.3	n/a
8th	36.7	35.1	33.9	26.1	14.1	9.6	9.5	9.7	5.1	3.1	3.2	4.6
10th	53.2	61.5	54.2	47.1	28.9	26.2	22.3	21.5	15.0	11.7	8.4	10.9
12th	68.4	74.2	71.0	64.0	44.2	40.6	37.6	35.3	26.9	21.8	18.0	17.2
All	44.0	46.9	43.9	n/a	23.3	20.3	18.2	n/a	12.4	9.7	7.8	n/a

Figure 3.1-1



## 3.2 Lifetime and 30-Day High Incidence/Early Initiation Drug Use: Tobacco

In the 2015 PAYS, Pennsylvania youth were asked to report if they had ever used cigarettes or smokeless tobacco and how frequently/heavily (if ever) they used both tobacco products as well as vaping/e-cigarette products. Results of students reporting that they smoked cigarettes or used smokeless tobacco at least once in their lifetime; or that they had used cigarettes, smokeless tobacco, or an e-cigarette at least once in the past month, are reported in this section.

### Lifetime Tobacco Use

The 2015 PAYS results presented in Table 3.2-1 show that 16.3% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in their lifetime, and 8.4% of students in the four grades have used smokeless tobacco in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.2-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime cigarette use rates than youth in same grades in the national sample. For lifetime cigarette use, Pennsylvania rates were 2.3% lower in the 8th grade than national 8th grade rates and 1.6% lower in the 10th grade than national 10th grade rates. For lifetime smokeless tobacco use, Pennsylvania rates were 4.1% lower in the 8th grade, 2.5% lower in the 10th grade, and 4.9% higher in the 12th grade in comparison to national rates.

Since the 2013 survey, lifetime cigarette use decreased significantly in the 10th and 12th grades, with a decrease of 2.9% in the 10th grade, 2.5% in the 12th grade, and 1.3% overall. Since the 2013 survey, smokeless tobacco lifetime use rates decreased 1.1% in the 10th grade and were stable in other grades.

### Past Month Tobacco Use

The 2015 PAYS results presented in Table 3.2-1 and Figure 3.2-1 show that 6.4% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in the past 30 days, and 4.1% of students in the same grades have used smokeless tobacco. In looking at past month cigarette use rates by grade level, 0.8% of 6th graders, 3.5% of 8th graders, 6.8% of 10th graders, and 14.6% of 12th graders in Pennsylvania have used cigarettes in the past 30 days; while 0.4% of 6th graders, 1.8% of 8th graders, 4.9% of 10th graders, and 9.2% of 12th graders have used smokeless tobacco in the past month.

The 2015 PAYS was the first to collect data on past-month e-cigarette/vape device use. The 2015 survey showed that 15.5% of students had used an e-cigarette or vape device in the past month. By grade, 2.6% of 6th graders indicated past-month use, 11.7% of 8th graders indicated past-month use, 20.4% of 10th graders indicated past-month use, and 27.0% of 12th graders indicated past-month use.

In comparison to data gathered through the national MTF Survey (see Figure 3.2-1), Pennsylvania youth in the 8th and 10th grades indicated similar use to national youth, while Pennsylvania 12th graders indicated a past-month cigarette use rate that was 3.2% higher than 12th graders nationally. For smokeless tobacco, while Pennsylvania youth in grades 8 and 10 indicated significantly lower use rates than MTF students, PA 12th grade past-month use was 4.9% higher. As for e-cigarettes/vape devices, the past-month use rate was 2.2% higher in PA for the 8th grade, 6.4% higher in PA for the 10th grade, and 10.8% higher in PA for the 12th grade in comparison to the same grades for the MTF.

Since the 2013 survey, past month cigarette use decreased 0.4% in the 8th grade, 3.1% in the 10th grade, 2.4% in the 12th grade, and 1.6% for all grades combined. Past-month smokeless tobacco use decreased 0.9% for the 10th grade and 1.1% for the 12th grade since the 2013 survey.

### Past Year Vape Device Use

The 2015 PAYS results presented in Table 3.2-3 and Figure 3.2-2 show the percent of past-year e-cigarette users who are using vape devices for different substances. Of past-year vape users, most (71.4%) are only using flavoring in their devices, while 19.1% of past-year users had used nicotine, 8.6% have used marijuana or hash oil, and 1.3% had used another substance in their vape device. 19.7% of past-year users were unsure of what they had inhaled.

For data regarding lifetime tobacco use and 30-day tobacco use by county and grade, please refer to the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.2-2

**Tobacco Use: Lifetime and Past-Month Cigarette and Smokeless Tobacco Use**

Grade	Cigarettes (Lifetime Use)				Cigarettes (30-Day Use)				Smokeless Tobacco (Lifetime Use)				Smokeless Tobacco (30-Day Use)				E-Cigarettes (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	4.2	2.4	2.9	n/a	0.7	0.5	0.8	n/a	1.7	1	1.2	n/a	0.5	0.3	0.4	n/a	n/a	n/a	2.6	n/a
8th	15.6	10.2	11.0	13.3	5.3	3.9	3.5	3.6	6.5	4.6	4.5	8.6	3.1	1.9	1.8	3.2	n/a	n/a	11.7	9.5
10th	28.5	21.2	18.3	19.9	11.7	9.9	6.8	6.3	13.4	10.9	9.8	12.3	7.3	5.8	4.9	4.9	n/a	n/a	20.4	14
12th	43.1	35.2	32.7	31.1	19.4	17	14.6	11.4	23.6	18.9	18.1	13.2	11.4	10.3	9.2	6.1	n/a	n/a	27.0	16.2
All	23.3	17.6	16.3	n/a	9.5	8	6.4	n/a	11.5	9	8.4	n/a	5.7	4.7	4.1	n/a	n/a	n/a	15.5	n/a

Figure 3.2-1

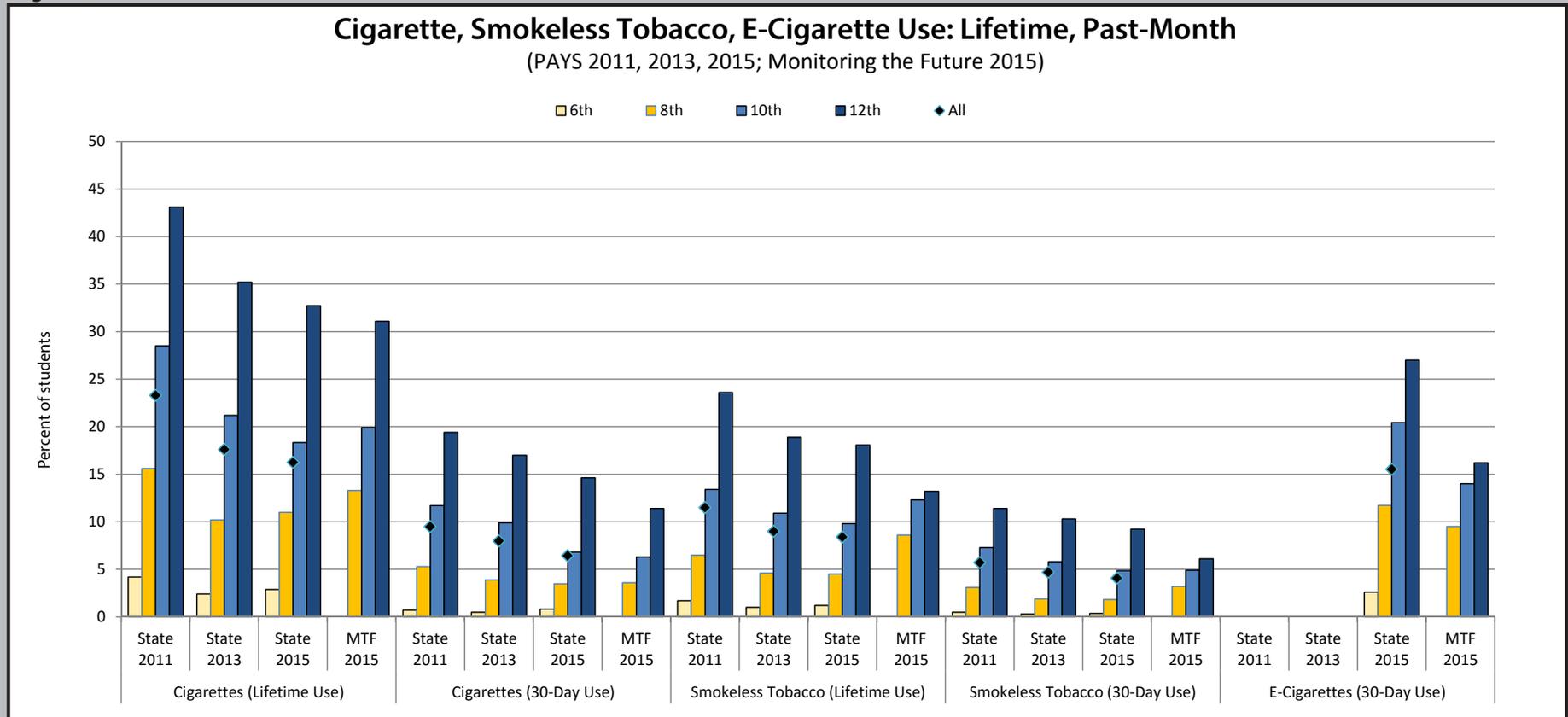
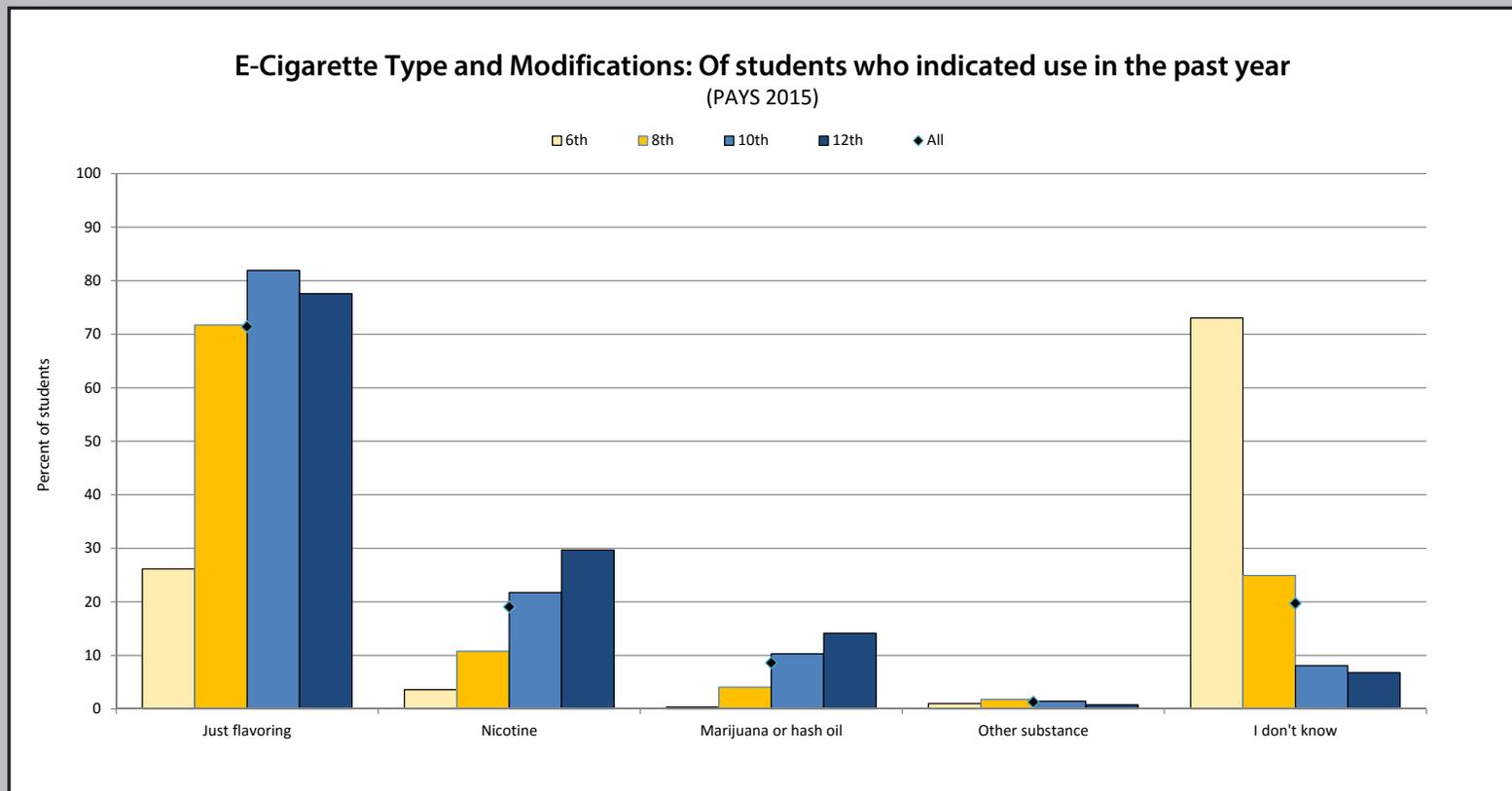


Table 3.2-3

**E-Cigarette Modifications: Of students indicating any use in the past year**

Grade	Just flavoring	Nicotine	Marijuana or hash oil	Other substance	I don't know
6th	26.1	3.6	0.3	1.0	73.0
8th	71.7	10.8	4.1	1.8	24.9
10th	81.9	21.7	10.3	1.4	8.1
12th	77.6	29.7	14.2	0.8	6.8
All	71.4	19.1	8.6	1.3	19.7

Figure 3.2-2



## 3.3 Lifetime and 30-Day High Incidence/Early Initiation Drug Use: Marijuana

In the 2015 PAYS, Pennsylvania youth were asked to report if they had used marijuana in their lifetime or in the past 30-days. Results of students reporting that they used marijuana at least once in their lifetime or in the past month are reported in this section.

### Lifetime Marijuana Use

The 2015 PAYS results presented in Table 3.3-1 show that 17.3% of students in grades 6, 8, 10, and 12 have used marijuana at least once in their lifetime. By grade, 1.2% of 6th graders, 7.3% of 8th graders, 22.0% of 10th graders, and 38.2% of 12th graders have used marijuana in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.3-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated significantly lower lifetime marijuana use rates than youth in the same grades in the national sample. Pennsylvania rates were 8.2% lower than national rates in the 8th grade (7.3% in Pennsylvania, compared to 15.5% in the national sample), 9.1% lower than national rates in the 10th grade (22.0% in Pennsylvania, compared to 31.1% in the national sample), and 6.5% lower than national rates in the 12th grade (38.2% in Pennsylvania compared to 44.7% in the national sample). Since the 2013 survey, lifetime use increased only 0.4% in the 6th grade and 0.9% in the 8th grade, but significantly decreased in the 10th grade (decrease of 3.8%) and 12th grade (decrease of 2.1%).

### Past Month Marijuana Use

The 2015 PAYS results presented in Table 3.3-1 and Figure 3.3-1 show that 9.4% of students in grades 6, 8, 10, and 12 have used marijuana at least once in the past 30 days. In looking at past month use rates by grade level, 0.6% of 6th graders, 3.8% of 8th graders, 12.0% of 10th graders, and 20.8% of 12th graders in Pennsylvania have used marijuana in the past 30 days.

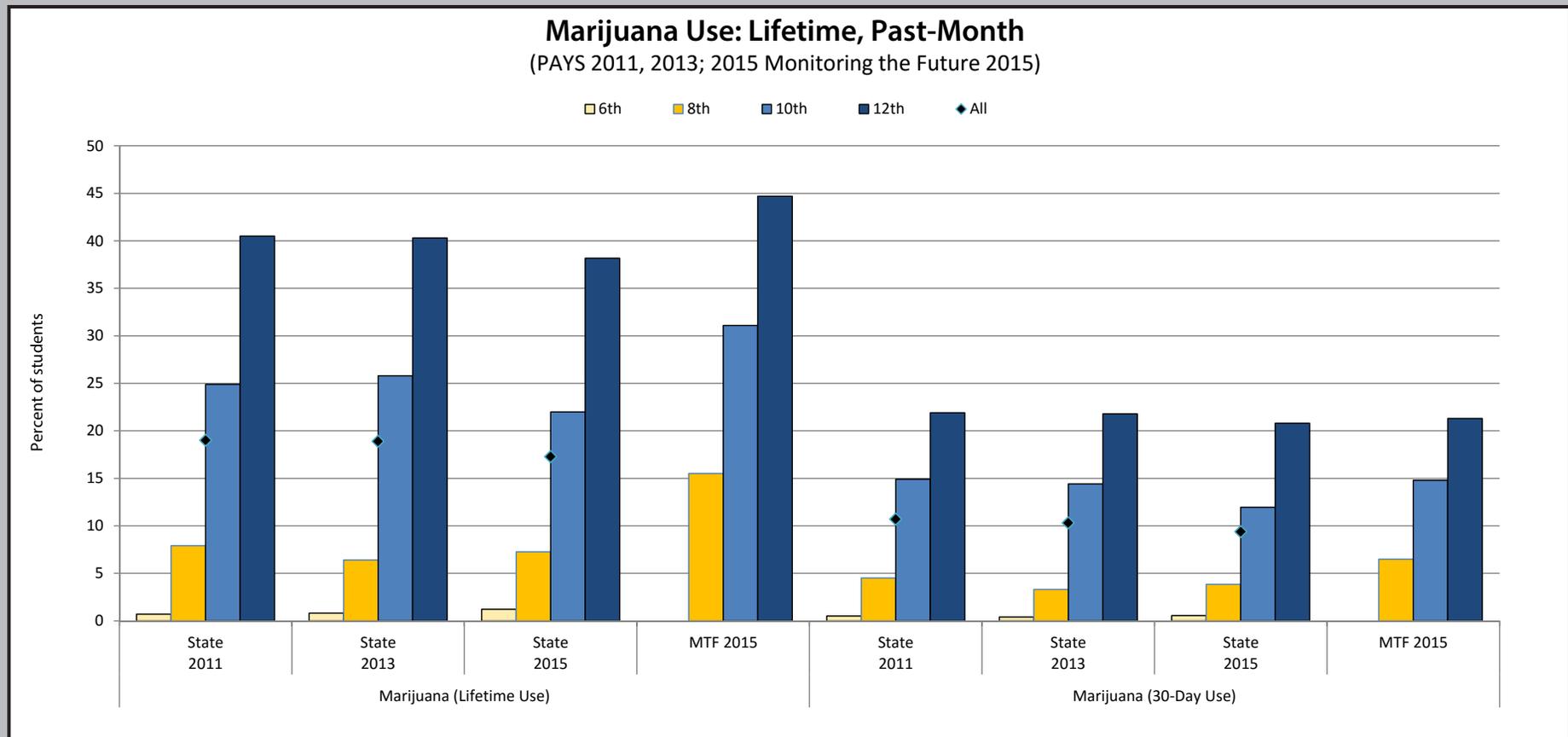
As with lifetime marijuana use, in comparison to data gathered through the national MTF Survey (see Figure 3.3-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower past month marijuana use rates than youth in same grades in the national sample. Pennsylvania rates were 2.7% lower than national rates in the 8th grade (3.8% in Pennsylvania, compared to 6.5% in the national sample), 2.8% lower than national rates in the 10th grade (12.0% in Pennsylvania, compared to 14.8% in the national sample), and 0.5% lower than national rates in the 12th grade (20.8% in Pennsylvania compared to 21.3% in the national sample).

For data regarding lifetime and 30-day marijuana use by county and grade, please refer to the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.3-1  
**Marijuana Use: Lifetime and Past-Month**

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.7	0.8	1.2	n/a	0.5	0.4	0.6	n/a
8th	7.9	6.4	7.3	15.5	4.5	3.3	3.8	6.5
10th	24.9	25.8	22.0	31.1	14.9	14.4	12.0	14.8
12th	40.5	40.3	38.2	44.7	21.9	21.8	20.8	21.3
All	19.0	18.9	17.3	n/a	10.7	10.3	9.4	n/a

Figure 3.3-1



## 3.4 Lifetime and 30-Day High Incidence/Early Initiation Drug Use: Inhalants

In the 2015 PAYS, Pennsylvania youth were asked to report if they had used inhalants in their lifetime or in the past 30-days. Results of students reporting that they used inhalants at least once in their lifetime or in the past month are reported in this section.

### Lifetime Inhalant Use

The 2015 PAYS results presented in Table 3.4-1 show that 4.5% of students in grades 6, 8, 10, and 12 have used inhalants at least once in their lifetime. By grade, 3.3% of 6th graders, 4.8% of 8th graders, 4.7% of 10th graders, and 5.2% of 12th graders indicated lifetime inhalant use.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.4-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated significantly lower lifetime inhalant use rates than youth in same grades in the national sample. Pennsylvania rates were 4.6% lower than national rates in the 8th grade (4.8% in Pennsylvania, compared to 9.4% in the national sample), 2.5% lower than national rates in the 10th grade (4.7% in Pennsylvania, compared to 7.2% in the national sample), and 0.5% lower than national rates in the 12th grade (5.2% in Pennsylvania compared to 5.7% in the national sample).

Since the 2013 survey, lifetime inhalant use in all grades decreased significantly (0.7% to 2.1% decreases in each grade).

### Past Month Inhalant Use

The 2015 PAYS results presented in Table 3.4-1 and Figure 3.4-1 show that 1.3% of students in grades 6, 8, 10, and 12 have used inhalants at least once in the past 30 days. In looking at past month use rates by grade level, we see that, unlike most substances, inhalant use in the past month peaks in the 6th grade, rather than in the 12th grade, with 1.7% of 6th graders, 1.5% of 8th graders, 1.1% of 10th graders, and 0.7% of 12th graders in Pennsylvania have used inhalants in the past 30 days.

While lifetime inhalant use in Pennsylvania was significantly less than lifetime inhalant use in the national MTF sample, 30-day inhalant use rates are nearly identical for Pennsylvania and national youth with little to no significant differences in use to report for any grade.

Since the 2013 survey, past month inhalant use significantly decreased 1.0% in the 8th grade, but changed insignificantly in other grades.

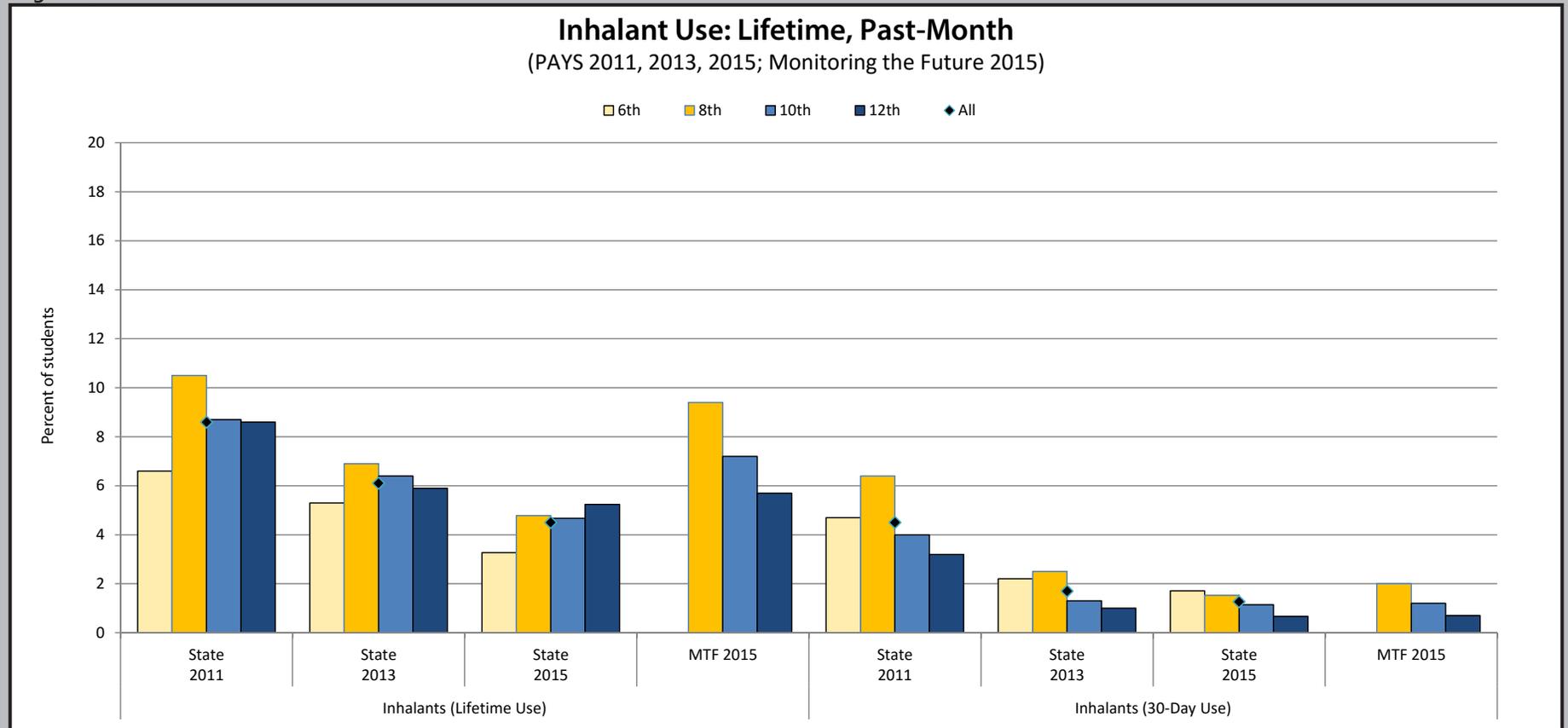
For data regarding lifetime and 30-day inhalant use by county and grade, please refer to the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.4-1

**Inhalant Use: Lifetime and Past-Month**

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	6.6	5.3	3.3	n/a	4.7	2.2	1.7	n/a
8th	10.5	6.9	4.8	9.4	6.4	2.5	1.5	2
10th	8.7	6.4	4.7	7.2	4	1.3	1.1	1.2
12th	8.6	5.9	5.2	5.7	3.2	1	0.7	0.7
All	8.6	6.1	4.5	n/a	4.5	1.7	1.3	n/a

Figure 3.4-1



## 3.5 Lifetime and 30-Day Prescription Drug Use

In the 2015 PAYS, Pennsylvania youth were asked to report if they had used prescription drugs such as Performance Enhancing Drugs (PEDs)/Steroids, narcotic prescription drugs, prescription tranquilizers, prescription stimulants, or over-the-counter drugs without a doctor's orders in their lifetime or in the past 30-days. Results of students reporting that they used any of these prescription drugs at least once in their lifetime or in the past month (without a doctor's orders) are reported in this section.

### Lifetime (non-prescribed) Prescription and Over-the-Counter Drug Use

The 2015 PAYS results presented in Table 3.5-1 show that 1.0% of students in grades 6, 8, 10, and 12 have used PEDs or Steroids at least once in their lifetime, 6.3% have used prescription narcotics in their lifetime, 2.3% have used prescription tranquilizers in their lifetime, 3.7% have used prescription stimulants, and 4.0% used over-the-counter drugs (for the purpose of getting high) in their lifetime (all use is without a doctor's orders).

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.5-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime Prescription stimulant and Prescription tranquilizer use rates than youth in same grades in the national sample; and Pennsylvania youth in grades 8 and 12 indicated higher lifetime use of prescription narcotics (2.0% higher for the 8th grade, 3.7% higher for the 12th grade). (Note: Comparable MTF data are not available for over-the-counter drugs.)

Since the 2013 survey, lifetime prescription drug use rates were relatively unchanged, though prescription narcotics use among 10th graders decreased 1.6% (from 8.3% in 2013 to 6.7% in 2015). Other lifetime use increases or decreases since 2013 were small — a 0.6% increase or decrease or less.

### Past Month (non-prescribed) Prescription Drug Use

The 2015 PAYS results presented in Table 3.5-2 and Figure 3.5-2 show that 0.3% of students in grades 6, 8, 10, and 12 have illegally (i.e., without a doctor's permission) used PEDs/Steroids at least once in the past 30 days, 1.9% have used prescription narcotics, 0.7% used prescription tranquilizers, 1.3% used prescription stimulants, and 1.4% have used over-the-counter drugs for non-medical purposes. For all of these substances, use increases with increased grade level. For example, for past-month prescription narcotics use, 1.0% of 6th graders indicated use, 1.6% of 8th graders indicated use, 2.0% of 10th graders indicated use, and 3.0% of 12th graders indicated use.

Pennsylvania and MTF rates for PED, prescription narcotics, and prescription tranquilizer 30-day use were either identical or very similar, differing only by 0.1% to 0.9% in each grade. However, prescription stimulant use was significantly lower in grades 8 (1.5% lower in PA) and 10 (1.7% lower in PA).

For data regarding lifetime and 30-day prescription drug use by county and grade, please refer to the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.5-1

**Prescription Drugs: Lifetime Use**

Grade	PEDs & Steroids				Narcotic prescription drugs				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.4	0.4	0.7	n/a	1.1	2.1	1.9	n/a	0.1	0.2	0.3	n/a	0.2	0.2	0.6	n/a	n/a	n/a	2.6	n/a
8th	0.6	0.7	0.6	1.0	3.7	4.1	4.3	2.3	1.1	0.8	0.8	3.0	1.2	1.1	1.0	6.8	n/a	n/a	2.5	n/a
10th	0.8	1.2	1.2	1.2	8.1	8.3	6.7	6.8	3.1	2.7	2.6	5.8	4.4	3.9	3.3	9.7	n/a	n/a	4.2	n/a
12th	1.4	2.0	1.6	2.3	13.1	12.1	12.1	8.4	6.1	5.9	5.3	6.9	8.2	9.1	9.7	10.8	n/a	n/a	6.5	n/a
All	0.8	1.1	1.0	n/a	6.7	6.8	6.3	n/a	2.7	2.5	2.3	n/a	3.6	3.7	3.7	n/a	n/a	n/a	4.0	n/a

Figure 3.5-1

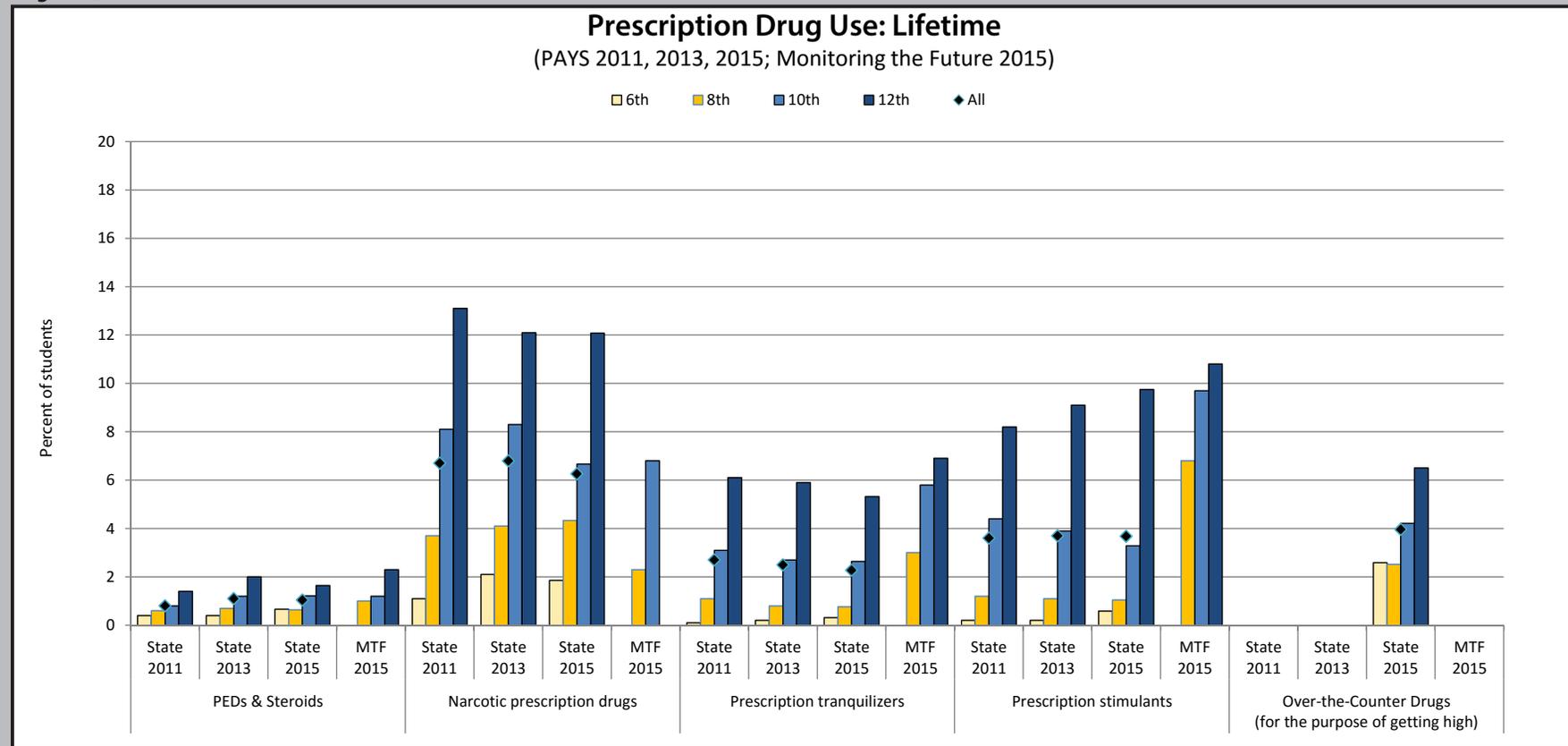
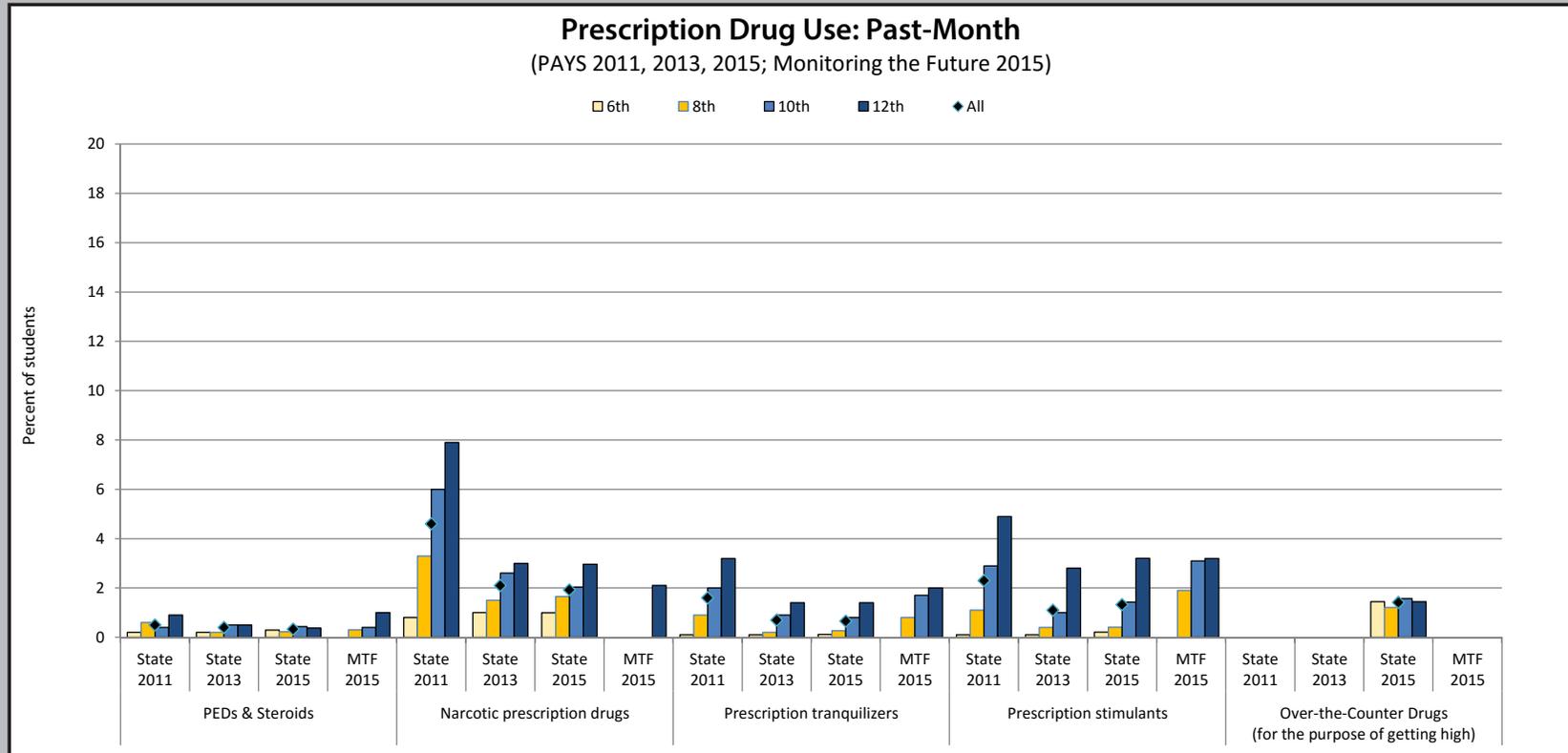


Table 3.5-2

**Prescription Drugs: Past-Month Use**

Grade	PEDs & Steroids				Narcotic prescription drugs				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.2	0.2	0.3	n/a	0.8	1.0	1.0	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.2	n/a	n/a	n/a	1.4	n/a
8th	0.6	0.2	0.2	0.3	3.3	1.5	1.6	0.7	0.9	0.2	0.3	0.8	1.1	0.4	0.4	1.9	n/a	n/a	1.2	n/a
10th	0.4	0.5	0.4	0.4	6.0	2.6	2.0	1.7	2.0	0.9	0.8	1.7	2.9	1.0	1.4	3.1	n/a	n/a	1.6	n/a
12th	0.9	0.5	0.4	1.0	7.9	3.0	3.0	2.1	3.2	1.4	1.4	2.0	4.9	2.8	3.2	3.2	n/a	n/a	1.4	n/a
All	0.5	0.4	0.3	n/a	4.6	2.1	1.9	n/a	1.6	0.7	0.7	n/a	2.3	1.1	1.3	n/a	n/a	n/a	1.4	n/a

Figure 3.5-2



## 3.6 Lifetime and 30-Day Other Illicit Drug Use

In the 2015 PAYS, Pennsylvania youth were asked to report if they had used other illicit drugs such as heroin, hallucinogens, ecstasy, synthetic drugs, cocaine, crack, or methamphetamines in their lifetime or in the past 30-days. Results of students reporting that they used any of these illicit drugs at least once in their lifetime or in the past month are reported in this section.

### Lifetime Other Illicit Drug Use

The 2015 PAYS results presented in Table 3.6-1 show that 0.6% of students in grades 6, 8, 10, and 12 have used heroin at least once in their lifetime, 2.8% have used hallucinogens in their lifetime, 2.7% have used synthetic drugs, 2.1% have used ecstasy in their lifetime, 1.5% have used cocaine in their lifetime, 0.5% have used crack, and 0.5% have used other methamphetamines in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.6-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime use rates in comparison to youth represented by the MTF Survey. In comparison to MTF use rates for grades 8, 10, and 12, Pennsylvania lifetime hallucinogen use rates were 1.2% to 1.3% lower for the 8th and 10th grades, lifetime cocaine use rates were 1.1% to 1.4% lower for the 8th and 10th grades; lifetime crack use rates were 0.5% to 0.8% lower for all comparable grades; and lifetime methamphetamine use rates were 0.4% to 0.7% lower for the 8th and 10th grades.

Since the 2013 survey, lifetime illicit drug use rates were relatively unchanged, though lifetime synthetic drug use decreased 1.4% for 10th graders (from 4.0%

in 2013 to 2.6% in 2015), and 2.1% for 12th graders (from 6.9% in 2013 to 4.8% in 2015). Other changes across other grades and drug categories were 0.7% or less.

### Past Month Other Illicit Drug Use

The 2015 PAYS results presented in Table 3.6-2 and Figure 3.6-2 show that 0.2% of students in grades 6, 8, 10, and 12 have used heroin at least once in the past 30 days. Past month use rates for the other illicit drug substances were as follows: hallucinogens - 0.6%, ecstasy - 0.6%, synthetic drugs, 0.6%, cocaine - 0.3%, crack - 0.1%, and methamphetamines - 0.1%.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.6-2), Pennsylvania youth in the 8th, 10th, and 12th grades indicated similar use rates (0.5% or less difference) in comparison to youth represented by the MTF Survey.

Since the 2013 survey, past-month illicit drug use rates were largely unchanged.

For data regarding lifetime and 30-day other illicit drug use by county and grade, please refer to the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov) or the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool).

Table 3.6-1

**Other Illegal Drugs: Lifetime Use**

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0.0	0.1	0.2	n/a	0.1	0.2	0.3	n/a	0.1	0.1	0.2	n/a	n/a	1.1	1.5	n/a	0.1	0.2	0.3	n/a	0.1	0.2	0.2	n/a	0.1	0.1	0.3	n/a
8th	0.2	0.3	0.3	0.5	0.9	0.9	0.7	2.0	0.7	0.6	0.7	2.3	n/a	1.5	1.8	n/a	0.5	0.6	0.5	1.6	0.5	0.4	0.4	1.0	0.3	0.4	0.4	0.8
10th	0.3	0.9	0.6	0.7	3.2	3.8	3.4	4.6	2.0	2.6	2.0	3.8	n/a	4.0	2.6	n/a	1.5	1.5	1.3	2.7	0.5	0.9	0.6	1.1	0.4	0.8	0.6	1.3
12th	1.0	1.4	1.4	0.8	6.1	7.6	6.9	6.4	5.5	5.7	5.4	5.9	n/a	6.9	4.8	n/a	4.0	3.1	3.8	4.0	1.2	1.3	0.9	1.7	1.1	1.2	1.0	1.0
All	0.4	0.7	0.6	n/a	2.5	3.2	2.8	n/a	2.1	2.3	2.1	n/a	n/a	3.4	2.7	n/a	1.6	1.4	1.5	n/a	0.6	0.7	0.5	n/a	0.5	0.7	0.5	n/a

Figure 3.6-1

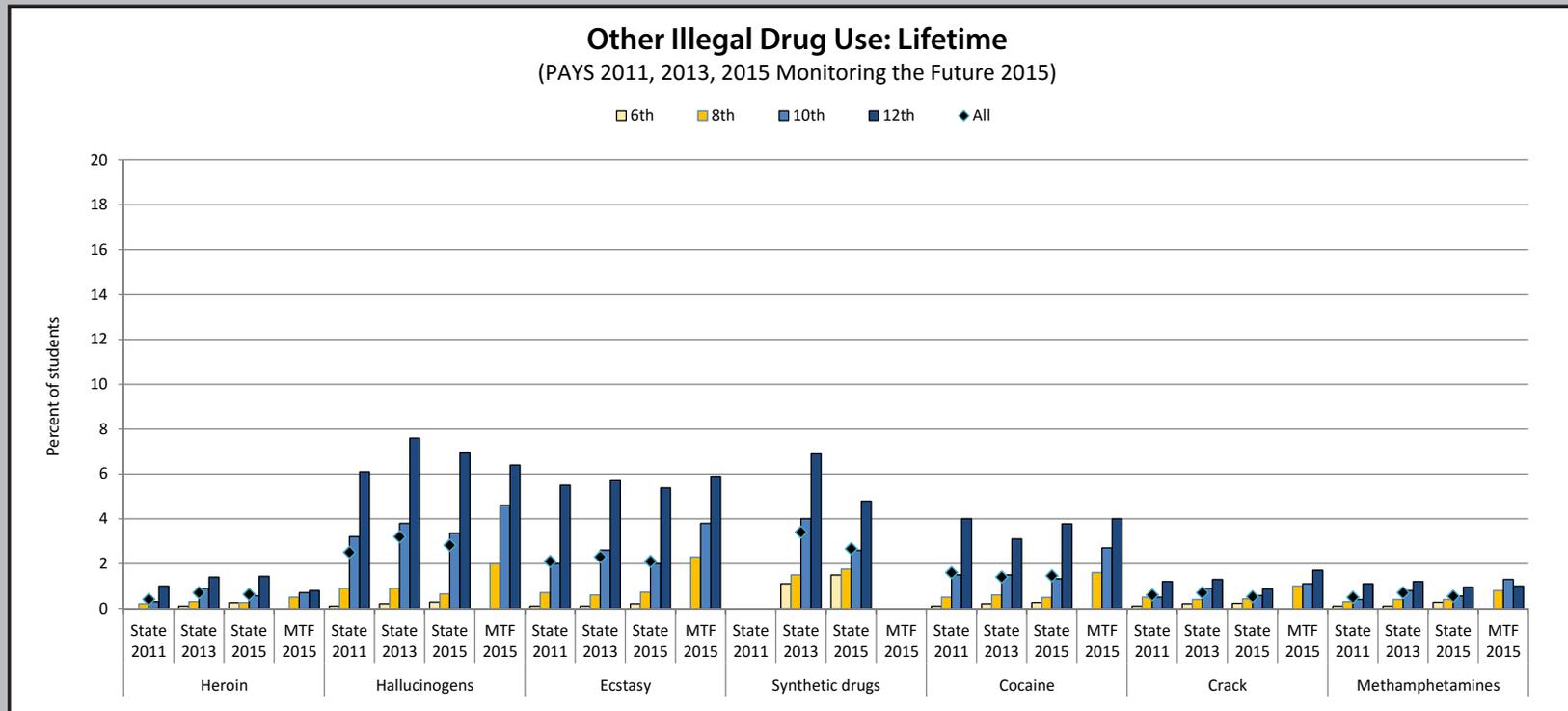
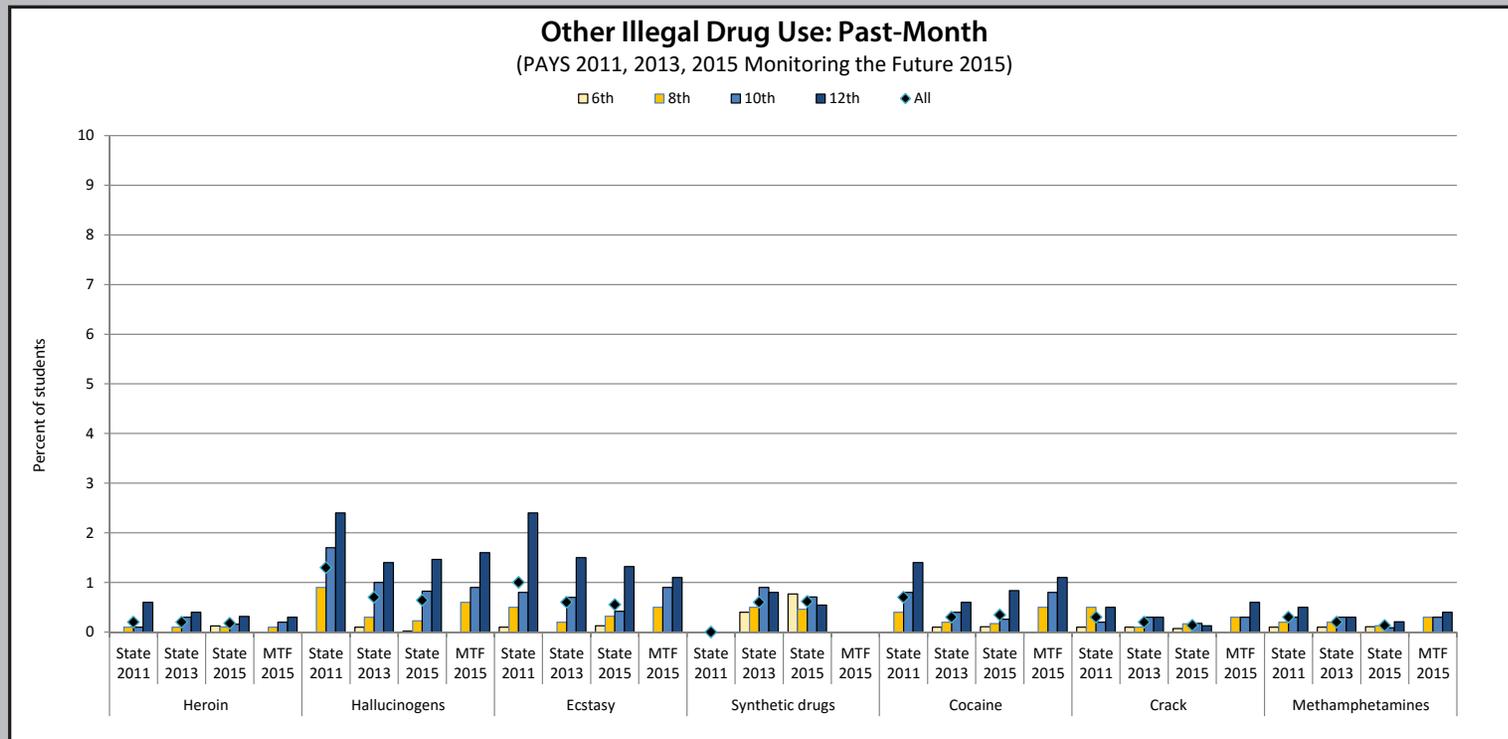


Table 3.6-2

**Other Illegal Drugs: Past-Month Use**

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015	State 2011	State 2013	State 2015	MTF 2015
6th	0	0	0.1	n/a	0	0.1	0.0	n/a	0.1	0	0.1	n/a	n/a	0.4	0.8	n/a	0	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a
8th	0.1	0.1	0.1	0.1	0.9	0.3	0.2	0.6	0.5	0.2	0.3	0.5	n/a	0.5	0.5	n/a	0.4	0.2	0.2	0.5	0.5	0.1	0.2	0.3	0.2	0.2	0.1	0.3
10th	0.1	0.3	0.2	0.2	1.7	1	0.8	0.9	0.8	0.7	0.4	0.9	n/a	0.9	0.7	n/a	0.8	0.4	0.3	0.8	0.2	0.3	0.2	0.3	0.3	0.3	0.1	0.3
12th	0.6	0.4	0.3	0.3	2.4	1.4	1.5	1.6	2.4	1.5	1.3	1.1	n/a	0.8	0.5	n/a	1.4	0.6	0.8	1.1	0.5	0.3	0.1	0.6	0.5	0.3	0.2	0.4
All	0.2	0.2	0.2	n/a	1.3	0.7	0.6	n/a	1	0.6	0.6	n/a	n/a	0.6	0.6	n/a	0.7	0.3	0.3	n/a	0.3	0.2	0.1	n/a	0.3	0.2	0.1	n/a

Figure 3.6-2



## 3.7 Lifetime ATOD Use by Gender

Tables 3.7-1 and 3.7-2 below show the percentage of lifetime ATOD use for males and for females. Lifetime use is a measure of the experience that young people have had with the various substances. Although being female is generally considered a protective factor for most problem behaviors, it can be seen that males and females are very similar in their use of most substances and generally have substance use rates that are less than three percent of each other. One area

in which males are significantly higher users is with smokeless tobacco use, in which males in all grades use much more smokeless tobacco — three times higher for all grades combined (13.2% lifetime use by males, 3.6% lifetime use by females). Please see Appendix C for additional data comparing male and female rates in chart format, and please visit the PAYS Web Tool to run data for any PAYS item by gender.

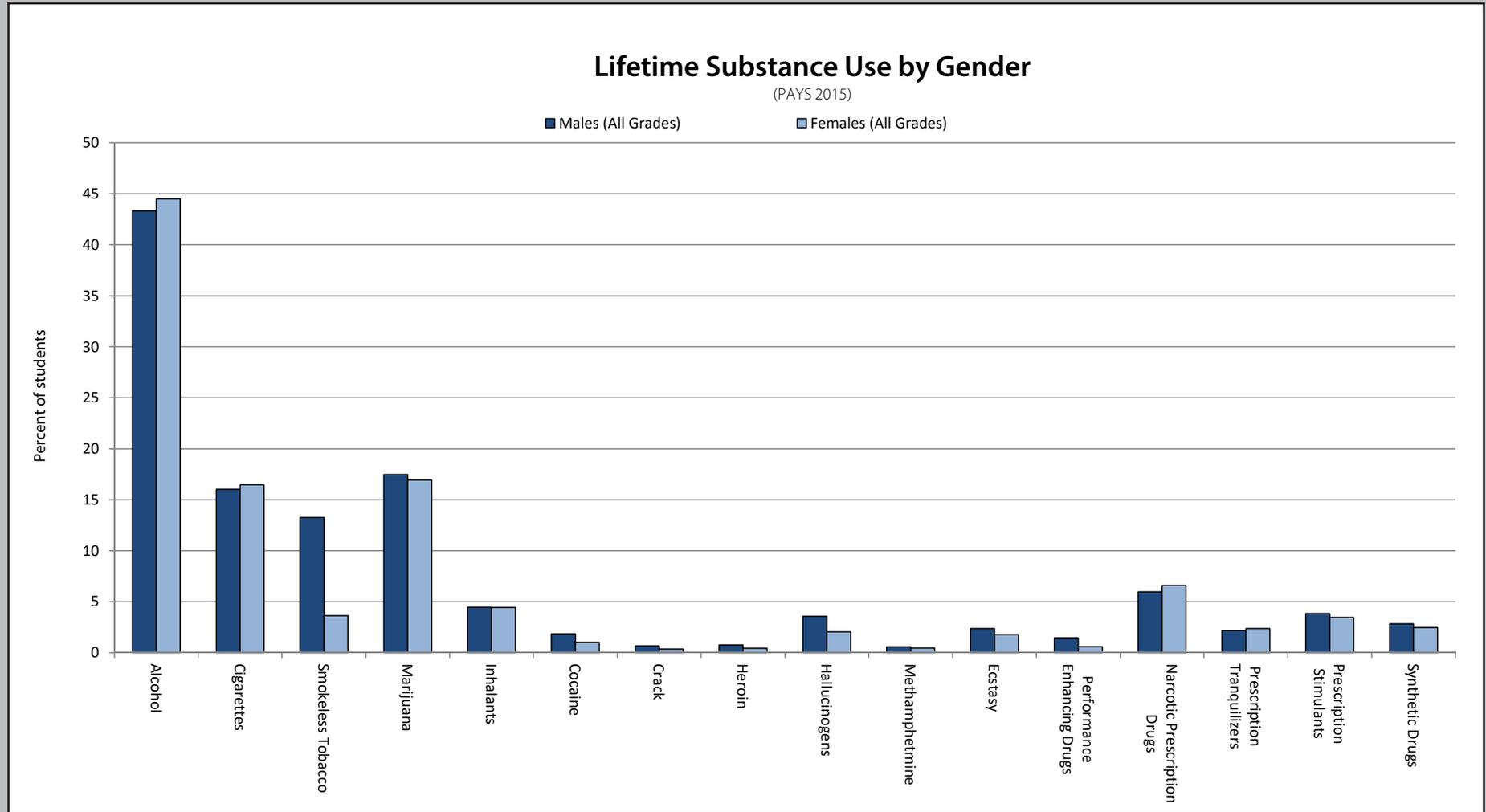
Table 3.7-1 **Lifetime Substance Use by Gender: Males**

	Alcohol		Cigarettes		Smokeless Tobacco		Marijuana		Inhalants		Cocaine		Crack		Heroin		Hallucinogens		Meth-amphetamine		Ecstasy		Performance Enhancing Drugs		Narcotic Prescription Drugs		Prescription Tranquilizers		Prescription Stimulants		Synthetic Drugs		Over-the-Counter Drugs to Get High	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	15.3	19.0	2.5	3.5	1.8	1.9	1.0	1.7	6.0	3.6	0.2	0.4	0.4	0.4	0.2	0.4	0.2	0.3	0.3	0.3	0.1	0.2	0.4	0.9	2.0	1.9	0.2	0.3	0.3	0.8	0.8	1.3	2.9	
8th	34.7	33.7	10.2	9.7	7.1	6.1	7.2	7.0	5.7	3.9	0.6	0.5	0.4	0.5	0.3	0.2	1.1	0.7	0.5	0.3	0.7	0.7	0.8	0.6	3.1	3.4	0.6	0.6	1.0	0.9	1.4	1.6	2.2	
10th	60.8	52.2	21.6	17.9	18.3	15.6	28.1	23.4	5.9	4.9	2.5	1.6	1.3	0.7	1.3	0.6	4.9	4.5	1.4	0.6	3.2	2.1	2.1	1.8	7.6	5.9	2.3	2.1	3.9	3.4	4.7	2.6	4.4	
12th	74.8	68.6	36.9	33.2	30.3	29.8	43.1	37.8	6.4	5.5	4.2	4.9	1.8	1.0	1.6	1.9	10.3	8.9	1.5	1.2	6.3	6.5	3.5	2.6	12.8	12.7	5.9	5.8	9.9	10.3	8.2	5.8	7.1	
All Grades	47.1	43.3	18.1	16.0	14.6	13.2	20.3	17.5	6.0	4.5	1.9	1.8	1.0	0.7	0.9	0.8	4.2	3.6	0.9	0.6	2.6	2.4	1.7	1.5	6.5	6.0	2.3	2.2	3.8	3.8	3.8	2.8	4.2	

Table 3.7-2 **Lifetime Substance Use by Gender: Females**

	Alcohol		Cigarettes		Smokeless Tobacco		Marijuana		Inhalants		Cocaine		Crack		Heroin		Hallucinogens		Meth-amphetamine		Ecstasy		Performance Enhancing Drugs		Narcotic Prescription Drugs		Prescription Tranquilizers		Prescription Stimulants		Synthetic Drugs		Over-the-Counter Drugs to Get High	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015		
6th	11.1	12.7	2.3	2.3	0.2	0.6	0.6	0.7	4.7	2.9	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.0	0.3	0.0	0.2	0.3	0.3	2.3	1.8	0.2	0.3	0.2	0.3	1.5	1.7	2.3	
8th	35.5	34.2	10.0	12.3	2.0	2.9	5.5	7.5	8.0	5.5	0.5	0.4	0.5	0.3	0.3	0.3	0.6	0.6	0.3	0.4	0.5	0.8	0.5	0.7	5.1	5.3	1.0	1.0	1.2	1.2	1.5	1.8	2.7	
10th	62.3	56.2	20.8	18.5	3.6	4.2	23.6	20.3	7.0	4.4	0.6	1.0	0.5	0.4	0.5	0.5	2.7	2.3	0.3	0.5	1.9	1.8	0.4	0.6	8.9	7.3	3.2	3.2	4.0	3.1	3.3	2.5	3.9	
12th	73.7	73.1	33.4	32.3	7.3	6.6	37.5	38.2	5.3	4.9	1.9	2.6	0.9	0.7	1.1	0.9	4.8	4.9	0.9	0.7	4.9	4.2	0.6	0.7	11.2	11.7	5.9	4.9	8.2	9.1	5.6	3.8	5.9	
All Grades	46.9	44.5	17.1	16.5	3.3	3.6	17.4	16.9	6.3	4.5	0.8	1.0	0.5	0.4	0.5	0.4	2.1	2.0	0.4	0.5	1.9	1.8	0.4	0.6	7.1	6.6	2.6	2.4	3.5	3.5	3.0	2.5	3.7	

Figure 3.7-1



## 3.8 30-Day ATOD Use by Gender

Tables 3.8-1 and 3.8-2 below show the percentage of 30-day ATOD use for males and for females. Again, although being female is generally considered a protective factor for most problem behaviors, it can be seen that males and females are very similar in their use of most substances and generally have substance use rates that are less than two percent different from each other. The only substance that is consistently higher in all grades for males compared to females is smokeless tobacco (0.2% to 14.1% higher for males in each grade). When it comes to past-month substance use, it is interesting to note differences in male/female use across the grades. In the 6th grade, substance use is quite similar across all substances for males and females, with males having equal or slightly higher use rates for 13 of the 18 substances. In the 8th, however,

females become more dominant users; 8th grade females indicate slightly higher use over males in 14 of the 18 substance categories. While use rates in these categories are still very similar for both genders, a higher percentage of females are using. When students enter high school, males reclaim status as higher users, and in the 10th grade, females indicate slightly higher use for only 4 categories; and in the 12th grade, only one category.

Such findings indicate that prevention planning focused on the demographic of gender should not automatically assume higher use by males. The PAYS Web Tool ([www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool)) will allow individuals to search State and county-level data by grade and gender. We would encourage all to keep this in mind while diving into the data at that level. Please see Appendix C for more gender-related data.

**Table 3.8-1  
Past Month Substance Use by Gender: Males**

	Alcohol		Cigarettes		Smokeless Tobacco		E-Cigarettes/ Vaping Devices	Marijuana		Inhalants		Cocaine		Crack		Heroin		Hallucinogens		Meth-amphetamine		Ecstasy		Performance Enhancing Drugs		Narcotic Prescription Drugs		Prescription Tranquilizers		Prescription Stimulants		Synthetic Drugs		Over-the-Counter Drugs to Get High
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015		State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015									
6th	3.7	3.8	0.5	0.9	0.5	0.5	3.2	0.5	0.8	2.4	2.2	0.2	0.2	0.3	0.1	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.1	0.3	0.4	1.0	1.0	0.0	0.2	0.1	0.3	0.2	0.8	1.7
8th	8.5	8.6	3.7	2.9	3.1	2.3	11.2	3.5	3.8	1.9	1.2	0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.3	0.3	0.3	0.1	1.0	1.3	0.0	0.2	0.3	0.4	0.4	0.3	1.1
10th	25.2	20.1	9.9	6.2	10.3	8.1	22.1	16.5	12.3	1.3	1.3	0.7	0.3	0.5	0.3	0.4	0.2	1.3	1.0	0.7	0.1	0.8	0.5	0.8	0.7	2.1	1.6	0.8	0.7	1.1	1.5	1.0	0.9	1.6
12th	40.5	37.7	18.9	15.8	17.8	16.9	29.0	24.3	21.5	1.2	0.7	0.8	1.1	0.5	0.2	0.4	0.5	2.3	2.1	0.2	0.3	1.6	1.5	1.1	0.6	3.2	2.8	1.4	1.6	3.4	3.5	1.0	0.6	1.4
All Grades	19.8	17.5	8.4	6.4	8.0	6.9	16.4	11.5	9.6	1.7	1.4	0.5	0.4	0.3	0.2	0.2	0.2	1.0	0.8	0.3	0.2	0.7	0.6	0.6	0.5	1.9	1.7	0.6	0.7	1.3	1.4	0.7	0.7	1.4

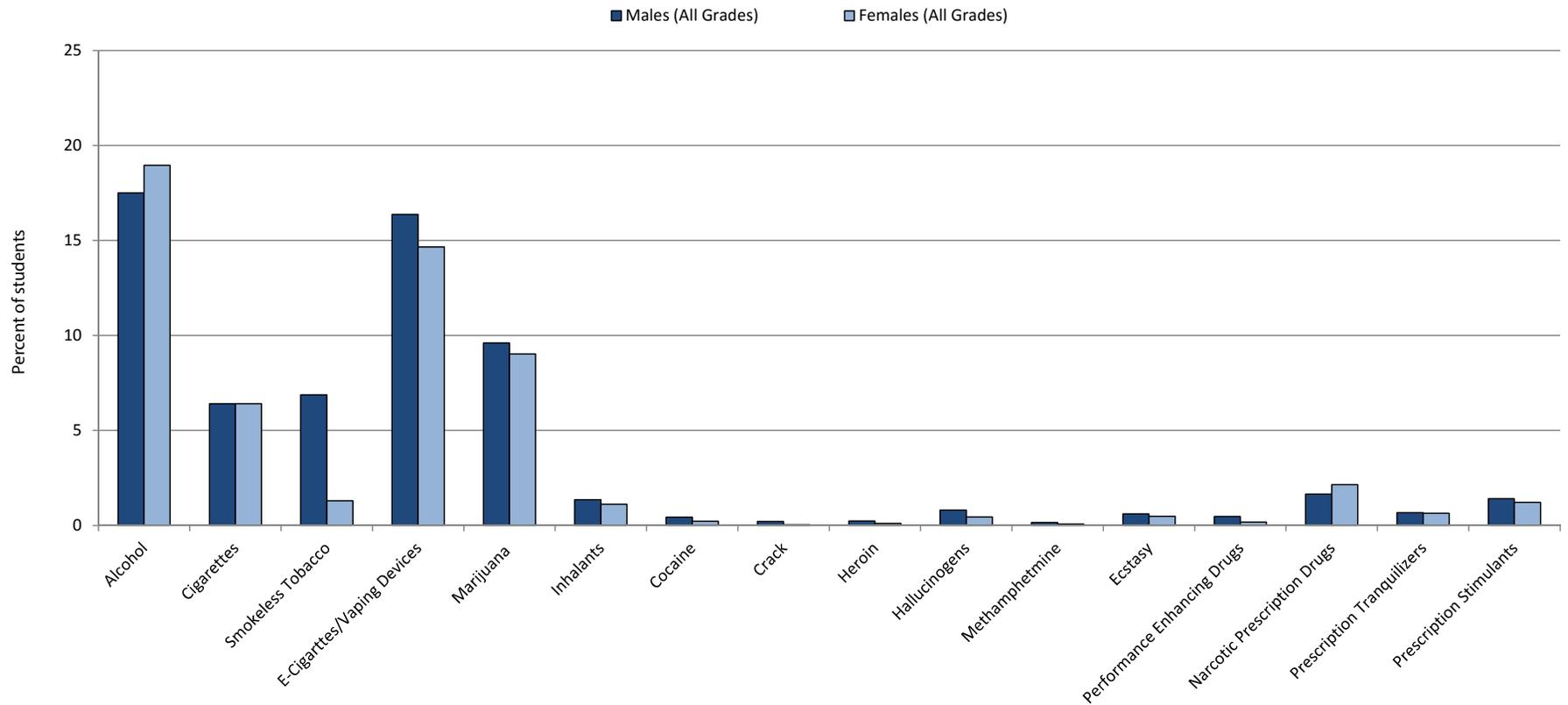
**Table 3.8-2  
Past Month Substance Use by Gender: Females**

	Alcohol		Cigarettes		Smokeless Tobacco		E-Cigarettes/ Vaping Devices	Marijuana		Inhalants		Cocaine		Crack		Heroin		Hallucinogens		Meth-amphetamine		Ecstasy		Performance Enhancing Drugs		Narcotic Prescription Drugs		Prescription Tranquilizers		Prescription Stimulants		Synthetic Drugs		Over-the-Counter Drugs to Get High
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015		State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015									
6th	2.4	2.7	0.4	0.6	0.0	0.3	2.0	0.3	0.3	2.0	1.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	1.0	0.9	0.1	0.1	0.1	0.0	0.5	0.8	1.2	
8th	10.6	10.5	4.0	4.1	0.7	1.3	12.3	3.1	3.9	3.1	1.8	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.4	0.1	0.3	1.9	2.0	0.4	0.3	0.4	0.5	0.6	0.5	1.3
10th	27.3	24.0	9.9	7.2	1.5	1.7	18.5	12.5	11.4	1.3	0.9	0.1	0.1	0.1	0.0	0.2	0.1	0.6	0.6	0.0	0.0	0.5	0.3	0.2	0.2	3.2	2.3	1.0	0.9	0.9	1.3	0.7	0.5	1.4
12th	40.7	37.6	15.0	13.5	2.8	1.8	25.1	19.2	19.9	0.8	0.6	0.4	0.6	0.1	0.0	0.4	0.2	0.5	0.8	0.3	0.1	1.4	1.1	0.0	0.1	2.8	3.2	1.5	1.2	2.2	3.0	0.6	0.5	1.4
All Grades	20.9	19.0	7.5	6.4	1.3	1.3	14.7	9.1	9.0	1.8	1.1	0.2	0.2	0.1	0.0	0.2	0.1	0.3	0.5	0.1	0.1	0.5	0.5	0.1	0.2	2.3	2.2	0.8	0.6	0.9	1.2	0.6	0.6	1.3

Figure 3.8-1

### Past-Month Substance Use by Gender

(PAYS 2015)



## 3.9 Perceived Harmfulness of ATODs

When youth perceive that a substance is harmful, they are less likely to use it. PAYS asked youth, “How much do you think people risk harming themselves (physically or in other ways) if they: smoked cigarettes heavily, binge drank regularly, used alcohol regularly, tried marijuana once or twice, smoked marijuana regularly, smoked marijuana once or twice a week, or used prescription drugs not prescribed to them.” Response categories were that the previously named substance categories placed them at “Moderate Risk” or “Great Risk.” Results are reported in Table 3.9-1 and Figure 3.9-1.

Of the seven substance use categories, students perceived the greatest risk in smoking one or more packs of cigarettes per day (81.1% perceived moderate or great risk overall) and using prescription drugs not prescribed to them (82.4% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (46.3% of students perceived moderate or great risk) and smoking marijuana once or twice a week (61.4% of students perceived great or moderate risk).

Perceptions of risk for most categories tended to peak in the 6th, 8th, or 10th grades. Sixth graders indicated the highest perceived risk of trying marijuana once or twice and smoking marijuana once or twice a week. Eighth graders indicated the highest perceived risk of regular alcohol use and regular marijuana use; while 10th graders indicated the highest perceived risk of regular/heavy tobacco use, binge drinking, and using prescription drugs. In general, all questions regarding perceived risks associated with marijuana use decreased as students increased in grade level. For example, 76.2% of 6th graders perceived moderate or great risk in smoking marijuana once or twice a week. By the 12th grade, only 43.4% of students perceived a risk in this regular weekly use.

In comparing the 2013 and 2015 survey data, perceived harmfulness of heavy cigarette use decreased 5.1% to 8.9% in each grade. Perceived harmfulness of drinking alcohol regularly decreased 1.8% to 8.3% in each grade. In contrast, the perceived risks associated with binge drinking increased 2.3% to 6.4% in each grade from 2013 to 2015.

Table 3.9-1

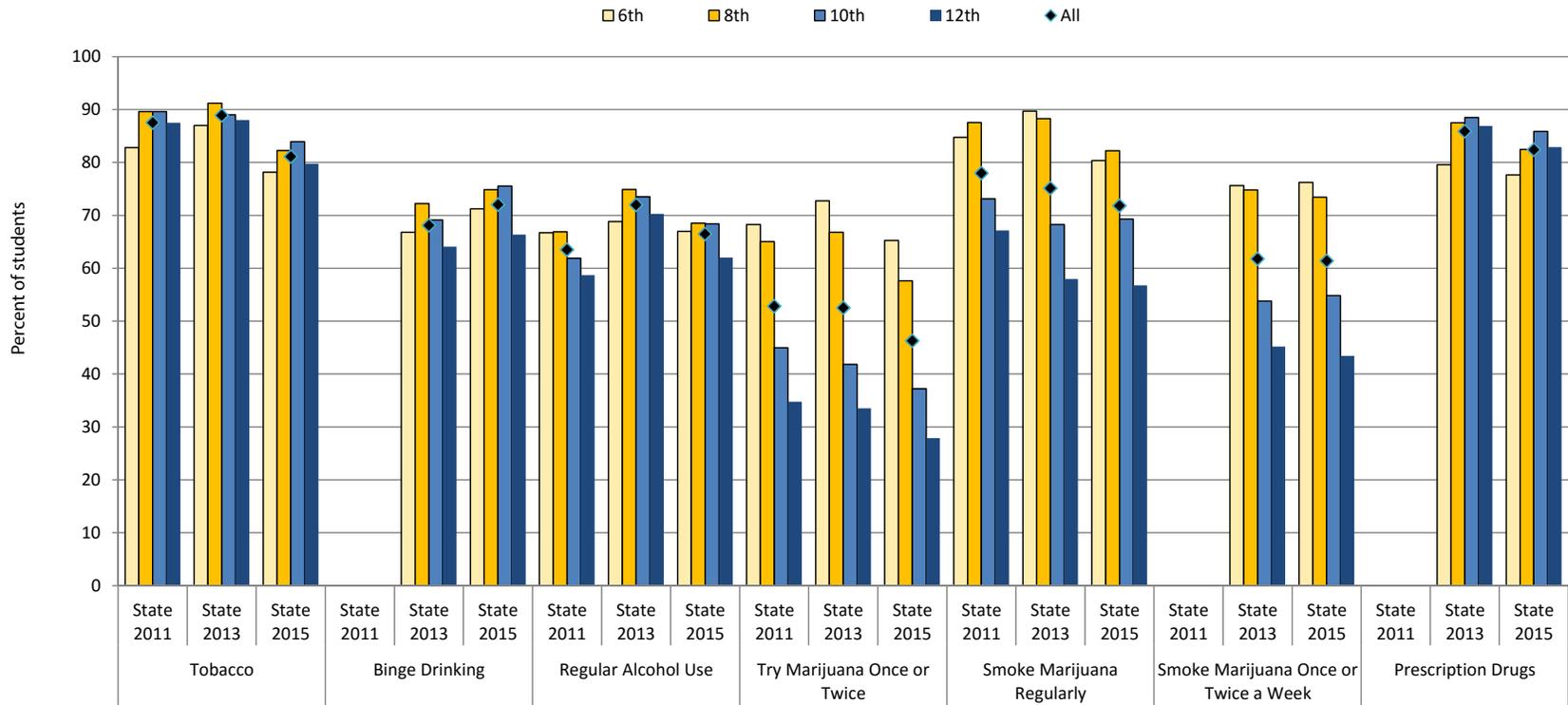
### Perception of Risk (% Marking "moderate risk" or "great risk")

Grade	Tobacco			Binge Drinking			Regular Alcohol Use			Try Marijuana Once or Twice			Smoke Marijuana Regularly			Smoke Marijuana Once or Twice a Week			Prescription Drugs		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	82.8	87.0	78.1	n/a	66.8	71.2	66.7	68.8	67.0	68.3	72.8	65.2	84.8	89.7	80.3	n/a	75.6	76.2	n/a	79.6	77.7
8th	89.6	91.2	82.3	n/a	72.2	74.9	66.9	74.9	68.5	65.0	66.8	57.6	87.5	88.3	82.2	n/a	74.8	73.4	n/a	87.5	82.5
10th	89.6	89.0	83.9	n/a	69.1	75.5	61.9	73.5	68.4	45.0	41.8	37.2	73.1	68.3	69.3	n/a	53.8	54.8	n/a	88.5	85.9
12th	87.5	88.0	79.8	n/a	64.1	66.4	58.7	70.3	62.0	34.7	33.5	27.9	67.1	58.0	56.8	n/a	45.2	43.4	n/a	86.9	82.9
All	87.5	88.9	81.1	n/a	68.1	72.0	63.5	72.0	66.5	52.8	52.5	46.3	77.9	75.1	71.8	n/a	61.8	61.4	n/a	85.9	82.4

Figure 3.9-1

### Perceived Risks of Using Substances:

% Marking "moderate risk" or "great risk" for perceived risk of using each substance category:  
(PAYS 2011, 2013, 2015)



## 3.10 Sources of Obtaining Alcohol

Table 3.10-1 and Figure 3.10-1 contain data on where students obtained alcohol in the past year. When examining sources of ATOD data, it is important to note that the percentages reported in Table 3.10-1 reflect the percent of alcohol-using students (i.e., those who used in the past year) who marked each option. Further, it must be noted that the categories are not mutually exclusive, and students were instructed to mark all of the sources from which they obtained substances. For example, students could mark that “Parents or friends’ parents provided it to me” and that they “Bought it at a store.” Accordingly, total percentages will not sum to 100% within grade, as selection of multiple options is evident.

While a large percentage of alcohol-using 6th graders (64.5%) and 8th graders (48.3%) indicated they used alcohol as “part of a family or religious celebration,”

10th and 12th graders most often indicated “friends, brothers, or sisters provided it to me” (36.3% of 10th graders and 44.0% of 12th graders).

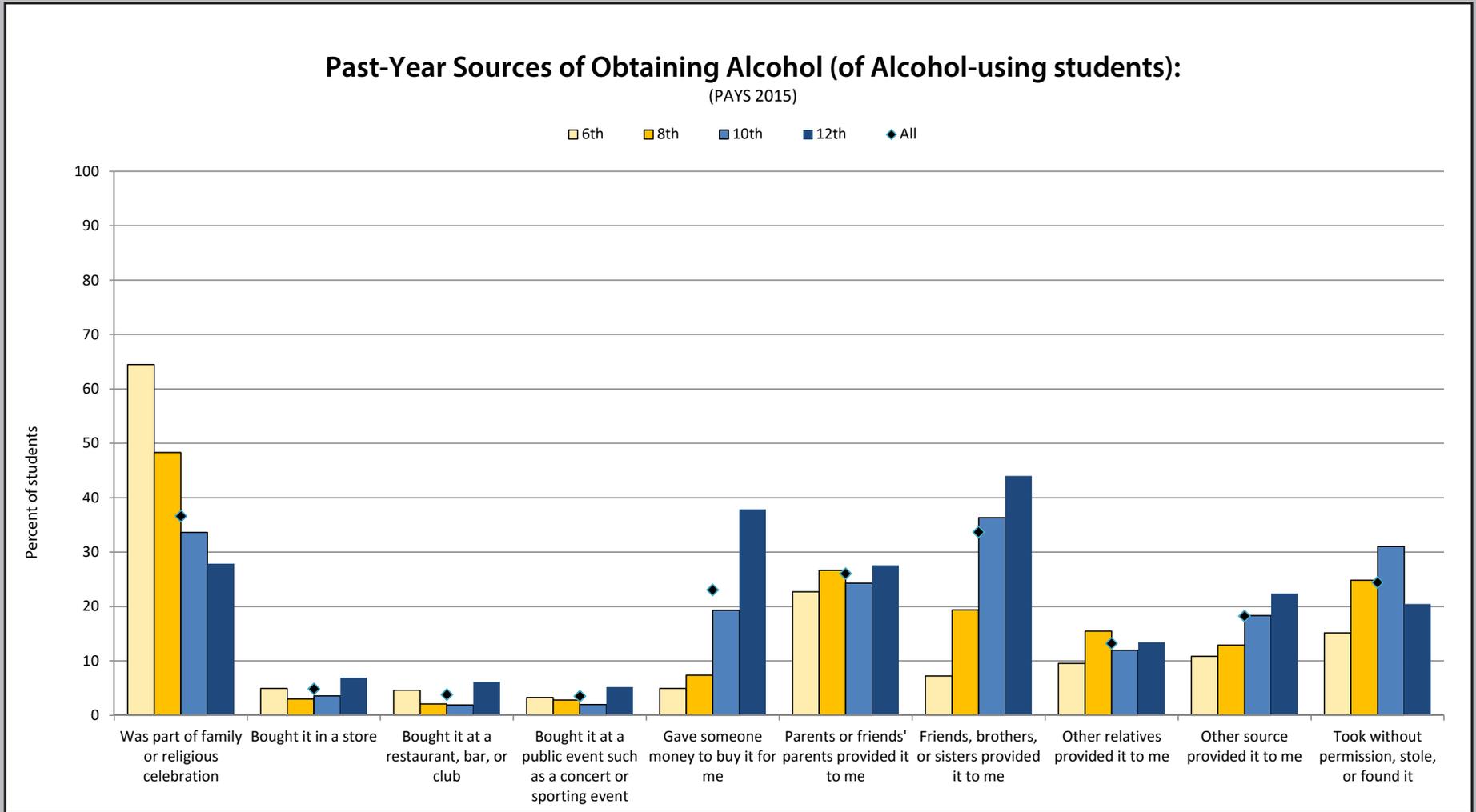
For all grades combined, 36.6% of alcohol-using youth indicated they had alcohol as part of a family/religious celebration; 4.9% had bought it at a store; 3.8% had bought it at a restaurant, bar, or club; 3.5% had bought it at a public event such as a concert or sporting event; 23.1% had given someone money to buy it for them; 26.0% had received it from parents or friends’ parents who provided it; 33.7% had received it from friends, brothers, or sisters; 13.2% had received it from other relatives; 18.2% had gotten it from another source; and 24.4% had taken it without permission, stole it, or found it.

Table 3.10-1

### Sources of Alcohol in the Past Year (2015): Percentage indicates the percent of past-year alcohol using students who marked each item

Grade	Was part of family or religious celebration	Bought it in a store	Bought it at a restaurant, bar, or club	Bought it at a public event such as a concert or sporting event	Gave someone money to buy it for me	Parents or friends' parents provided it to me	Friends, brothers, or sisters provided it to me	Other relatives provided it to me	Other source provided it to me	Took without permission, stole, or found it
6th	64.5	4.9	4.6	3.3	4.9	22.7	7.2	9.5	10.9	15.1
8th	48.3	3.0	2.1	2.8	7.4	26.7	19.4	15.5	12.9	24.8
10th	33.6	3.6	1.9	2.0	19.3	24.3	36.3	12.0	18.3	31.0
12th	27.9	6.9	6.1	5.2	37.9	27.6	44.0	13.4	22.4	20.5
All	36.6	4.9	3.8	3.5	23.1	26.0	33.7	13.2	18.2	24.4

Figure 3.10-1



## 3.11 Sources of Obtaining Prescription Drugs

Table 3.11-1 and Figure 3.11-1 contain data on where students obtained prescription drugs in the past year. When examining sources of ATOD data, it is important to note that the percentages reflect the percent of prescription-drug-using students (i.e., those that reported use in the past year) who marked each option. Further, it must be noted that the categories are not mutually exclusive, and students were instructed to mark all of the sources from which they obtained prescriptions. For example, students could mark that they both “took them from a family member living in my home,” and “bought them from someone.” Accordingly, total percentages will not sum to 100% within grade, as selection of multiple options is evident.

For all grades combined, 41.0% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 41.8% indicated that a friend or family member gave them to the student, 26.9% indicated that they bought them from someone, 14.1% indicated they took them from someone not related to them, 12.9% indicated they took them from relatives who were not living in their home, and 8.3% indicated they ordered them over the Internet.

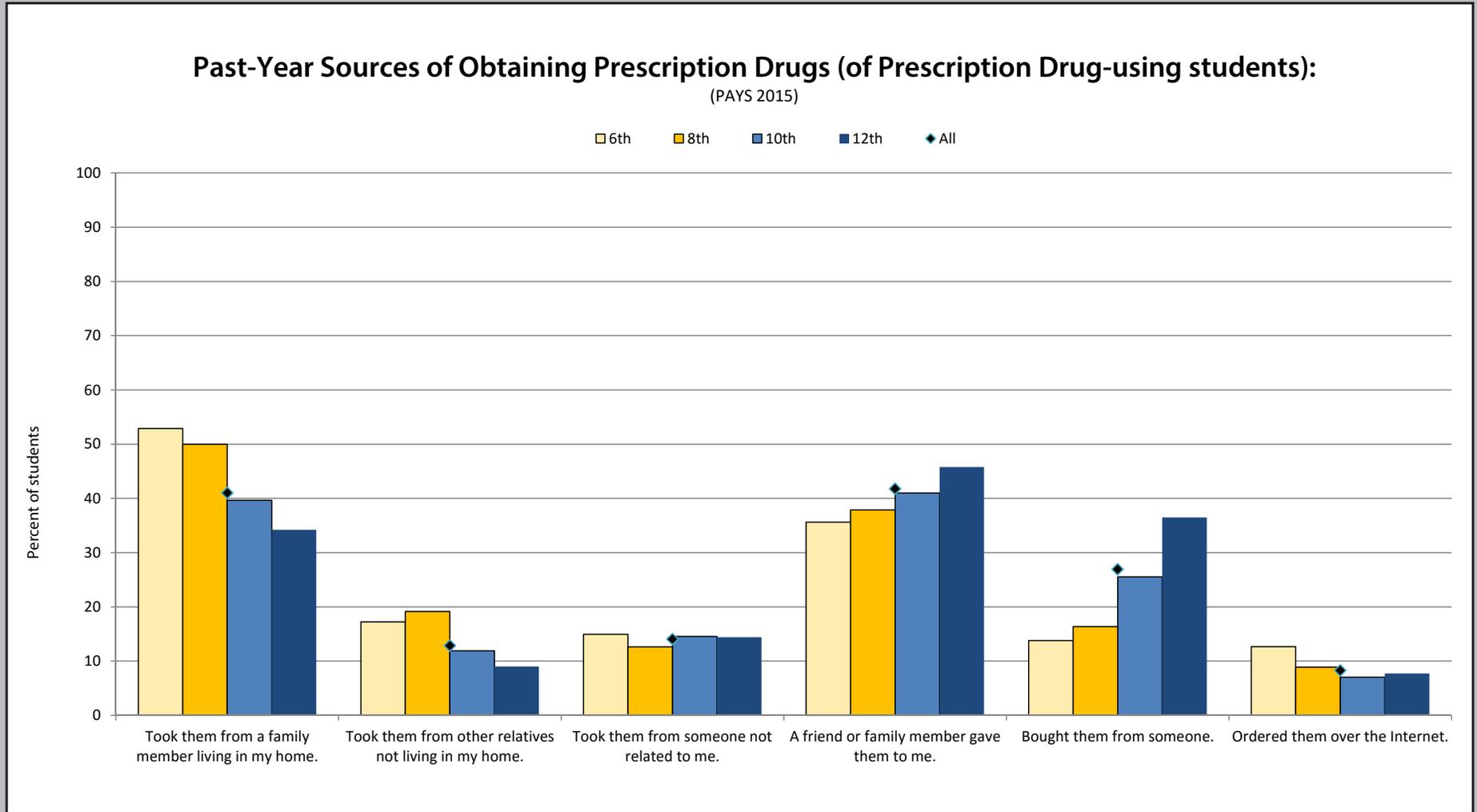
In general, as students got older, they were less likely to take prescriptions from a family member living in the home, but more likely to buy them from someone or have a friend or family member give the drugs to them.

Table 3.11-1

**Sources of Prescription Drugs in the past year (2015): Percentage indicates the percent of past-year prescription drug-using students who marked each item**

Grade	Took them from a family member living in my home.	Took them from other relatives not living in my home.	Took them from someone not related to me.	A friend or family member gave them to me.	Bought them from someone.	Ordered them over the Internet.
6th	52.9	17.2	14.9	35.6	13.8	12.6
8th	50.0	19.2	12.6	37.9	16.4	8.9
10th	39.6	11.9	14.5	41.0	25.6	7.0
12th	34.2	9.0	14.4	45.8	36.5	7.7
All	41.0	12.9	14.1	41.8	26.9	8.3

Figure 3.11-1



# Section 4: Antisocial Behavior and School Safety Measures

The charts and tables that follow present the rates of a variety of antisocial behaviors (ASB) and school safety measures.

Antisocial behavior may be outwardly directed, involving aggression against adults or peers, or might be behavior destructive to property, self, and others. Less overt antisocial behavior includes addictive behavior (such as gambling), and high-risk activities (such as drinking and driving).

Over the last 15 years, many youth surveys, including PAYS, have moved to incorporate risk and protective factor data alongside more traditional health behavior assessments. As this approach has evolved, school climate and safety have emerged as focal points for prevention programming and policy planning.

Creating safe supportive schools is essential to ensuring students' academic and social success. There are multiple elements to establishing environments

in which youth feel safe, connected, valued, and responsible for their behavior and learning. School climate and safety are measured in two ways: violence (actual and threatened) and bullying.

This section, **Antisocial Behaviors and School Safety Measures**, provides information on antisocial behaviors that have been traditionally observed by risk and protective factor survey instruments (such as school suspension, illegal drug sales, attacking someone with the intent of harming them, etc.), student/school-related antisocial behaviors, bullying and Internet safety, gambling, and dangerous driving behaviors. Data will be discussed by grade and (for some measures) by gender.

When accompanied by a copy of the State Report Executive Summary, each subsection found in Section 4 can be considered a self-standing piece that can be distributed to researchers, prevention specialists, and other interested parties.

## 4.1 Antisocial Behavior Outcomes by Grade

There are several antisocial behavior measures that have been long-standing components of risk and protective factor youth surveys such as PAYS. These past year antisocial behaviors include: student reports of attacking someone with the intent of seriously hurting them, selling illegal drugs, being drunk or high at school, being arrested, and being suspended from school. Table 4.1-1 and Figure 4.1-1 in this section display that information (along with a comparison to the BH Norm) by grade.

Table 4.1-1, which contains rates of several antisocial behavior outcomes, shows that unlike substance use, antisocial behavior doesn't always increase by increased grade level. The reported rate of youth being suspended from school was highest in the 8th grade at 9.1% and the reported rate of attacking someone with the intent of seriously harming them also was highest in the 8th grade at 6.9%. Reported rates of arrest, being drunk or high at school, and selling illegal drugs were highest in the 12th grade.

In comparison to the BH Norm (used to provide a comparison to a more national average), Pennsylvania youth indicate antisocial behavior rates that

are lower than the BH Norm for most items. Rates of attacking someone to seriously harm them are 3.3% to 6.0% lower in Pennsylvania vs. the BH Norm in each grade, and 5.1% lower for all grades combined (6.2% in Pennsylvania, 11.3% in the BH Norm). Illegal drug sale rates were 2.0% lower in PA than the BH Norm for all grades combined. As for reports of being drunk or high at school, rates in PA were 1.8% to 7.6% lower in each grade and 5.3% lower for all grades combined in comparison to the BH Norm rates. The all-grade PA rate for reported arrest (2.5%) was much lower than the BH rate (4.9%).

Since the 2013 survey, reported rates of attacking someone with the intent of harming them decreased 1.0% to 4.0% in each grade and 2.3% for all grades combined. For all other antisocial behavior rates, percentages were relatively stable.

For data regarding antisocial behaviors by county and grade, please refer to the reports provided on the PAYS Portal at [www.pays.pa.gov](http://www.pays.pa.gov).

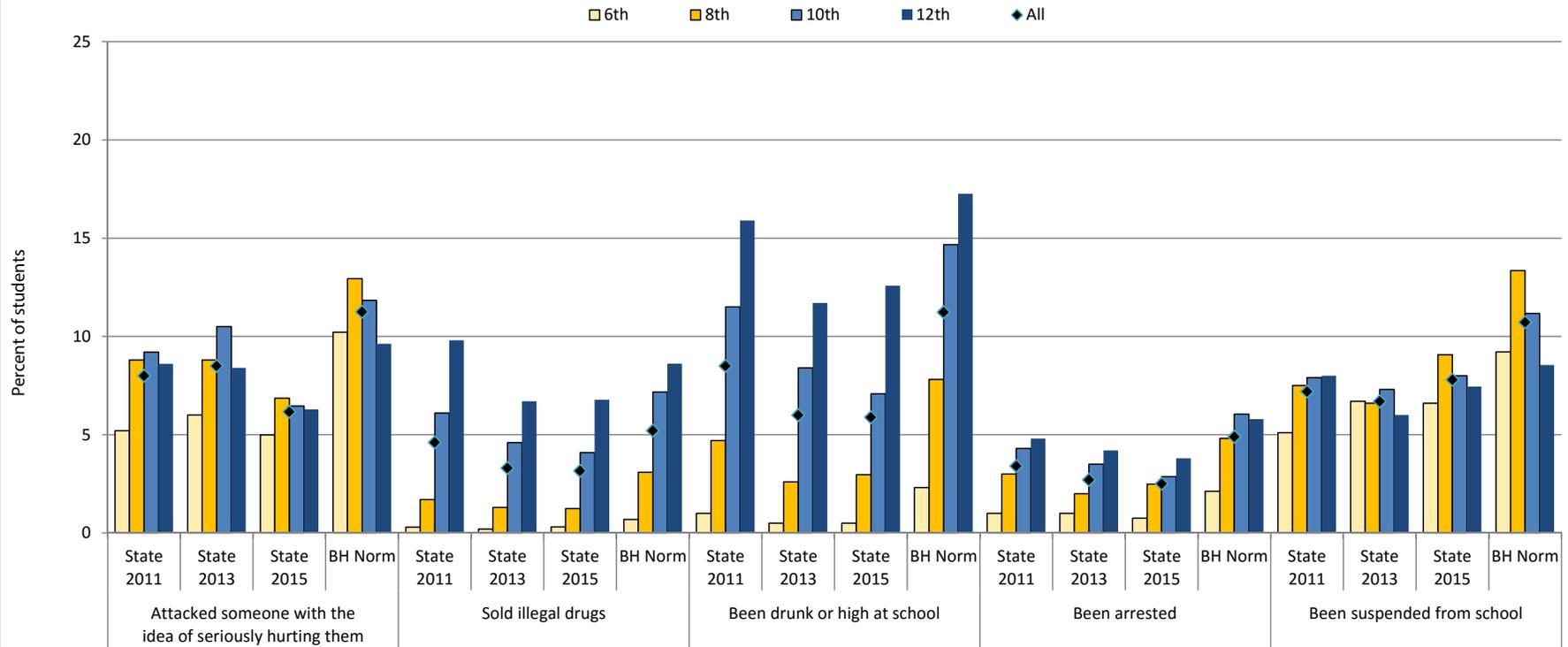
Table 4.1-1

### Antisocial Behaviors in the Past Year

Grade	Attacked someone with the idea of seriously hurting them				Sold illegal drugs				Been drunk or high at school				Been arrested				Been suspended from school			
	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm	State 2011	State 2013	State 2015	BH Norm
6th	5.2	6.0	5.0	10.2	0.3	0.2	0.3	0.7	1.0	0.5	0.5	2.3	1.0	1.0	0.8	2.1	5.1	6.7	6.6	9.2
8th	8.8	8.8	6.9	12.9	1.7	1.3	1.2	3.1	4.7	2.6	3.0	7.8	3.0	2.0	2.5	4.8	7.5	6.6	9.1	13.4
10th	9.2	10.5	6.5	11.8	6.1	4.6	4.1	7.2	11.5	8.4	7.1	14.7	4.3	3.5	2.9	6.0	7.9	7.3	8.0	11.2
12th	8.6	8.4	6.3	9.6	9.8	6.7	6.8	8.6	15.9	11.7	12.6	17.3	4.8	4.2	3.8	5.8	8.0	6.0	7.4	8.5
All	8.0	8.5	6.2	11.3	4.6	3.3	3.2	5.2	8.5	6.0	5.9	11.2	3.4	2.7	2.5	4.9	7.2	6.7	7.8	10.7

Figure 4.1-1

### Antisocial Behavior: (PAYS 2011, 2013, 2015)



## 4.2 Antisocial Behavior Outcomes by Gender

Table 4.2-1, Table 4.2-2, and Figure 4.2-1 in this section display a selection of antisocial behavior measures from the 2015 PAYS questionnaire by both grade and gender.

Although the data gathered from the 2015 PAYS indicate that male and female substance use rates are typically quite similar, male-female differences are more marked when looking at antisocial behaviors such as those highlighted in this section — heavy cigarette use, binge drinking, school suspension, illegal drug sales, reported arrest, attacking someone with the intent of harming them, being drunk or high at school, driving a vehicle after drinking, and driving a vehicle after smoking marijuana.

Table 4.2-1 and Table 4.2-2 show that males typically engage in these behaviors more than females. Some of the largest differences were in being suspended from school (10.1% for males compared to 5.5% for females), driving a vehicle after smoking marijuana (4.3% for males, 2.7% for females), and being arrested (3.2% for males compared to 1.8% for females).

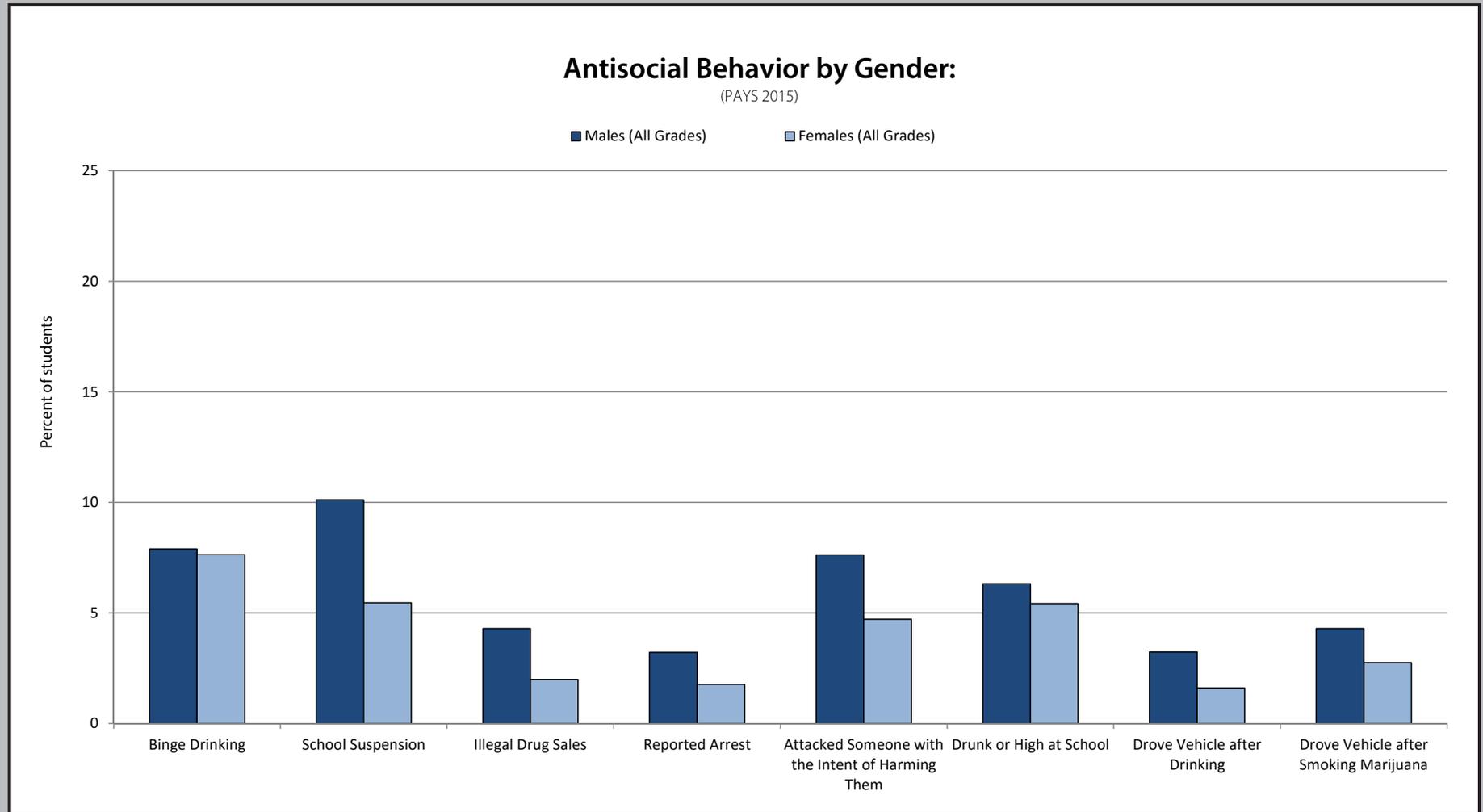
**Table 4.2-1**  
**Antisocial Behavior by Gender: Males**

	Binge Drinking		School Suspension		Illegal Drug Sales		Reported Arrest		Attacked Someone with the Intent of Harming Them		Drunk or High at School		Drove Vehicle after Drinking		Drove Vehicle after Smoking Marijuana	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	1.6	1.4	9.0	9.2	0.3	0.4	1.5	1.1	7.5	7.0	0.4	0.7	0.3	0.5	0.1	0.3
8th	2.7	2.6	8.9	11.4	1.9	1.8	2.5	2.9	9.4	7.8	2.8	2.9	0.4	1.8	0.4	0.9
10th	12.1	8.0	9.2	10.1	6.6	5.1	5.2	3.7	12.1	7.6	9.6	7.4	2.6	1.9	3.7	2.3
12th	24.2	19.8	8.3	9.7	9.9	9.7	6.4	5.1	11.0	8.2	14.1	14.1	10.7	8.4	15.7	12.9
All Grades	10.3	7.9	8.9	10.1	4.8	4.3	4.0	3.2	10.1	7.6	7.0	6.3	3.7	3.2	5.3	4.3

**Table 4.2-2**  
**Antisocial Behavior by Gender: Females**

	Binge Drinking		School		Illegal Drug Sales		Reported Arrest		Attacked Someone with the Intent of Harming Them		Drunk or High at School		Drove Vehicle after Drinking		Drove Vehicle after Smoking Marijuana	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	1.0	1.1	4.2	3.9	0.2	0.1	0.5	0.3	4.6	3.1	0.5	0.3	0.1	0.2	0.0	0.1
8th	3.4	3.9	4.2	6.6	0.8	0.6	1.5	2.0	8.0	5.9	2.4	3.0	0.4	0.5	0.3	0.4
10th	11.4	8.8	5.4	6.0	2.7	3.0	1.8	2.2	9.0	5.5	7.4	6.8	1.0	0.9	1.2	1.2
12th	19.4	16.4	3.8	5.2	3.6	4.0	2.0	2.4	5.8	4.3	9.2	11.1	6.7	4.4	9.2	8.6
All Grades	9.0	7.6	4.4	5.5	1.9	2.0	1.5	1.8	7.0	4.7	5.1	5.4	2.2	1.6	2.9	2.7

Figure 4.2-1



## 4.3 School-Related Violence and Drug Behaviors

Violence on school property is widely held to have become a serious problem in recent decades, especially where weapons such as guns or knives are involved. The presence of drugs on school property is also an area of concern.

Pennsylvania students were surveyed regarding the frequency with which they have been threatened or attacked on school property within the past year, and whether they were offered, given, or sold illegal drugs on school property within the past year.

Data in Table 4.3-1 and Figure 4.3-1 show that 8.8% of students in all grades have been offered drugs at least one time in the past 12 months. Of all students surveyed, 20.3% indicate having been threatened at school at least once in the past year, and 4.0% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 8.4% of all students indicated having been attacked at school, and 1.6% indicated

having been attacked with a weapon at school. In the past month, 1.6% of students in the State sample indicated that they brought a weapon (such as a gun, knife, or club) to school at least one time.

The 12th grade saw the highest rates of past-year reports of bringing a weapon to school and being attacked with a weapon at school (1.6%). However, 6th graders indicated the highest rates of being attacked at school in the past year (11.6%), and 8th graders indicated the highest rates of being threatened at school in the past year (25.1%), and being threatened with a weapon at school in the past year (4.7%).

Since the 2013 survey, reports of being threatened at school increased 1.5% for all grades combined (increases of 0.1% to 2.5% in each grade) and reports of being attacked at school increased 1.4% (increases of 0.6% to 1.9% in each grade).

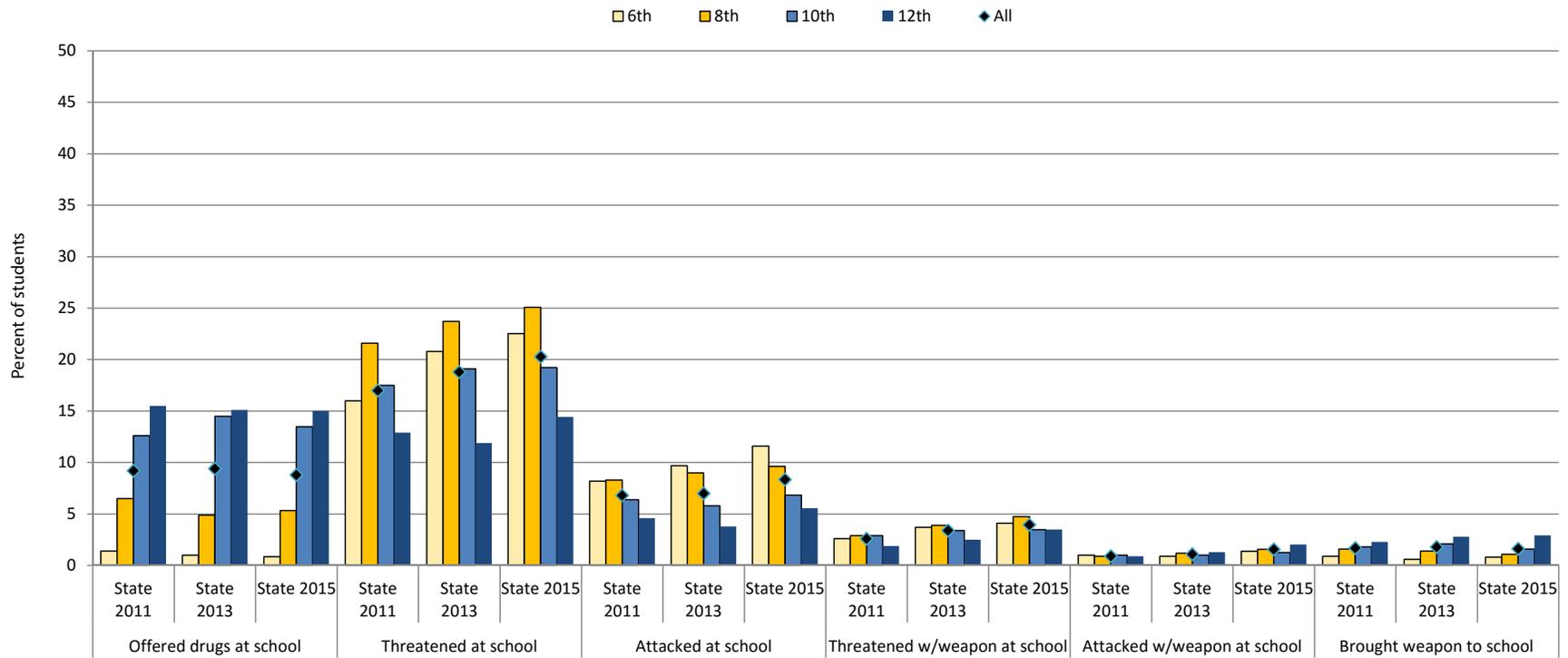
Table 4.3-1

### Violence and Drugs on School Property *(Percent of students marking 1 or more times)*

Grade	Offered drugs at school			Threatened at school			Attacked at school			Threatened w/weapon at school			Attacked w/weapon at school			Brought weapon to school		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	1.4	1.0	0.9	16.0	20.8	22.5	8.2	9.7	11.6	2.6	3.7	4.1	1.0	0.9	1.4	0.9	0.6	0.8
8th	6.5	4.9	5.3	21.6	23.7	25.1	8.3	9.0	9.6	2.9	3.9	4.7	0.9	1.2	1.6	1.6	1.4	1.1
10th	12.6	14.5	13.5	17.5	19.1	19.2	6.4	5.8	6.8	2.9	3.4	3.5	1.0	1.0	1.3	1.8	2.1	1.6
12th	15.5	15.1	15.0	12.9	11.9	14.4	4.6	3.8	5.6	1.9	2.5	3.5	0.9	1.3	2.0	2.3	2.8	2.9
All	9.2	9.4	8.8	17.0	18.8	20.3	6.8	7.0	8.4	2.6	3.4	4.0	0.9	1.1	1.6	1.7	1.8	1.6

Figure 4.3-1

### Violence and Drugs on School Property: (PAYS 2011, 2013, 2015)



## 4.4 Bullying and Internet Safety

Even though bullying is not a new phenomenon, the growing awareness that bullying has serious consequences for both schools and students is new. Bullies who operate electronically (that is, via text message, social media, or the Internet) can remain virtually anonymous, freeing them from normative and social constraints on their behavior.

Bullying behavior contributes to lower attendance rates, lower student achievement, low self-esteem, and depression (see Section 5.2), as well as higher rates of both juvenile and adult crime. Although the problem of bullying is receiving increased public attention, actual incidences of bullying often go undetected by teachers and parents. The most effective way to address bullying is through comprehensive, school-wide programs.

Increased public awareness of electronic or “cyber” bullying is due in part to high profile suicides linked to malicious use of social media services Twitter and Facebook. The modern teen’s social sphere is deeply intertwined with texting, social media, and the Internet. Invaded by bullying behavior, the harassment can feel inescapable, and traditional places of refuge such as the

home no longer apply. The resulting isolation from simply “turning off the phone” has the unfortunate effect of further punishing the victim.

Tables 4.4-1 and 4.4-2 and Figures 4.4-1 and 4.4-2 display the bullying/Internet safety data gathered via the PAYS 2015 questionnaire. While 92.0% of students in the State sample indicated that they think it is wrong or very wrong to bully someone, and 95.2% of students indicated their parents felt it was wrong or very wrong to bully, 16.9% of students said they were bullied two or more times a week, 16.3% of students said they had been electronically bullied in the past year and 5.3% said they had stayed at home from school because they were worried about being bullied. Rates of being electronically bullied were highest in the 8th grade (18.9% of 8th graders reported having been electronically bullied).

Students were also asked “In the past 12 months, did anyone on the Internet ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual?” Of all students, 20.3% marked “yes” to this question and 10th graders reported the highest response to this question (26.9% marked “yes”).

Table 4.4-1 **Bullying and Internet Safety**

Grade	Inappropriate sexual contact on Internet (% answering "YES!" or "yes")		Stayed home from school because worried about being bullied		Electronic bullying (% answering "YES!" or "yes")		Think bullying is wrong (% answering "wrong" or "very wrong")		Parents think bullying is wrong (% answering "wrong" or "very wrong")		Adults at school stop bullying when they see/hear it/student tells them about it	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	7.3	9.4	n/a	5.0	11.3	16.0	96.6	94.5	97.6	96.7	n/a	80.2
8th	17.5	20.2	n/a	6.1	17.7	18.9	93.9	92.5	96.6	95.8	n/a	66.8
10th	23.6	26.9	n/a	5.5	14.4	16.7	92.1	91.9	95.5	95.6	n/a	60.3
12th	19.1	23.4	n/a	4.5	11.0	13.8	89.5	89.5	93.6	93.0	n/a	54.8
All	17.4	20.3	n/a	5.3	13.7	16.3	92.8	92.0	95.7	95.2	n/a	65.1

Table 4.4-2 **Bullying General Frequency in the Past Year**

Grade	Everyday	2 or 3 times a week	4 or 5 times a week	More than 5 times a week
6th	4.6	11.8	1.4	1.7
8th	4.2	12.4	1.3	1.9
10th	3.7	9.8	0.5	1.6
12th	2.4	8.5	0.8	1.1
All	3.7	10.6	1.0	1.6

Figure 4.4-1

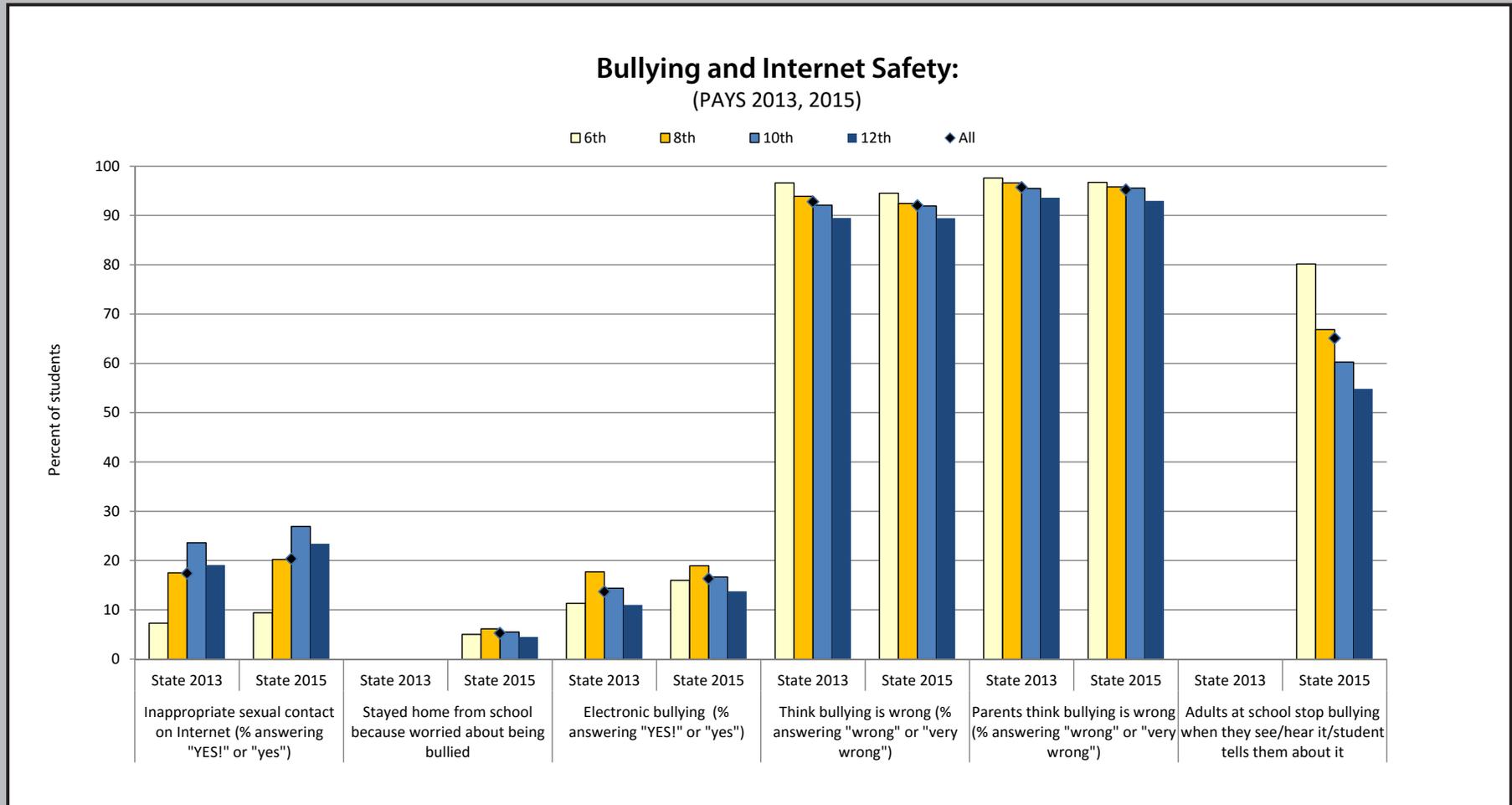
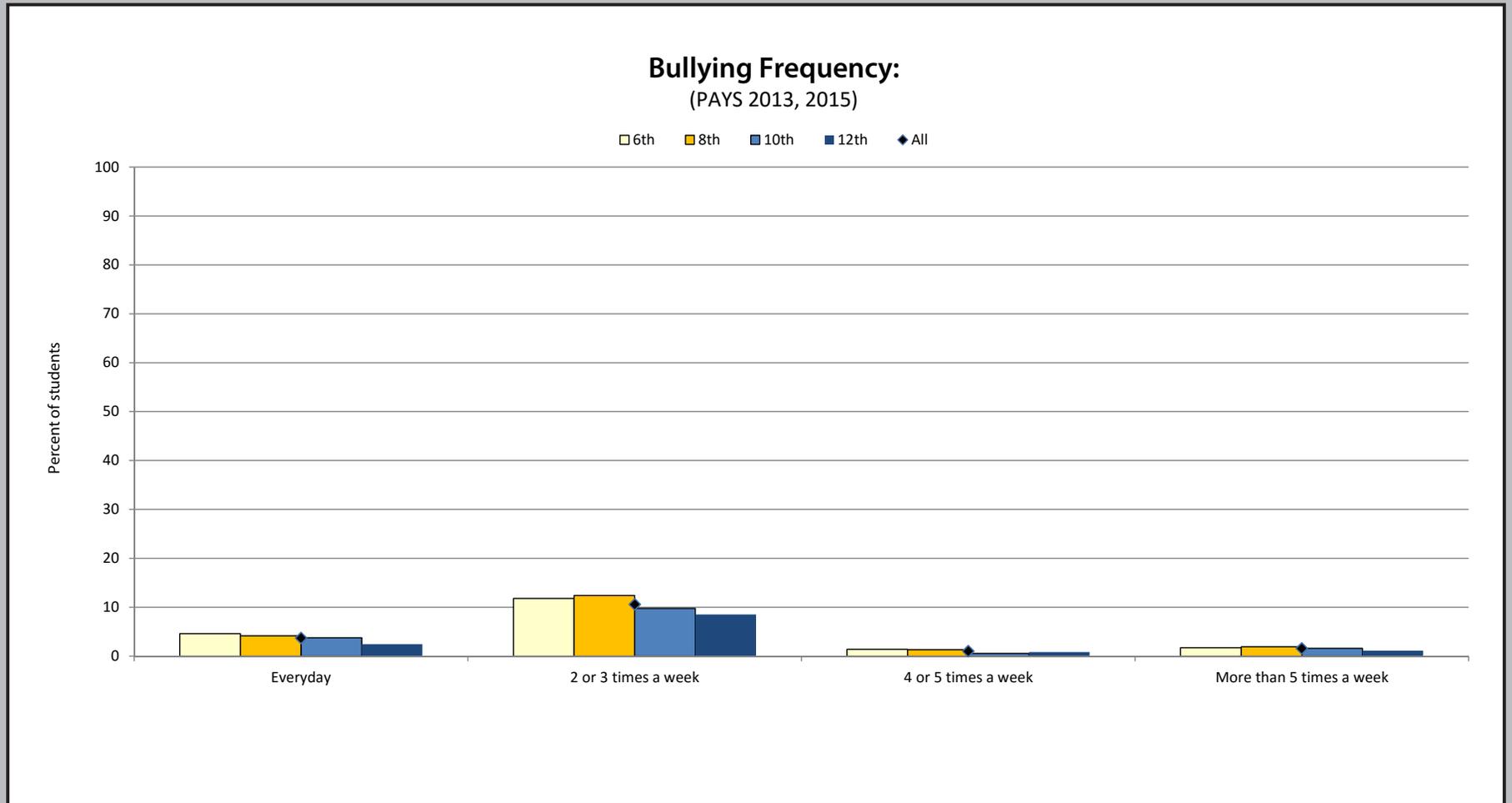


Figure 4.4-2



## 4.5 Additional Bullying Data

Additional bullying data were gathered through the 2015 PAYS in the form of questions asking students who had been bullied in the past year to report where they were bullied (Table 4.5-1 and Chart 4.5-1), and their perception of why they were bullied (Table 4.5-2 and Chart 4.5-2). All percentages reported in the tables and charts of this section are of students who indicated being bullied in the past year.

As for locations, overwhelmingly past-year bully victims indicated being bullied on school property (72.8%). The next highest locations were at home (32.3%), while going to or from school (22.9%), in the community (22.3%), and at a school-sponsored event (15.0%).

Of students reporting they were bullied in the past year, the perceived reasons for being bullied were looks (i.e., clothing, hairstyle, etc.) (43.7%), size (height, weight, etc) (35.4%), social standing (17.8%), social conflict

(14.3%), grades at school (13.1%), family socioeconomic standing (11.6%), sexuality (8.8%), skin color (8.4%), religion (7.3%), gender (6.4%), country of birth (3.7%), and county that family is from (4.3%). A large number of students also reported that they “don’t know why” they are bullied (33.2%) and that they were bullied for “some other reason” (37.3%).

**Table 4.5-1  
Bullying Locations (of students indicating they had been bullied in the past year)**

Grade	On school property	At a school-sponsored event	While going to or from school	In the community	At home
6th	70.7	10.4	27.5	20.6	28.9
8th	77.0	15.4	23.0	21.7	30.6
10th	70.2	17.6	21.7	23.6	38.3
12th	70.4	18.2	16.6	25.0	34.0
All	72.8	15.0	22.9	22.3	32.3

**Table 4.5-2  
Perceived Reasons for being Bullied (of students indicating they had been bullied in the past year)**

Grade	I don't know why	The color of my skin	My religion	My size (height, weight, etc)	My accent	The country I was born in	The country my family (parents, grandparents) was born in	The way I look (clothing, hairstyle, etc.)	How much money my family has or does not have	My gender	My grades or school achievement	My social standing	Social conflict	My sexual orientation	I have a disability (learning or physical or disability)	Some other reason
6th	40.0	7.2	4.6	35.2	2.7	3.4	4.0	38.8	10.0	5.6	12.0	10.6	6.9	3.5	4.8	37.1
8th	33.1	7.7	7.3	38.8	4.8	3.4	4.0	49.1	13.4	5.9	13.5	18.9	14.2	10.1	4.6	39.2
10th	30.3	9.1	8.3	32.5	5.1	4.2	4.4	41.9	10.5	6.8	12.1	21.9	19.1	11.3	6.8	37.4
12th	26.3	10.9	10.1	32.1	5.4	4.2	5.1	42.1	12.1	8.1	15.3	21.6	19.9	10.5	6.8	33.1
All	33.2	8.4	7.3	35.4	4.4	3.7	4.3	43.7	11.6	6.4	13.1	17.8	14.3	8.8	5.5	37.3

Figure 4.4-1

### Bullying Locations, (Of students who indicated being bullied in the past year): (PAYS 2015)

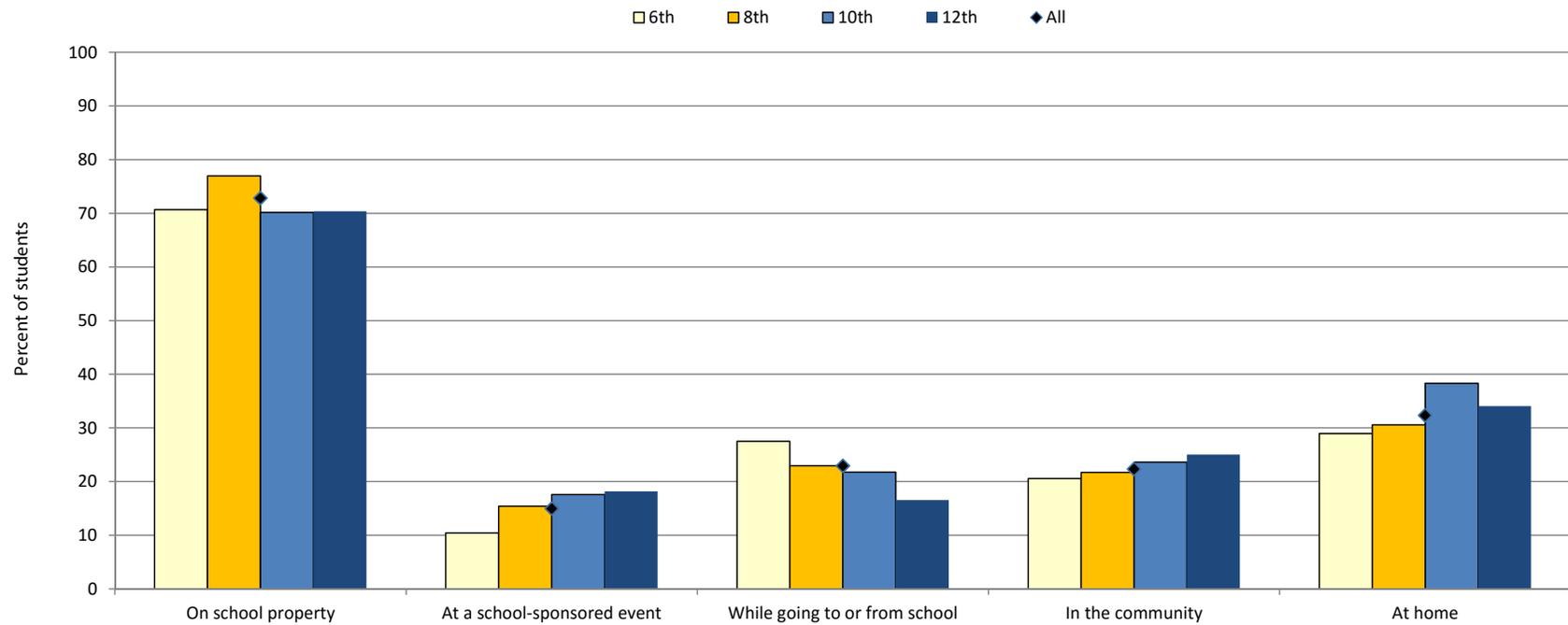
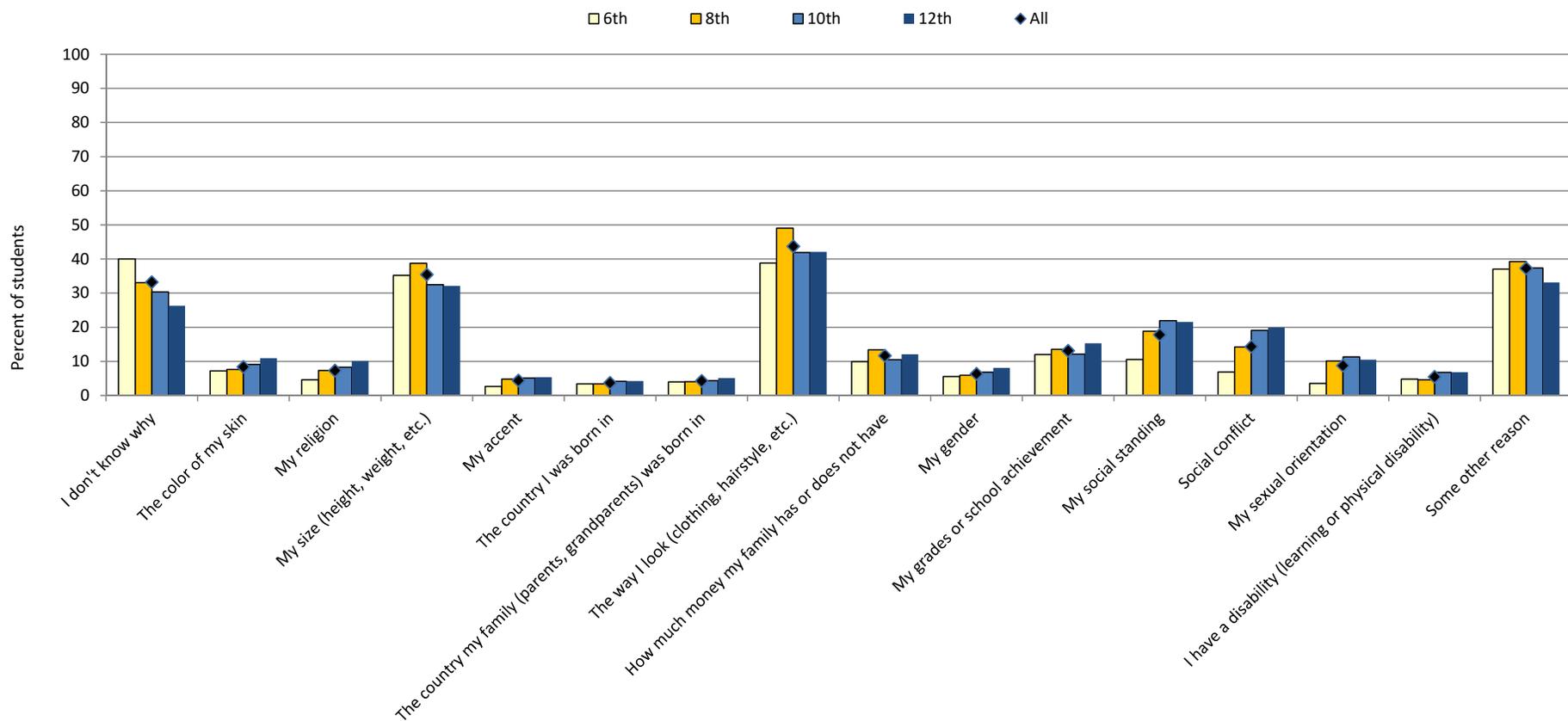


Figure 4.5-2

### Perceived Reasons for Being Bullied, (Of students who indicated being bullied in the past year): (PAYS 2015)



## 4.6 Gang Involvement

Gangs often serve as a sanctuary for troubled youth from troubled families. They can provide social structure where family, school, and community fail.

Gangs tend to cluster in high-crime, socially disorganized neighborhoods, where many youth are in trouble, feel unsafe, and are less attached to others in the community and where firearms are readily available.

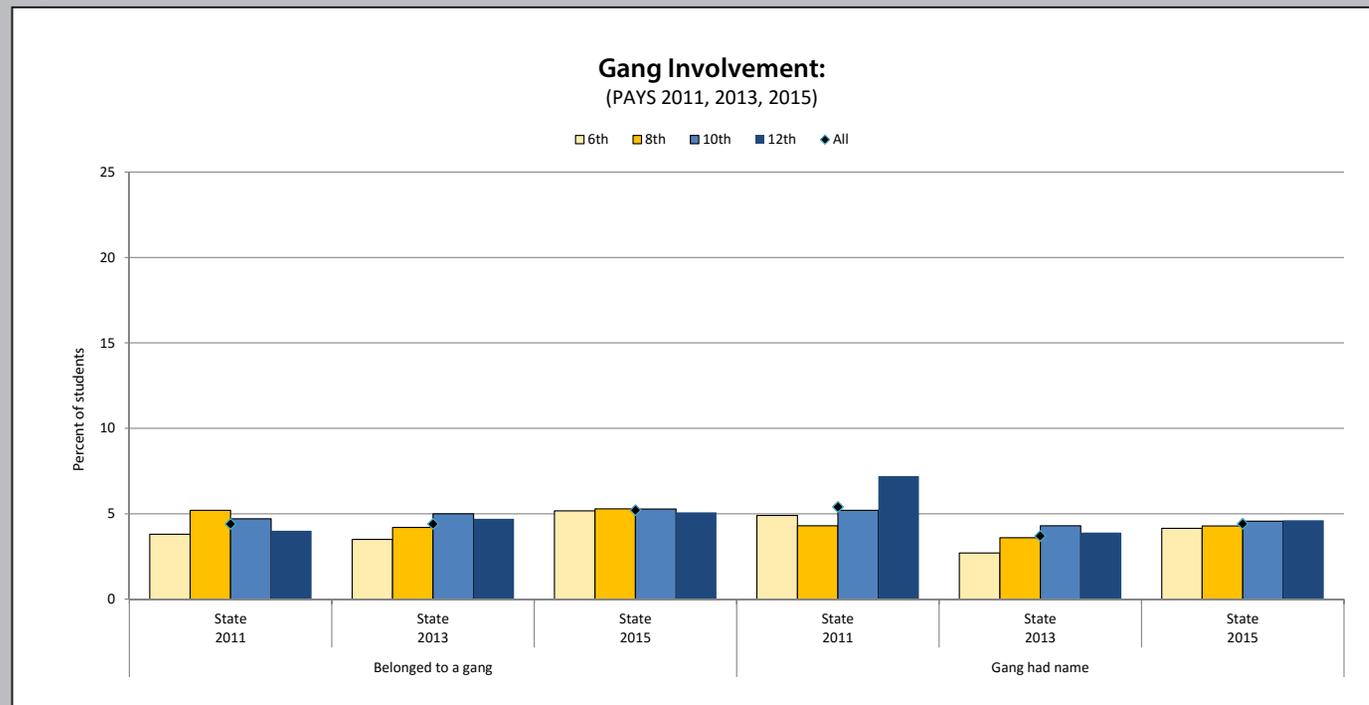
Some of the gang-related data gathered through the 2015 PAYS are provided in Table 4.6-1 and Figure 4.6-1. In 2015, 5.2% of all students indicated that they had belonged to a gang at some point in their life — up from 4.4% of students in 2013.

Table 4.6-1

### Gang Involvement (Lifetime)

Grade	Belonged to a gang			Gang had name		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	3.8	3.5	5.2	4.9	2.7	4.1
8th	5.2	4.2	5.3	4.3	3.6	4.3
10th	4.7	5.0	5.3	5.2	4.3	4.6
12th	4.0	4.7	5.1	7.2	3.9	4.6
All	4.4	4.4	5.2	5.4	3.7	4.4

Figure 4.6-1



## 4.7 Gambling

Even though gambling activities are legally restricted to adults, there is clear evidence that underage youth actively participate in gambling. Despite being promoted as a harmless form of entertainment, gambling operates on the same reward pathways and the same neurotransmitters as ATOD addiction. Youth gambling is associated with alcohol and drug use, truancy, low grades, and risk-taking behavior.

Students were asked in the Pennsylvania Youth Survey to report whether or not they had participated in various gambling activities in the past year. Please note that this question changed significantly from 2013 to 2015 in terms of the number of response options/gambling types listed. In subsequent questions, students were also asked about compulsive urges to gamble and whether they had ever lied about gambling habits.

The individual activities most often participated in during the past year were playing the lottery (21.8% of all students, a grade-level peak of 23.3% in the 10th grade), betting on personal games of skill (18.5% of all students, a grade-level peak of 19.8% in the 8th grade), and betting on sports (14.1% of all students, a grade-level peak of 16.0% in the 10th grade).

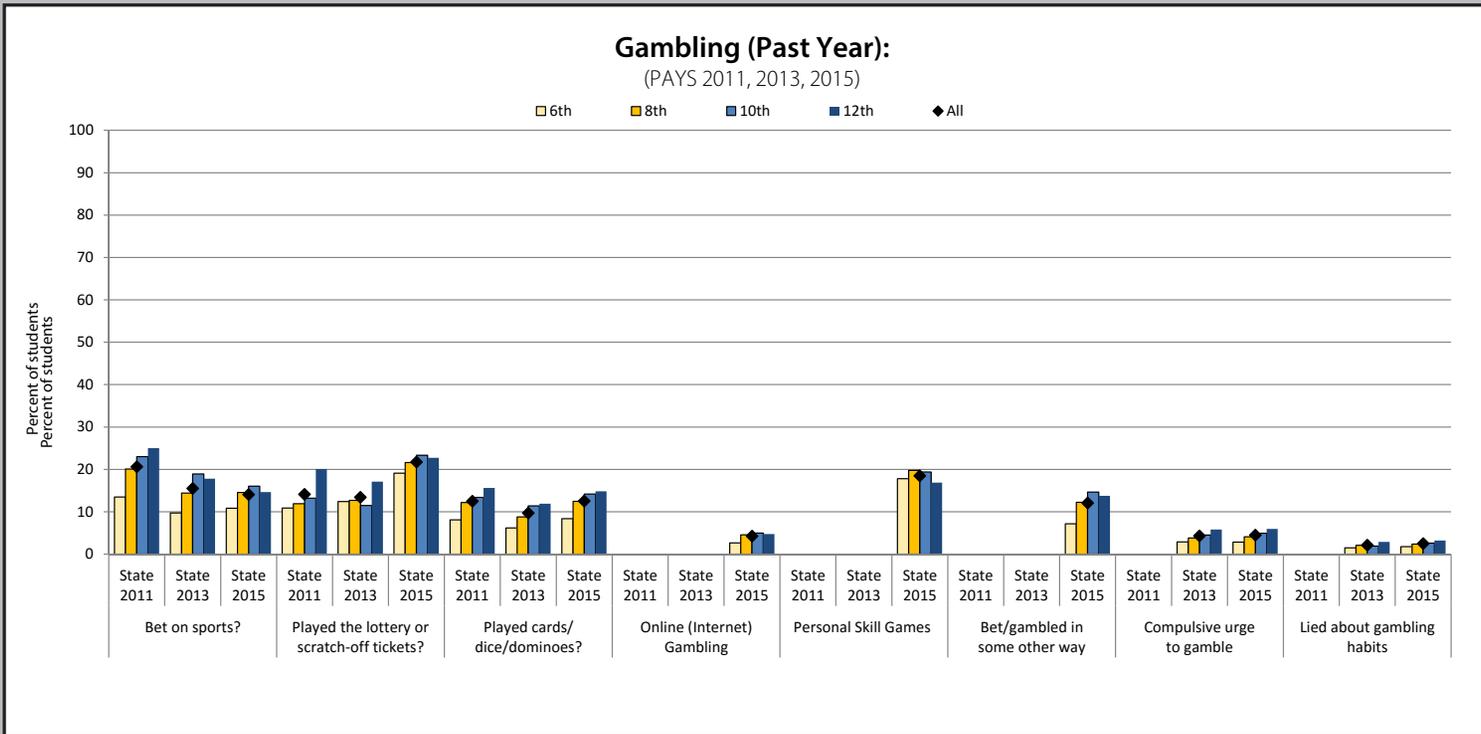
In comparing 2015 gambling data to data gathered in 2013, 2015 data show that reports of betting on sports are down for most grades (a decrease of 1.4% for all grades combined), but have increased for playing cards (increase of 2.8% for all grades combined). The percent of students marking that they have played the lottery or scratch ticket has increased significantly in all grades (increases of 5.6% to 11.8% in each grade and 8.4% for all grades combined), but this can be attributed to an expansion of the question from “Bought lottery tickets” in 2011 and 2013 to a more comprehensive “Lottery (scratch cards, numbers, etc.)” in 2015.

In response to the question “Have you ever felt the need to bet more and more money?” 4.5% of students marked “Yes.” In response to the question “Have you ever felt the need to lie to important people (e.g., family/friends) about how much you gamble?” 2.5% of students responded in the affirmative.

**Table 4.7-1**  
**Gambling in the Past Year**

Grade	Bet on sports?			Played the lottery or scratch-off tickets?			Played cards/dice/dominoes?			Online (Internet) Gambling			Personal Skill Games (such as pool, darts, coin tossing, video games)			Bet/gambed in some other way			Compulsive urge to gamble			Lied about gambling habits		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6	13.5	9.7	10.8	10.9	12.4	19.1	8.1	6.2	8.4	n/a	n/a	2.7	n/a	n/a	17.8	n/a	n/a	7.2	n/a	2.9	2.8	n/a	1.5	1.8
8	20.1	14.4	14.5	11.9	12.7	21.6	12.2	8.8	12.5	n/a	n/a	4.6	n/a	n/a	19.8	n/a	n/a	12.2	n/a	3.8	4.1	n/a	2.1	2.4
10	23.0	18.9	16.0	13.2	11.5	23.3	13.4	11.4	14.2	n/a	n/a	5.0	n/a	n/a	19.4	n/a	n/a	14.6	n/a	4.5	4.9	n/a	1.9	2.6
12	25.0	17.8	14.7	20.1	17.1	22.7	15.6	11.9	14.8	n/a	n/a	4.7	n/a	n/a	16.9	n/a	n/a	13.8	n/a	5.8	6.0	n/a	2.9	3.2
All	20.6	15.5	14.1	14.1	13.4	21.8	12.5	9.7	12.5	n/a	n/a	4.3	n/a	n/a	18.5	n/a	n/a	12.1	n/a	4.3	4.5	n/a	2.1	2.5

**Figure 4.7-1**



## 4.8 Dangerous Driving Behaviors

Table 4.8-1 and Figure 4.8-1 display PAYS data gathered regarding dangerous driving behaviors involving driving after drinking and driving after the use of marijuana.

Driving under the influence of drugs and alcohol endangers everyone on the roadway. Alcohol and marijuana impair clear thinking and hand-eye coordination; and, according to the Centers for Disease Control, alcohol-impaired drivers are involved in nearly 1 in 3 crash deaths, resulting in 9,967 deaths nationwide in 2014.

PAYS data show that 2.4% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 6.4% of that grade. More students

reported driving after smoking marijuana in the past year (3.5% of the total survey sample population, and 10.7% of 12th grade respondents).

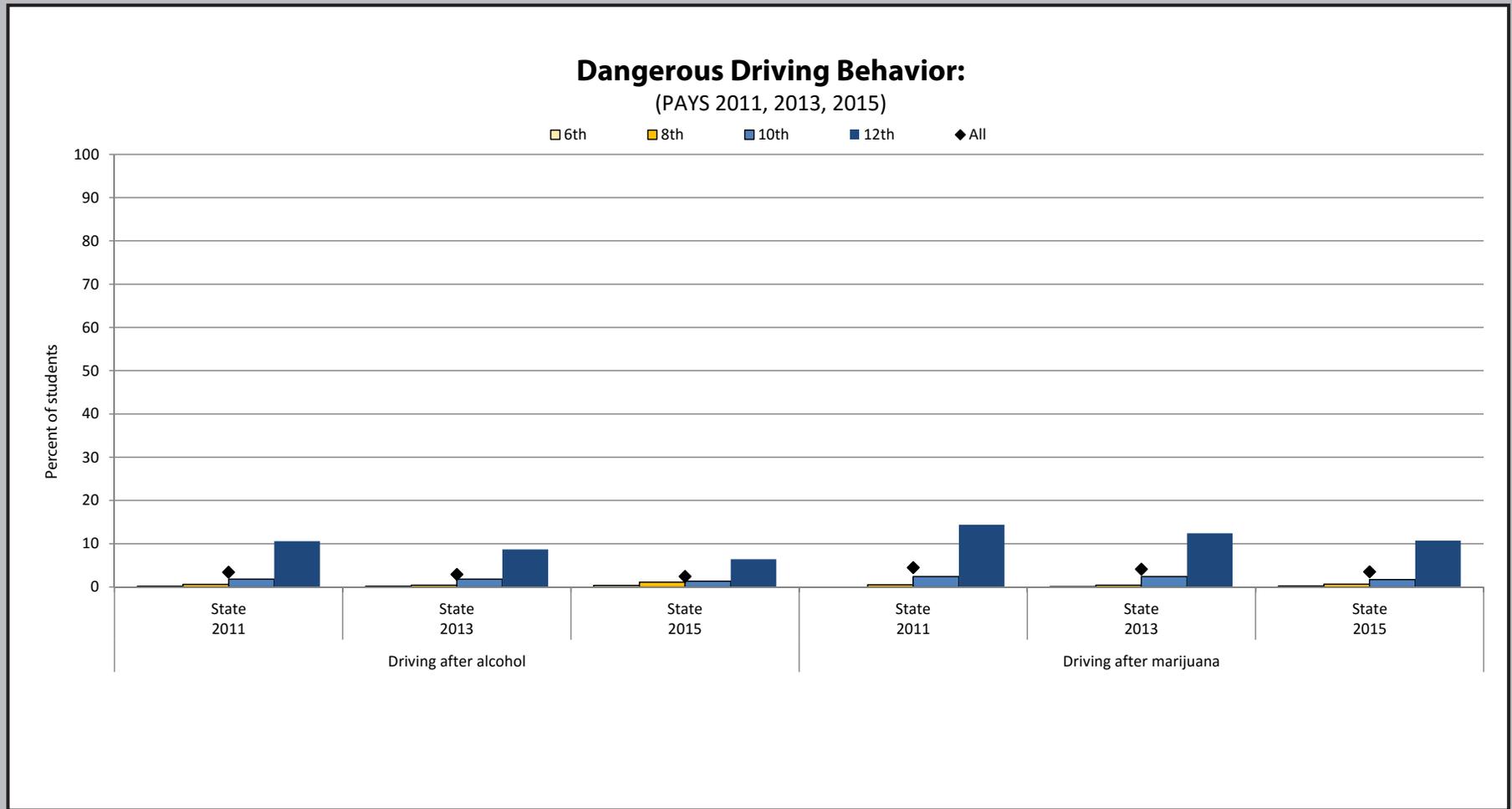
Three years of data are available for driving after drinking and driving after smoking marijuana. 2015 PAYS data show that the percent of Pennsylvania students reporting driving after drinking has decreased 1.0% since 2011 (rate of 3.4% in 2011, 2.9% in 2013, and 2.4% in 2015) and the percent of students reporting driving after consuming marijuana has decreased 1.0% (rate of 4.5% in 2011, 4.1% in 2013, 3.5% in 2015). Although 12th grade rates for these two items are quite high, the rates are significantly less than in previous administrations. The 12th grade rate of drinking then driving is down 2.3% since 2011, and the 12th grade rate of driving after smoking marijuana is down 3.7% since 2011.

Table 4.8-1

### Dangerous Driving Behavior: Driving After Consuming Alcohol Or Marijuana

	Driving after alcohol			Driving after marijuana		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	0.2	0.2	0.4	0.0	0.1	0.2
8th	0.6	0.4	1.1	0.5	0.4	0.7
10th	1.8	1.8	1.4	2.4	2.4	1.7
12th	10.6	8.7	6.4	14.4	12.4	10.7
All	3.4	2.9	2.4	4.5	4.1	3.5

Figure 4.8-1



# Section 5: Mental Health Data

This fifth section, **Mental Health Data**, provides information on student mental health data related to depression, trauma, and suicide ideation. Stress, anxiety, loneliness, and frustration are all emotions that can negatively impact student health, and outcomes such as suicide underscore the necessity of tracking student emotional health.

## Mental Health

Important mental health habits—including coping, resilience, and good judgment—help adolescents to achieve overall wellbeing and set the stage for positive mental health in adulthood. Although mood swings are common during adolescence, approximately one in five adolescents has a diagnosable mental disorder, such as depression and/or “acting out” conditions that can include extremely defiant behavior. Friends and family can watch for warning signs of social and emotional distress and urge young people to get help. Effective treatments may include a combination of therapy and medication. Unfortunately, less than half of adolescents who need mental health services receive them.

When accompanied by a copy of the State Report Executive Summary, each subsection found in Section 5 can be considered a self-standing piece that can be distributed to researchers, prevention specialists, and other interested parties.

## Mental Health Disorders

Nationwide, approximately one out of five adolescents has a diagnosable mental health disorder, and one in four shows at least mild symptoms of depression. Warning signs are not always obvious, but more common symptoms include persistent irritability, anger, or social withdrawal, as well as major changes in appetite or sleep. Mental health disorders can disrupt school performance, harm relationships, and lead to suicide (the third leading cause of death among adolescents). Ongoing stigmas regarding mental health disorders inhibit some adolescents and their families from seeking help.

## Positive Mental Health: Resilience

“Resilient” adolescents are those who have managed to cope effectively, even in the face of stress and other difficult circumstances, and are poised to enter adulthood with a good chance of positive mental health. A number of factors promote resilience in adolescents—among the most important are caring relationships with adults and an easy-going disposition. Adolescents themselves can use a number of strategies, including exercising regularly, to reduce stress and promote resilience. Schools and communities are also recognizing the importance of “emotional intelligence” in adolescents’ lives—a growing number of courses and community programs focus on adolescents’ social-emotional learning and coping skills.

## 5.1 Mental Health, Stress, and Suicide Indicators

The PAYS questionnaire has gathered data on depressive symptoms in past survey administrations. Additionally, the 2015 PAYS also provided questions regarding suicide ideation and student traumas. The results in Tables 5.1-1 through 5.1-3, Figures 5.1-1 through 5.1-3 show findings of these questions.

A series of “Depressive Symptoms” questions are included in the survey which not only provide data for the calculation of the Depressive Symptoms risk factor scale, but which also aid in the calculation of depressive symptom ranges (for those with no/low depressive symptoms, moderate depressive symptoms, or high depressive symptoms). Those questions are as follows: “In the past 12 months, have you felt depressed or sad MOST days, even if you feel OK sometimes?” “Sometimes I think life is not worth it,” “At times I think I am no good at all,” and “All in all, I am inclined to think I’m a failure.” These questions could be answered NO! (Definitely Not True), no (Mostly Not True), yes (Mostly True), or YES! (Definitely True). A self-harm question was added to the 2015 PAYS and the results will be reported in this subsection.

In addition to depressive symptoms questions, the percentage of participants who indicated having experienced a trauma (i.e., having a close family member or friend die) are asked as well as a series of questions about suicide. These questions provide information about suicidal ideation and attempts of suicide (e.g., “Have you ever considered attempting suicide?” and “Have you ever attempted suicide?”).

The following are some key findings from these mental health-related data:

- The survey data show that 38.3% of all students indicated (via responding “YES!” or “yes” to the statement) that they had felt depressed or sad most days in the past 12 months; 23.9% of all students indicated that they sometimes thought life is not worth it; 34.7% of all students indicated that “at times I think I am no good at all” and 19.9% indicated that they felt that they were a failure. Further 19.9% of students (all grades combined) indicated harming themselves (i.e., “cutting, scraping, burning as a way to relieve difficult feelings, or to communicate emotions that may be difficult to express verbally”) at least one time in the past year.

- For the depressive symptoms measures, there has been a general increase in the percent of students responding to those questions/statements in the affirmative. The percent of students indicating they have felt depressed for most days in the past year increased 6.6% since 2013, the percent indicating they often felt like life was not worth it increased 1.3% since 2013, the percent indicating that at times they thought they were no good at all increased 2.0% since 2013, and the percent that felt they were a failure increased 2.5% since 2013.
- 40.3% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 13.7% indicated having the stress of worrying that food at home would run out; and 6.6% indicated the stress of having to skip a meal due to a lack of money.
- 16.0% of students in all grades combined indicated that they had considered suicide in their lifetime. The grade-level rates for this question were as follows: 8.7% of 6th graders, 15.4% of 8th graders, 19.2% of 10th graders, and 19.5% of 12th graders indicated they had considered suicide in their lifetime.
- 12.7% of students in all grades combined indicated that they had gone so far as to create a suicide plan at least once in their lifetime. The grade-level rates for this question were as follows: 6.2% of 6th graders, 12.7% of 8th graders, 15.1% of 10th graders, and 15.8% of 12th graders indicating they had created a suicide plan.
- In regard to those students who indicated they had attempted suicide in their lifetime, 5.8% of 6th graders, 10.1% of 8th graders, 10.5% of 10th graders, 11.2% of 12th graders, and 9.5% of all students indicated that they had attempted suicide at least one time in their lifetime.

See Tables 5.1-1, 5.1-2, and 5.1-3; and Figures 5.1-1, 5.1-2, and 5.1-3 for full data.

Table 5.1-1 **Symptoms of Depression** (Percent of students marking "YES!" or "yes" to the following depressive symptoms statements. For self-harm, the percent indicates students reporting any past-year self-harm behavior.)

Grade	Felt depressed or sad MOST days in the past 12 months			Sometimes I think that life is not worth it			At times I think I am no good at all			All in all, I am inclined to think that I am a failure			Past-year Self-Harm		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	27.6	26.4	33.9	15.0	14.7	18.1	23.0	24.7	29.5	10.2	12.3	15.6	n/a	n/a	10.4
8th	30.1	30.9	37.7	20.2	23.2	24.2	27.3	31.8	33.9	13.0	17.9	21.1	n/a	n/a	16.7
10th	32.8	36	40.6	21.7	26.9	26.0	31.2	37.7	37.3	14.1	20.7	21.2	n/a	n/a	17.8
12th	33.4	32.6	40.7	20.4	24.4	26.8	29.6	35.2	37.5	13.7	17.9	21.6	n/a	n/a	15.1
All	31.1	31.7	38.3	19.4	22.6	23.9	28.0	32.7	34.7	12.9	17.4	19.9	n/a	n/a	15.1

Table 5.1-2 **Trauma and Stress**

Grade	Death of friend/family (past year)		Worried that food at home would run out before family got money to buy more		Skipped a meal because family didn't have enough money to buy food	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	47.2	42.9	n/a	13.4	n/a	5.4
8th	43.7	42.6	n/a	14.9	n/a	6.6
10th	38.4	38.8	n/a	13.1	n/a	6.0
12th	36.7	37.4	n/a	13.6	n/a	8.1
All	41.2	40.3	n/a	13.7	n/a	6.6

Table 5.1-3 **Suicide Risk** (Percent of students marking 1 or more times)

Grade	Felt so sad or hopeless almost every day for at least 2 weeks in past year that stopped doing usual activities		Considered suicide		Planned suicide		Attempted suicide		Needed medical treatment for attempt	
	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015	State 2013	State 2015
6th	16.8	14.9	6.9	8.7	4.7	6.2	4.2	5.8	1.0	1.2
8th	22.3	20.9	14.7	15.4	10.9	12.7	7.6	10.1	1.9	2.5
10th	27.3	23.9	20.4	19.2	15.7	15.1	9.6	10.5	2.4	2.6
12th	26.1	25.4	18.9	19.5	14.0	15.8	8.5	11.2	1.4	2.6
All	23.4	21.5	15.6	16.0	11.6	12.7	7.6	9.5	1.7	2.3

Figure 5.1-1

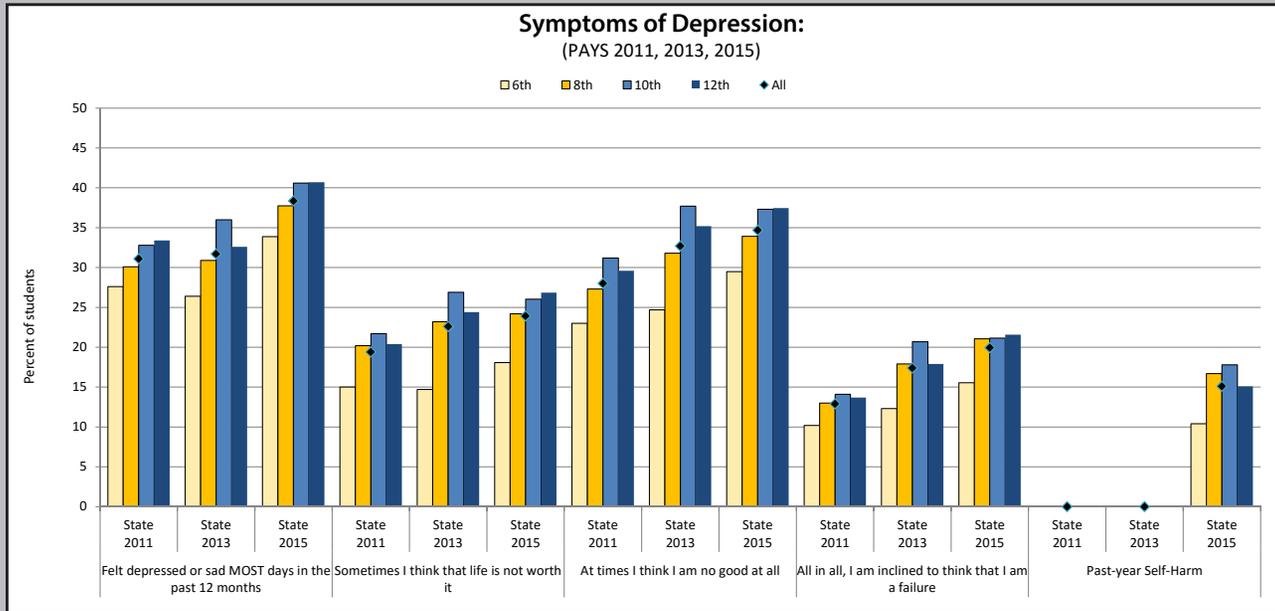


Figure 5.1-2

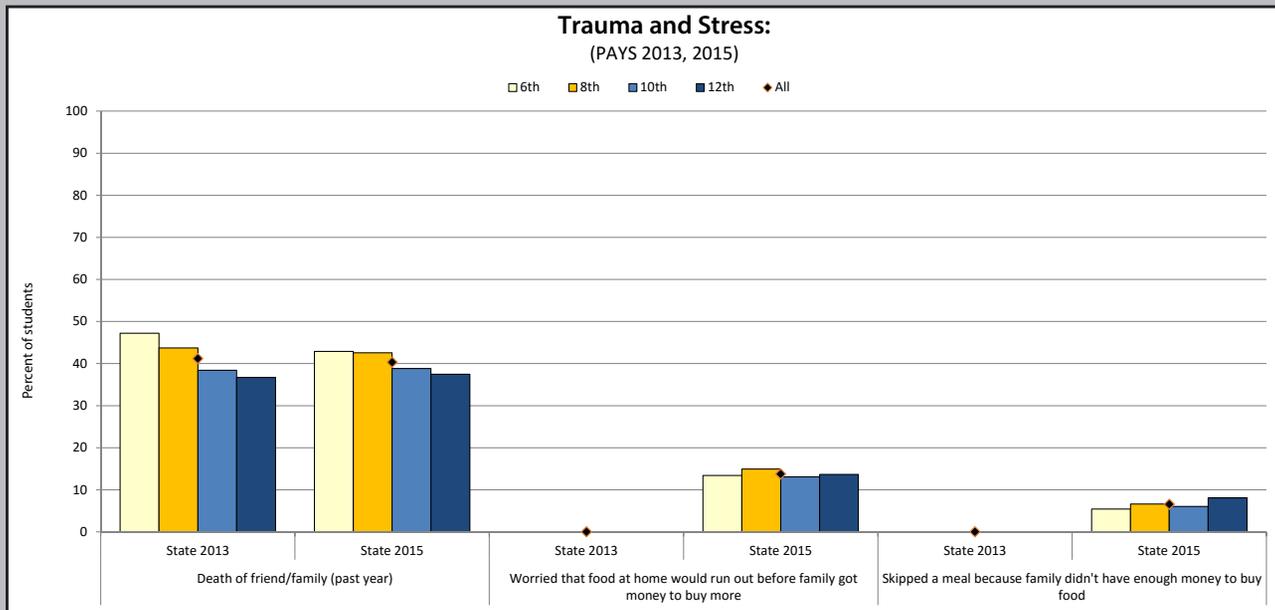
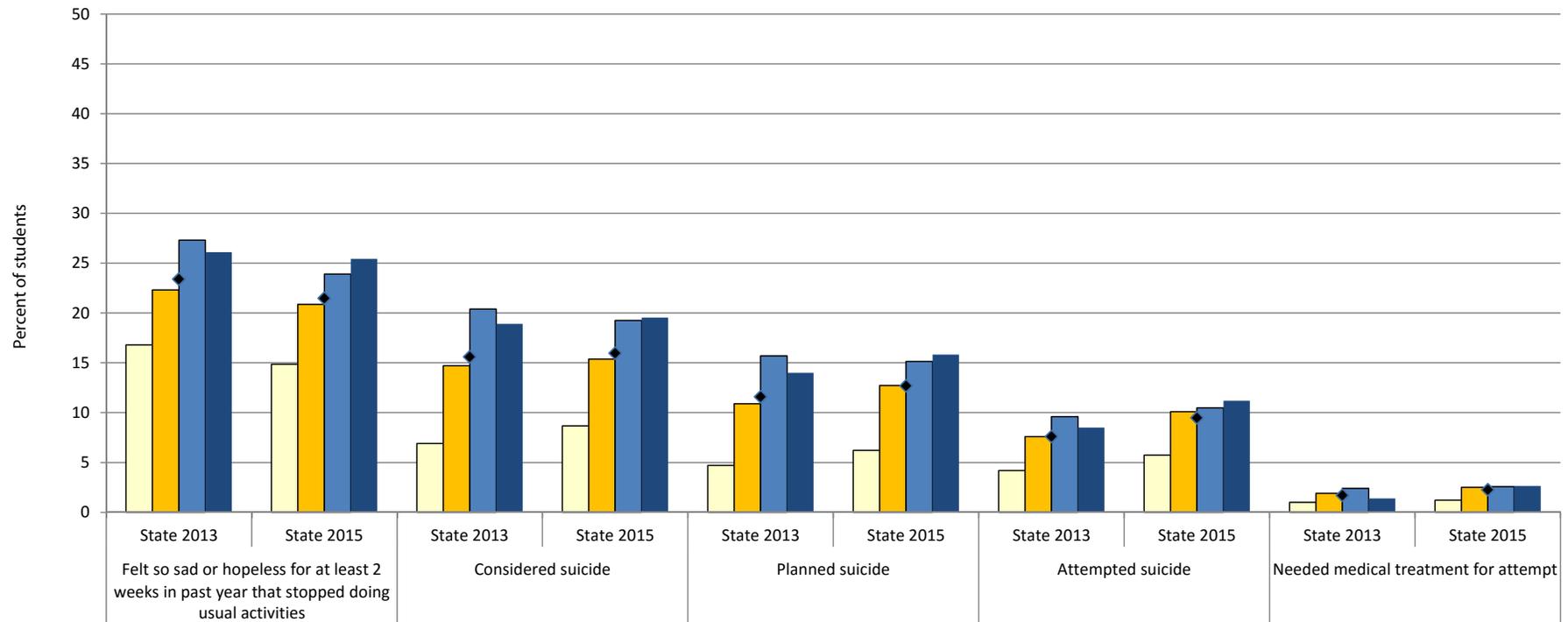


Figure 5.1-3

**Suicide Risk:**  
(PAYS 2011, 2013, 2015)

□ 6th   □ 8th   □ 10th   □ 12th   ◆ All



## 5.2 Depressive Symptoms and Substance Use

The substance use rate of youth who reported depressive symptoms is much greater than those who have a much more positive outlook on life. The four depressive symptoms that were asked on the survey questionnaire were: 1) Sometimes I think that life is not worth it, 2) At times I think I am no good at all, 3) All in all, I am inclined to think that I am a failure, and 4) In the past year, have you felt depressed or sad MOST days, even if you felt OK sometimes? Results for these individual questions were featured in the previous subsection. The following pages take a look at that data from a different perspective — one that uses those questions to calculate the estimated percentage of students who have no/low depressive symptoms, moderate depressive symptoms, or high depressive symptoms. The questions were scored on a scale of 1 to 4 (NO!, no, yes, YES!). The survey respondents were divided into three groups. The first group was the depressed group who scored at least a mean of 3.75 on the depressive symptoms. This meant that those individuals marked “YES!” to all four items or marked “yes” to one item and “YES!” to three. The second group was the non-depressed group who marked “NO!” to all four of the items, and the third group was a middle group who comprised the remaining respondents. Of the statewide sample, 27.1% of students scored no/low on this calculated scale; 66.8% scored moderate on this scale; and 6.1% scored high. The results of the substance use among the three groups is shown in Table 5.2-1.

The results in Table 5.2-1 and Figure 5.2-1 show a strong link between youth who report depressive symptoms and ATOD use. When compared to the non-depressed group, the youth with high depressive symptoms indicate 30-day alcohol use rates that are nearly three times higher than non-depressed students. Depressed students indicate use rates that are seven times higher for past-month cigarette use and three times higher for past month marijuana use in comparison to non-depressed students.

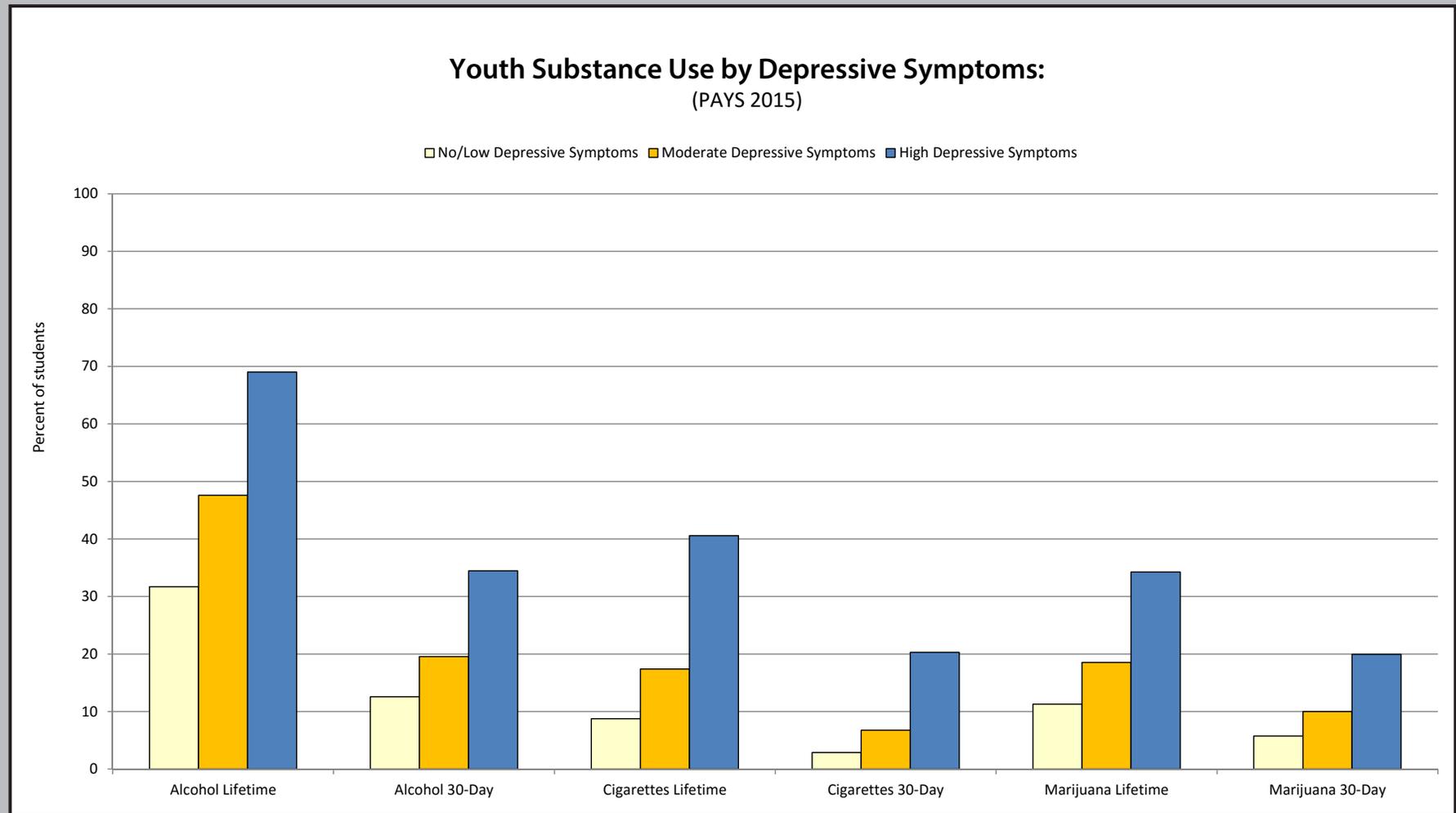
The ATOD use rates of the middle depressive symptoms group, that was comprised of most Pennsylvania youth, were closer to the rates of the non-depressed group than they were to the depressed. For the three substances in Table 5.2-1, the past month usage rates for the middle depressive symptoms group were anywhere from 4.3% to 7.0% higher than that of the non-depressed rate; while the past month use rates for the middle depressive symptoms group were anywhere from 9.9% to 14.9% lower than the depressed group. Thus, individuals with a positive outlook on life (even with some depressive symptoms) tend to use fewer substances than peers with a high level of depressive symptoms.

Table 5.2-1

### Depressive Symptoms and Youth Substance Use

	No/Low Depressive Symptoms	Moderate Depressive Symptoms	High Depressive Symptoms
% of students within each category	27.1	66.8	6.1
Alcohol Lifetime	31.7	47.6	69.0
Alcohol 30-Day	12.6	19.5	34.5
Cigarettes Lifetime	8.8	17.4	40.6
Cigarettes 30-Day	2.9	6.8	20.3
Marijuana Lifetime	11.3	18.5	34.3
Marijuana 30-Day	5.8	10.0	20.0

Figure 5.2-1



## 5.3 Mental Health and Bullying

Table 5.3-1 and Figure 5.3-1 delve into the relationship between bullying and suicide/mental health issues. PAYS Survey data for two bullying measures (skipping school due to bullying fears and being cyberbullied in the past year) show a strong relationship between being bullied and suicide ideation. For example, of students who indicated they hadn't been cyberbullied in the past year, 15.8% reported that they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Of students who indicated they had been bullied in the past year, 51.0% indicated feeling so sad or hopeless almost every day for at least two weeks in past year that they stopped

doing usual activities. Of students that indicated they had been cyberbullied in the past year, nearly 40% had considered suicide in the past year, nearly 30% had made a suicide plan in the past year, and 27% had attempted suicide in the past year.

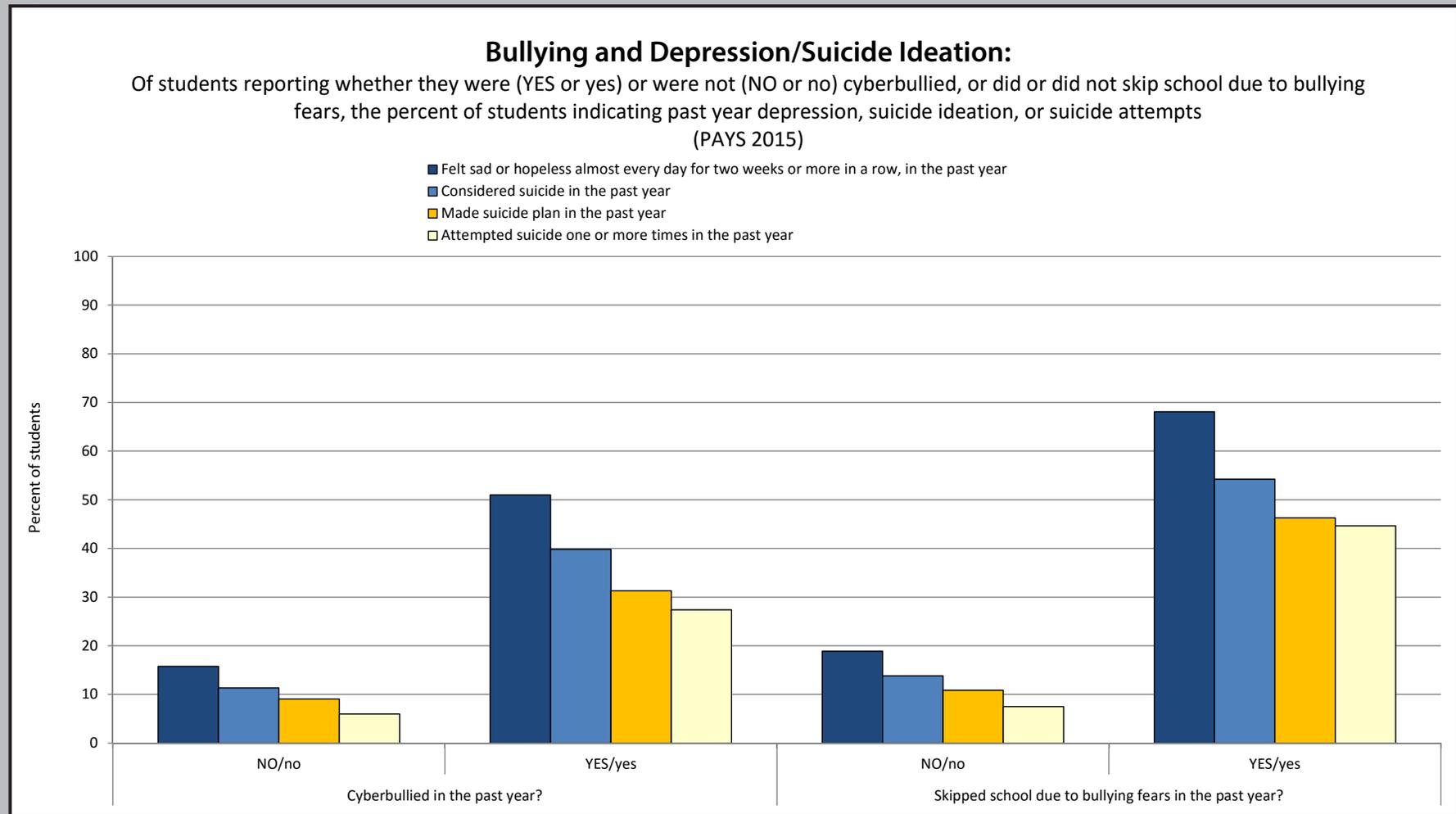
The same relationships exist for students who indicated they had skipped school due to bullying fears in the past year. Of those students, 68% had felt so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities, 54% had considered suicide, 46% had made a suicide plan, and 45% had attempted suicide

Table 5.3-1

### Bullying and Depression/Suicide

	Cyberbullied in the past year?		Skipped school due to bullying fears in the past year?	
	NO/no	YES/yes	NO/no	YES/yes
Felt so sad or hopeless almost every day for at least 2 weeks in past year that stopped doing usual activities	15.8	51.0	18.9	68.1
Considered suicide in the past year	11.4	39.8	13.8	54.2
Made suicide plan in the past year	9.1	31.3	10.8	46.3
Attempted suicide one or more times in the past year	6.0	27.4	7.5	44.6

Figure 5.3-1



## Section 6: Additional Data Relationships

This final section, **Additional Data Relationships**, provides examples of how risk factors actually relate to drug and alcohol use. By looking at how factors such as level of school achievement, degree of parental acceptability of drug use, transitions and mobility, degree of peer acceptability of drug use, and perceived use by peers affect substance use, we can begin to understand how the Risk and Protective Factor Model of prevention works, and how it can be used to target the needs of schools and communities.

When accompanied by a copy of the State Report Executive Summary, each subsection found in Section 6, can be considered a self-standing piece that can be distributed to researchers, prevention specialists, and other interested parties.

# 6.1 Parents Rules and Expectations Regarding Substance Use

PAYS provided students with the following statement “My family has clear rules about alcohol and drug use,” and asked them to respond with either “NO!”, “no,” “yes,” or “YES!”. The results of the question presented in Table 6.1-1 and Figure 6.1-1 display the data from that question in relation to lifetime and past-month alcohol use.

Of the students marking “YES!” or “yes” to the statement “My family has clear rules about alcohol and drug use,” 40.3% indicated they had used alcohol in their lifetime and 15.4% indicated they had used alcohol in the past month. In contrast, of students who marked “NO!” or “no” to that statement, 71.3% indicated they had used alcohol in their lifetime and 38.6% indicated they had used alcohol in the past month. These data reinforce the idea that parents must set clear rules and expectations regarding substance use.

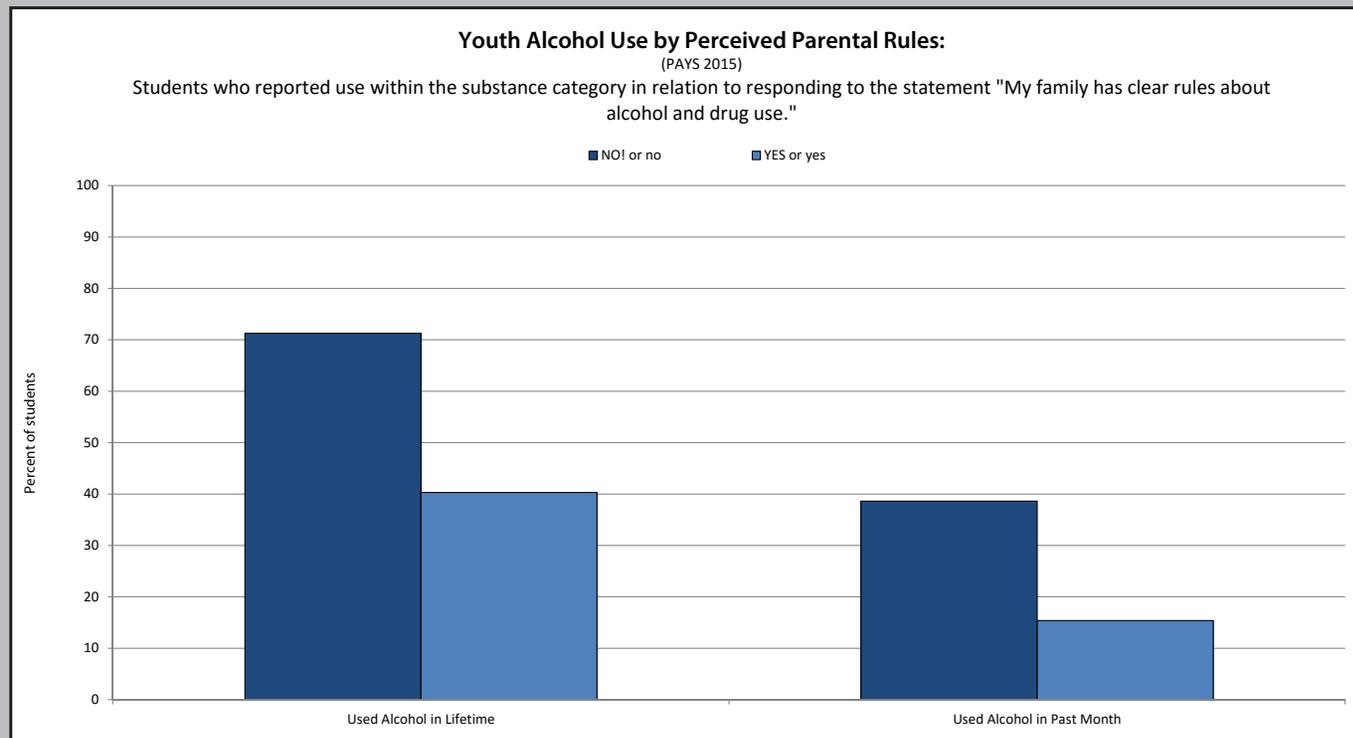
Table 6.1-1

## Alcohol Use and Parental Rules:

*% of students marking either NO!/no or YES!/yes to the statement "My family has clear rules about alcohol and drug use" who ALSO indicated using alcohol.*

	Used Alcohol in Lifetime	Used Alcohol in Past Month
NO! or no	71.3	38.6
YES! or yes	40.3	15.4

Figure 6.1-1



## 6.2 Academic Performance and Substance Use

Table 6.2-1 and Figure 6.2-1 show a clear relationship between substance use and academic performance. Of the youth who report getting better grades, fewer have tried ATODs and fewer are currently using ATODs than those who report poorer grades. Failing (D or F) youth indicate past month alcohol use rates that are nearly two times higher than “A” students’ alcohol use rates, past month marijuana use rates that are four times higher than the “A” students’ use rates, and past month cigarette use rates that are seven times higher than the use rate of “A” students. Similar and more dramatic differences can be seen for individual drugs.

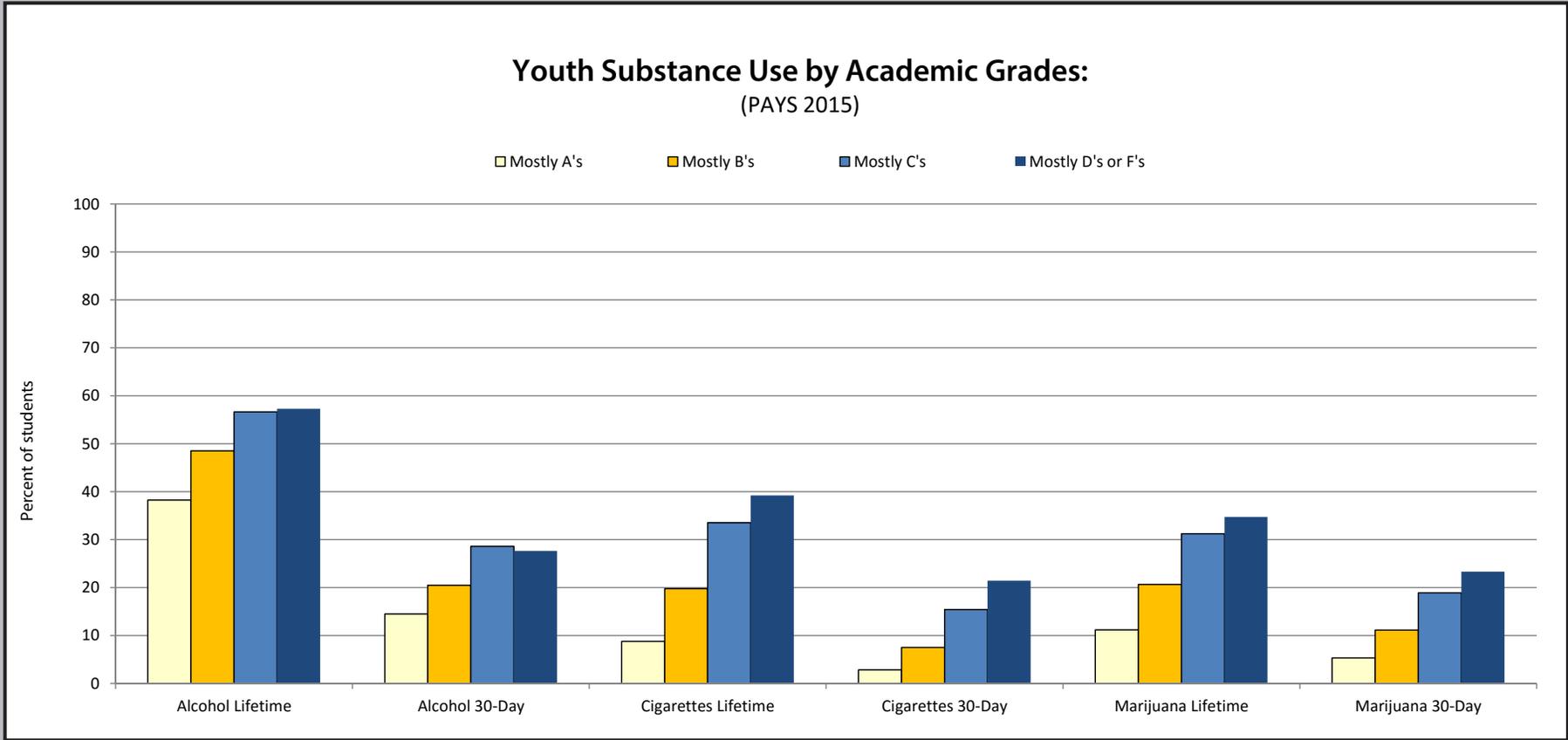
Obviously, the youth getting A’s are more invested in the education process and more bonded to school. The challenge of prevention programs is to develop methods of keeping all youth interested in learning and feeling attached to school. A survey of 1,000 youth on probation in Utah found that even though the probationers received poor grades and were often suspended from school, they still believed that education was important. Thus, many youth with lower grades have not given up on school and the education process, but are not able to succeed in a traditional school setting.

Table 6.2-1

### Academic Grades and Youth Substance Use: Percent of students within each grade category that reported use

	Mostly A's	Mostly B's	Mostly C's	Mostly D's or F's
Alcohol Lifetime	38.3	48.5	56.7	57.3
Alcohol 30-Day	14.5	20.5	28.6	27.7
Cigarettes Lifetime	8.8	19.8	33.5	39.2
Cigarettes 30-Day	2.8	7.5	15.4	21.5
Marijuana Lifetime	11.2	20.7	31.2	34.7
Marijuana 30-Day	5.3	11.1	18.9	23.3

Figure 6.2-1



## 6.3 Family Financial Stress and Substance Use

The 2015 PAYS questions asked students “How often do you worry that food at home will run out before your family gets money to buy more?” This question sheds light on the stressors that youth take on in situations of family financial distress. Looking at the responses to this question in relation to youth substance use shows a strong relationship between family financial stress and drug use, with more regular worry about food supplies corresponding with higher levels of youth drug use. For example, in Pennsylvania, of youth who said that they “never” worried about food at home, 8.5% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (8.7%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 13.7%. Of youth who indicated they worried about food once a month or more, 16.2% of those youth indicated regular marijuana use. Such a trend can be seen for each substance category in Table/Figure 6.3-1.

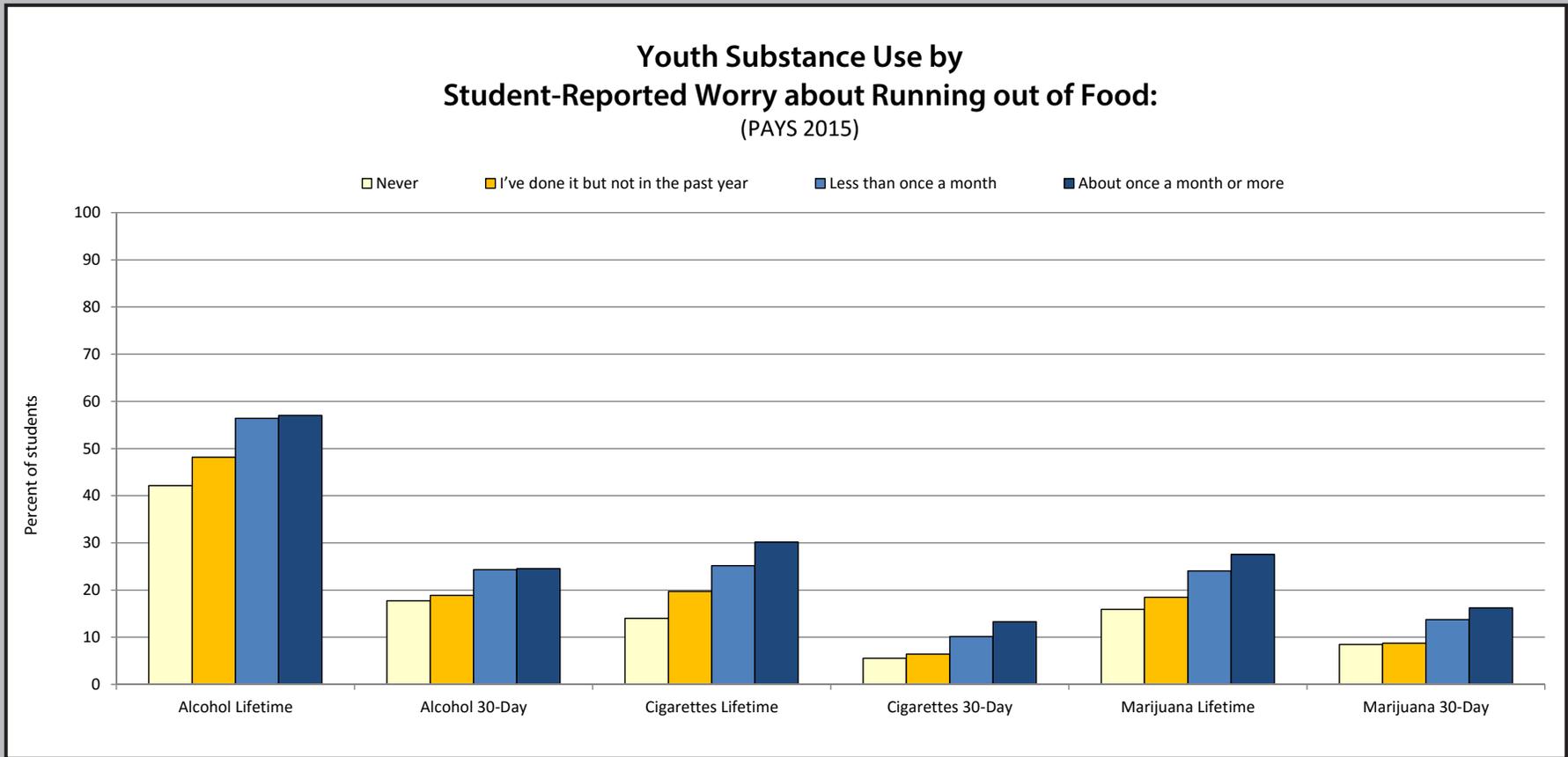
Table 6.3-1

### Family Financial Stress and Youth Substance Use:

*Use in relation to students responding to the question "How often do you worry that food at home will run out before your family gets money to buy more?"*

	Never	I've done it but not in the past year	Less than once a month	About once a month or more
Alcohol Lifetime	42.1	48.1	56.4	57.0
Alcohol 30-Day	17.7	18.9	24.3	24.6
Cigarettes Lifetime	14.0	19.7	25.2	30.2
Cigarettes 30-Day	5.6	6.4	10.2	13.3
Marijuana Lifetime	15.9	18.5	24.0	27.6
Marijuana 30-Day	8.5	8.7	13.7	16.2

Figure 6.3-1



## 6.4 Perceived Parental Acceptability and Substance Use

Parents influence the attitudes and behavior of their children, including their perceptions on drug and alcohol use. For example, parental approval of moderate drinking, even under parental supervision, substantially increases the likelihood of the young person using alcohol. Further, in families where parents involve children in their own drug or alcohol behavior, there is an increased likelihood that their children will use drugs in adolescence.

Table 6.4-1 and Figure 6.4-1 illustrate that a large majority of students perceive parental disapproval of substance use. Of all students, 93.0% indicated their parents felt it was “Wrong” or “Very wrong” to use tobacco, 90.9% perceived parental disapproval of marijuana use, 89.2% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.2% perceived parental disapproval of prescription drug use.

Table 6.4-2 and Figure 6.4-2 illustrate how even a small amount of perceived parental acceptability can lead to substance use. In PAYS, students were asked how wrong their parents felt it was to use different ATODs. The table to the right displays the percentage of students who have used marijuana in their lifetime and in the past 30 days in relation to their responses about their parents’ acceptance of marijuana use.

As can be seen, relatively few students (9.7% lifetime, 4.1% 30-day) use marijuana when their parents think it is “Very Wrong” to use it. In contrast, when a student believes that their parents agree with use somewhat (i.e., the parent only believes that it is “Wrong,” not “Very Wrong”), use increases to 39.1% for lifetime use and 21.4% for 30-day use. Rates of use continue to increase as the perceived parental acceptability increases.

These results make a strong argument for the importance of parents having strong and clear standards and rules when it comes to ATOD use.

Table 6.4-1

### Perception of Parental Disapproval (% Marking parents would feel it was “wrong” or “very wrong”)

Grade	Tobacco			Marijuana			Alcohol			Prescription drugs		
	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015	State 2011	State 2013	State 2015
6th	98.9	97.5	96.5	99.1	98.0	97.1	n/a	94.2	93.8	n/a	95.2	93.4
8th	97.2	96.4	95.4	97.3	95.9	94.7	n/a	94.1	92.5	n/a	96.6	94.1
10th	93.2	93.9	94.5	93.2	90.5	89.4	n/a	90.8	88.9	n/a	96.2	93.3
12th	86.5	86.9	86.2	89.1	85.7	83.3	n/a	85.6	81.8	n/a	94.6	92.0
All	93.8	93.5	93.0	94.6	92.3	90.9	n/a	91.1	89.2	n/a	95.7	93.2

Table 6.4-2

### Parental Acceptability and Youth Substance Use:

Use in relation to students responding to the question “How wrong do your parents feel it would be for you to smoke marijuana?”

	Marijuana Lifetime Use	Marijuana Past 30-Day Use
Not Wrong at All	48.9	34.7
A Little Bit Wrong	65.6	45.8
Wrong	39.1	21.4
Very wrong	9.7	4.1

Figure 6.4-1

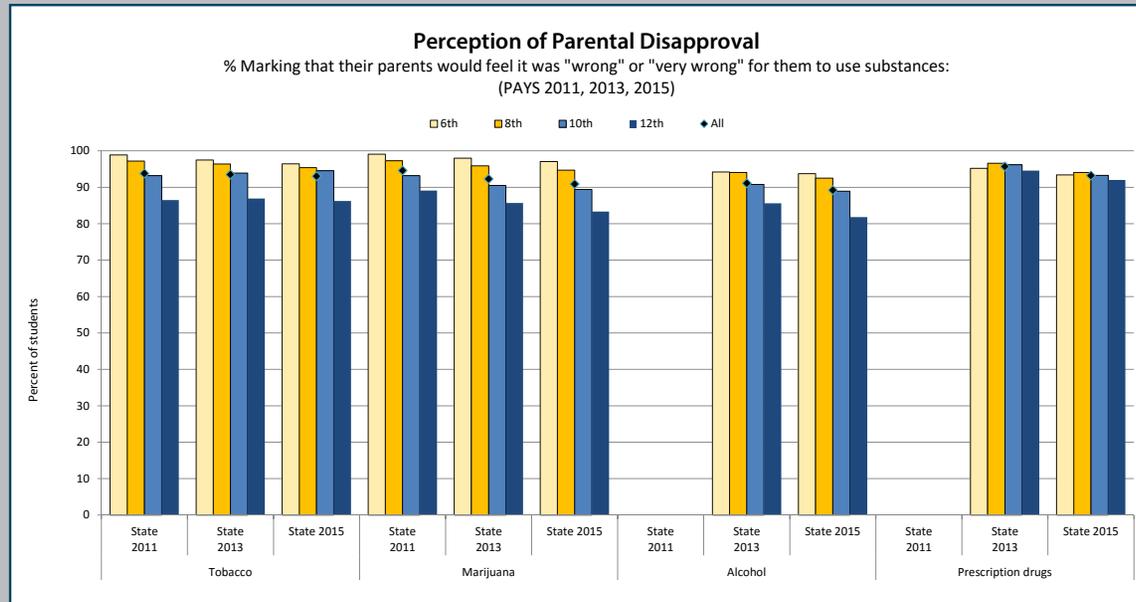
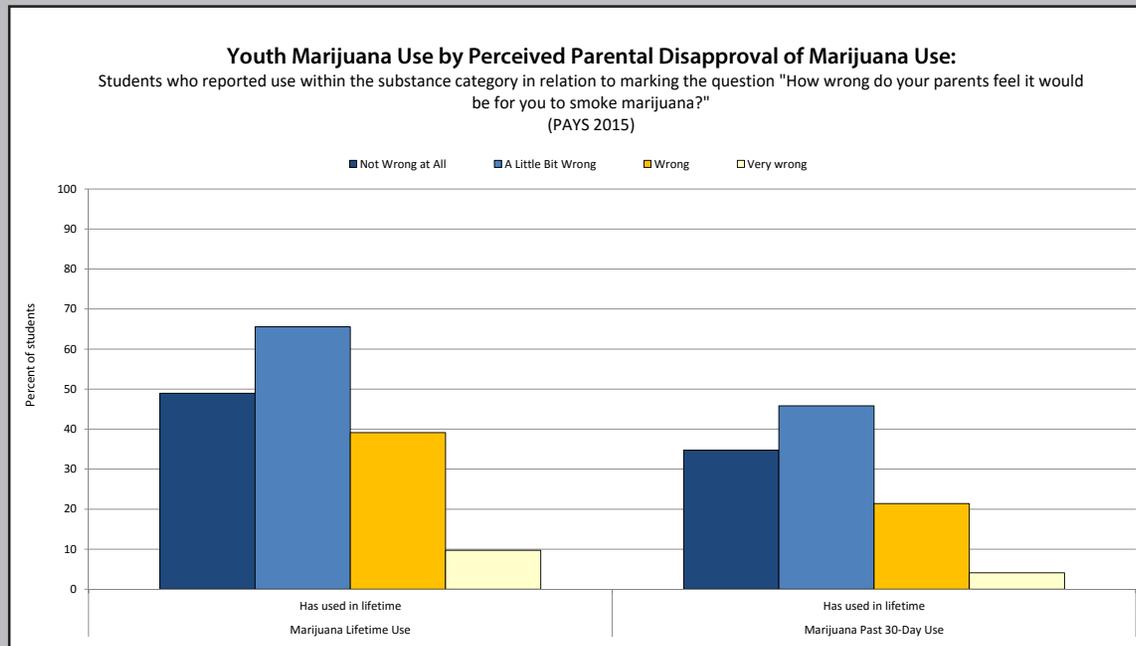


Figure 6.4-2



## 6.5 Perceived Peer Acceptability and Substance Use

During the elementary school years, children usually express anti-drug, anti-crime, and pro-social attitudes. They have difficulty imagining why people use drugs, commit crimes, and drop out of school. In middle school, as others they know participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This places youth at higher risk. The results provided in the following table and figure illustrate the relation between peer acceptability and individual drug use.

As with perceived parental acceptability, the slightest perceived peer acceptability seriously increases the chance that a student will use ATODs. In this section, lifetime and 30-day marijuana use results are looked at in relation to what youth thought were their chances of being seen as cool if they used marijuana. Table 6.5-1 and Figure 6.5-1 display the results.

When youth thought there was “No or very little chance” that they would be seen as cool if they used marijuana, only 8.7% had tried marijuana in their lifetime and only 4.1% had used it in the last month. However, when youth thought that there was even a “Little chance” that they would be seen as cool, marijuana use rates were over three times higher for lifetime use (28.6%) and over three times higher for past-month use (14.5%). Youth who thought that there was a “Very good chance” they would be seen as cool were nearly seven times more likely to use marijuana in the past month than youth who perceive that marijuana use was not cool.

These results better illustrate how peer acceptability puts youth at risk for ATOD use, and suggests that a good way to decrease use is to get youth to decrease acceptability of drugs.

Table 6.5-1

**Peer Acceptability and Youth Substance Use:**  
*Use in relation to students responding to the question "What are the chances you would be seen as cool if you smoked marijuana?"*

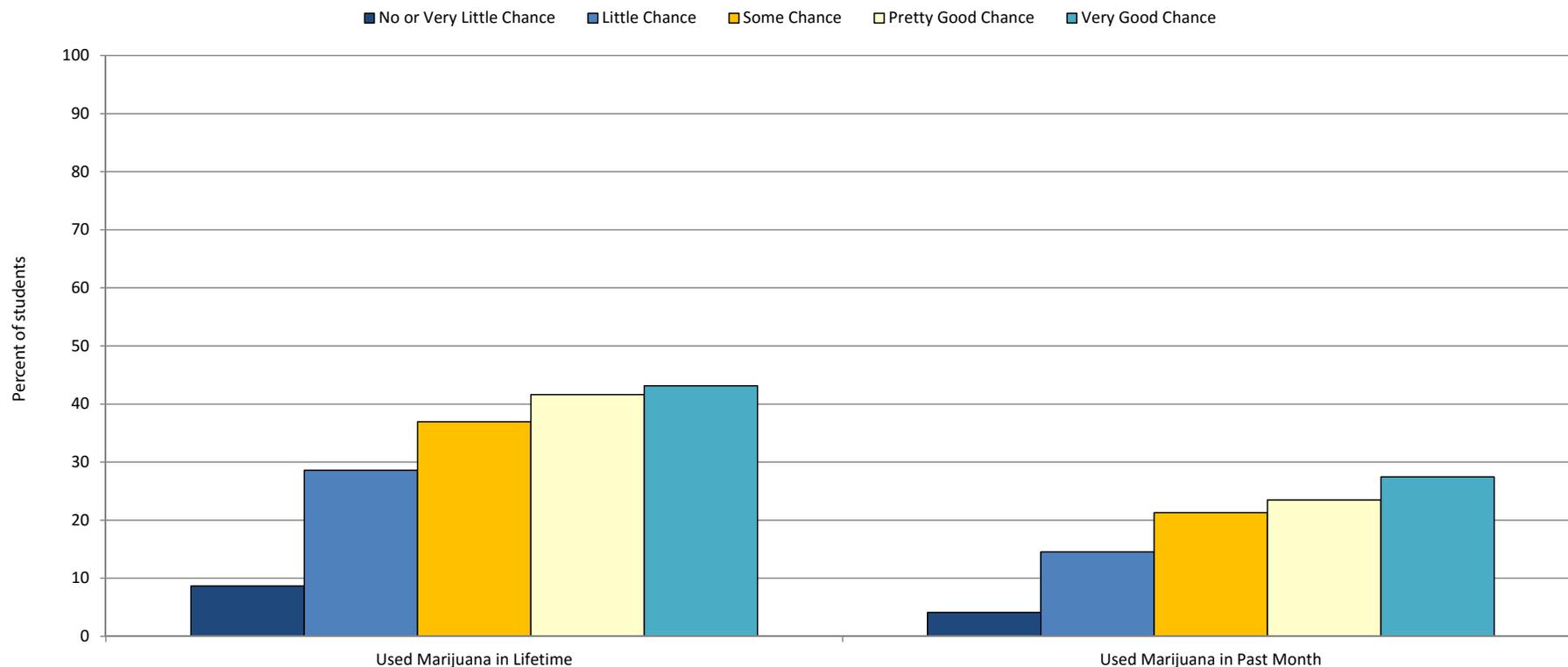
	Used Marijuana in Lifetime	Used Marijuana in Past Month
No or Very Little Chance	8.7	4.1
Little Chance	28.6	14.5
Some Chance	37.0	21.3
Pretty Good Chance	41.6	23.5
Very Good Chance	43.1	27.5

Figure 6.5-1

### Youth Marijuana Use by Perceived Peer Approval of Marijuana Use:

Students who reported use within the substance category in relation to marking the question "What are the chances you would be seen as cool if you smoked marijuana?"

(PAYS 2015)



## 6.6 Transitions/Mobility and Substance Use

The 2015 PAYS asked students to report the number of times they changed homes in the past year and in the past three years. Changing homes often means losing one's friends and learning the way around a new neighborhood or school. Neighborhoods with high rates of migration are also less cohesive and stable. Please note that a transitions and mobility question was also asked in 2013, but due to question wording differences, 2013 data will not be reported in this section.

The 2015 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 16.0% indicated having moved one or more times in the past year, and 25.7% indicated having moved one or more times in the past three years.

Table 6.6-2 shows students' responses to how many times they've moved in the past three years in relation to lifetime and past month substance use. The results indicate that higher numbers of moves are linked to higher substance use rates. For example, of students who indicated that they had not moved in the past three years, 15.8% of them had used marijuana in their lifetime; whereas of the students who indicated they had moved 3 or more times in past three years, 29.1% had used marijuana in their lifetime. Similar trends are seen for lifetime and past month use of all substances, with use rates gradually increasing upwards as the number of moves increases to 3 or more moves in the past three years.

**Table 6.6-1**  
**Transitions and Mobility**

	Changed homes 1 or 2 times in the past year	Changed homes 3 or more times in the past year	Changed homes 1 or 2 times in the past three years	Changed home 3 or more times in the past three years	Lived in a shelter, hotel, motel, car, campground, etc. due to loss of housing, lack of money, no other place to stay in the past year	Lived away from parents or guardians because you were kicked out, ran away, or were abandoned
6th	15.9	4.1	23.9	6.3	5.6	3.6
8th	14.0	2.4	20.7	5.7	4.2	4.6
10th	11.6	1.8	19.2	5.0	2.5	7.1
12th	12.3	2.2	17.8	4.8	3.3	9.8
All	13.4	2.6	20.3	5.4	3.9	6.3

**Table 6.6-2**  
**Changing Homes and Youth Substance Use:**  
*Percent of students reporting changing homes in the past three years in relation to substance use*

	Never	1 time	2 times	3 or more times
Alcohol Lifetime	42.6	46.5	50.3	55.5
Alcohol 30-Day	17.8	19.1	21.6	25.7
Cigarettes Lifetime	14.2	21.0	22.2	30.4
Cigarettes 30-Day	5.7	7.7	11.1	13.5
Marijuana Lifetime	15.8	20.1	22.1	29.1
Marijuana 30-Day	8.5	10.2	10.6	17.9

Figure 6.6-1

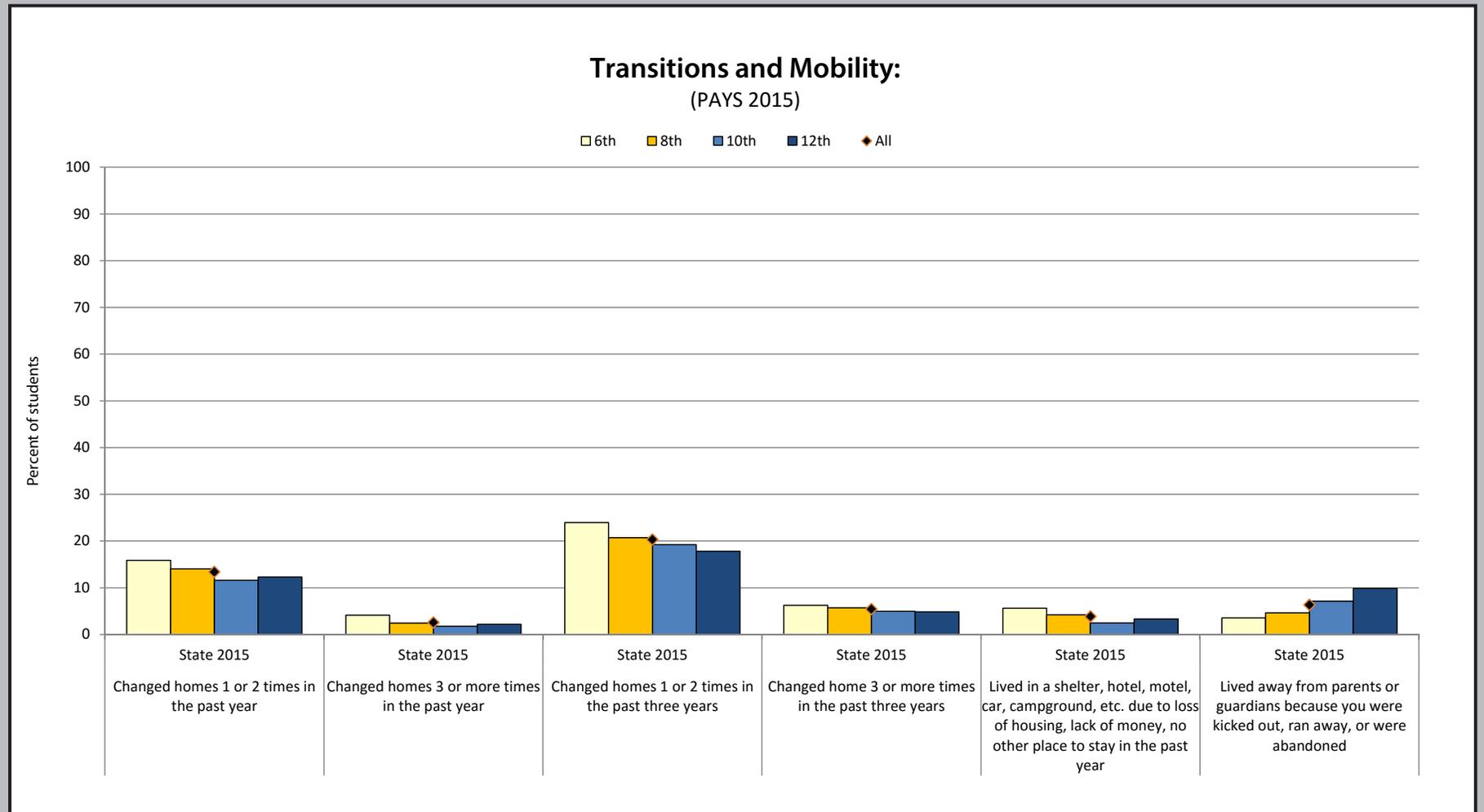
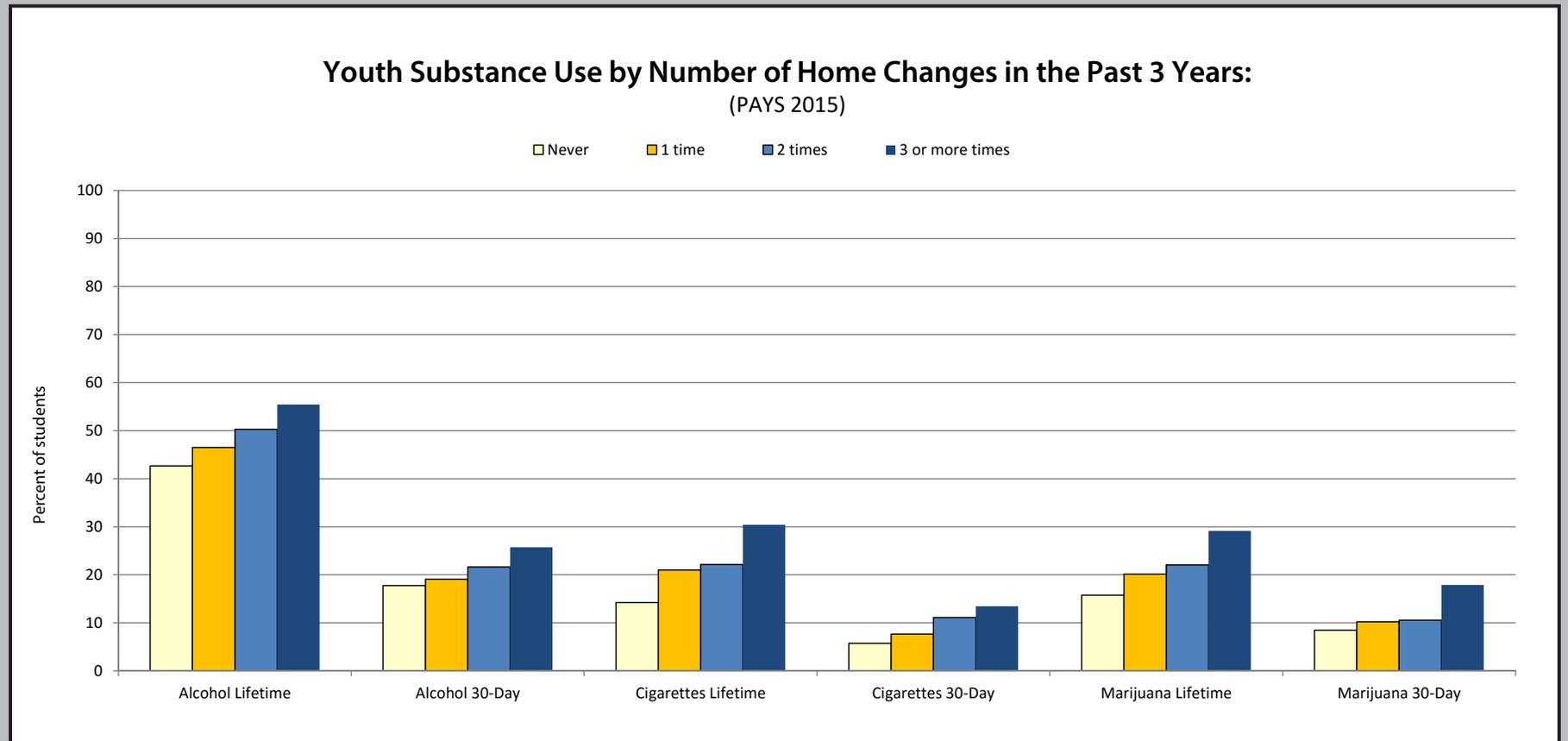


Figure 6.6-2



## Appendix A: Risk and Protective Factors and Their Associated Scales\*

\*Please note that not all of the scales listed here are covered through the PAYS form. This Appendix represents all of the scales that are referenced through Risk and Protective Factor prevention science. PAYS is only one source of data for prevention and that some of the risk and protective factors can be measured with data from other sources. Being able to gather risk and protective factor data from other sources is important as it allows the PAYS form to be as brief as possible and also allows room on the survey form for additional questions to be asked related to other prevention strategies/projects.

<i>Community Domain Protective Factors</i>	<b><u>Protective Factor</u></b>	<b><u>Associated Scales</u></b>
	<b>Community Opportunities for Prosocial Involvement</b>	No Scale
	<b>Community Rewards for Prosocial Involvement</b>	Community Rewards for Prosocial Involvement
<i>Community Domain Risk Factors</i>	<b><u>Risk Factor</u></b>	<b><u>Associated Scales</u></b>
	<b>Low Neighborhood Attachment and Community Disorganization</b>	Low Neighborhood Attachment Community Disorganization
	<b>Transitions &amp; Mobility</b>	No Scale
	<b>Laws and Norms Favorable to Drug Use, Firearms, and Crime</b>	Laws and Norms Favorable to Drug Use
	<b>Availability of Drugs and Firearms</b>	Perceived Availability of Drugs Perceived Availability of Handguns
	<b>Media Portrayals of Violence</b>	No Scale
	<b>Extreme Economic Deprivation</b>	No Scale
<i>Family Domain Protective Factors</i>	<b><u>Protective Factor</u></b>	<b><u>Associated Scales</u></b>
	<b>Family Attachment</b>	Family Attachment
	<b>Family Opportunities for Positive Involvement</b>	Family Opportunities for Positive Involvement
	<b>Family Rewards for Positive Involvement</b>	Family Rewards for Positive Involvement

Appendix A (Cont.): Risk and Protective Factors and Their Associated Scales

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*Family Domain Risk Factors*

<u>Risk Factor</u>	<u>Associated Scales</u>
<b>Family Management Problems</b>	Poor Family Management
<b>Family Conflict</b>	Family Conflict
<b>Family Involvement in the Problem Behavior</b>	Family History of Antisocial Behavior
<b>Favorable Parental Attitudes Towards The Problem Behavior</b>	Parental Attitudes Favorable to Antisocial Behavior Parental Attitudes Favorable to Drug Use

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*School Domain Protective Factors*

<u>Protective Factor</u>	<u>Associated Scales</u>
<b>School Opportunities for Prosocial Involvement</b>	School Opportunities for Prosocial Involvement
<b>School Rewards for Prosocial Involvement</b>	School Rewards for Prosocial Involvement

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*School Domain Risk Factors*

<u>Risk Factor</u>	<u>Associated Scales</u>
<b>Academic Failure Beginning in Late Elementary School</b>	Academic Failure
<b>Lack of Commitment to School</b>	Low School Commitment

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Appendix A (Cont.): Risk and Protective Factors and Their Associated Scales

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*Individual-Peer Protective Factors*

**Protective Factor**

**Associated Scales**

**Religiosity**

Religiosity

**Social Skills**

No Scale

**Belief in the Moral Order**

Belief in the Moral Order

**Prosocial Involvement**

Prosocial Involvement

**Rewards for Prosocial Involvement**

Rewards for Prosocial Involvement

**Interaction with Prosocial Peers**

Interaction with Prosocial Peers

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*Individual-Peer Risk Factors*

**Risk Factor**

**Associated Scales**

**Rebelliousness**

Rebelliousness

**Early and Persistent Antisocial Behavior**

Early Initiation of Drug Use  
Early Initiation of Antisocial Behavior

**Friends Who Engage in the Problem Behavior**

Interaction with Antisocial Peers  
Friends' Use of Drugs  
Rewards for Antisocial Behavior

**Favorable Attitudes Towards the Problem Behavior**

Attitudes Favorable Towards Antisocial Behavior  
Attitudes Favorable Towards Drug Use  
Perceived Risks of Drug Use  
Intention to Use

**Early Initiative of the Problem Behavior**

Early Initiative of Drug Use  
Early Initiative of Antisocial Behavior

**Gang Involvement**

Gang Involvement

**Constitutional Factors**

Sensation Seeking  
Depressive Symptoms

## Appendix B: PAYS Results, Frequency and Percentage for Each Response Category

Question	Response	%
<b>X1 How old are you?</b>	10 or younger	0.2
	11	17.2
	12	7.0
	13	17.9
	14	7.4
	15	18.8
	16	7.0
	17	17.5
	18	6.8
	19 or older	0.4
<b>X2 What grade are you in?</b>	6th	24.4
	8th	25.3
	10th	25.7
	12th	24.6
<b>X3 Are you of Hispanic, Latino, or Spanish origin?</b>	No, not of Hispanic, Latino, or Spanish origin	86.2
	Yes, Mexican, Mexican Am., Chicano	3.1
	Yes, Puerto Rican	5.7
	Yes, Cuban	0.5
	Yes, another Hispanic, Latino, or Spanish origin	4.5
<b>X4 What is your race? (Mark all that apply.)</b>	White	76.3
	Black, African American	10.9
	American Indian or Alaska Native	3.7
	Asian Indian, Japanese, Native Hawaiian, Chinese, Korean, Guamanian or Chamorro, Filipino, Vietnamese, Samoan, Other Asian.	6.1

Question	Response	%
<b>X5 Are you?</b>	female	49.9
	male	50.1
<b>X6 Think of where you live most of the time. Which of the following people live there with you? (Mark all that apply)</b>	Mother	89.7
	Stepmother	4.8
	Foster Mother	0.4
	Grandmother	8.6
	Aunt	2.8
	Father	69.1
	Stepfather	11.7
	Foster Father	0.3
	Grandfather	5.0
	Uncle	3.0
	Other Adults	2.7
	Older sister(s)	23.9
	Younger sister(s)	29.5
	Older stepsister(s)	1.9
	Younger stepsister(s)	2.4
Older brother(s)	26.2	
Younger brother(s)	29.1	
Older stepbrother(s)	2.0	
Younger stepbrother(s)	2.1	
Other children	3.4	
<b>X7 What is the language you use most often at home?</b>	English	93.1
	Spanish	4.4
	Another language	2.6

Question	Response	%
	How wrong do your parents feel it would be for you to:	
<b>X8A</b> Have one or two drinks of an alcoholic beverage(beer, wine, liquor) nearly every day?	Not at all wrong	3.6
	A little bit wrong	7.2
	Wrong	18.4
	Very wrong	70.7
<b>X8B</b> Use prescription drugs not prescribed to you?	Not at all wrong	3.5
	A little bit wrong	3.3
	Wrong	12.6
	Very wrong	80.5
<b>X9A</b> How many times in your lifetime have you had beer, wine, or hard liquor?	0 Occasions	56.1
	1-2 Occasions	16.0
	3-5 Occasions	9.4
	6-9 Occasions	4.8
	10-19 Occasions	5.1
	20-39 Occasions	3.5
	40+ Occasions	5.0
<b>X9B</b> How many times in your lifetime have you used marijuana?	0 Occasions	82.7
	1-2 Occasions	4.6
	3-5 Occasions	2.6
	6-9 Occasions	1.6
	10-19 Occasions	1.9
	20-39 Occasions	1.6
	40+ Occasions	4.9
<b>X9C</b> How many times in your lifetime have you used inhalants?	0 Occasions	95.5
	1-2 Occasions	2.6
	3-5 Occasions	0.8
	6-9 Occasions	0.3
	10-19 Occasions	0.2
	20-39 Occasions	0.2
	40+ Occasions	0.3

Question	Response	%
<b>X9D</b> How many times in your lifetime have you used cocaine?	0 Occasions	98.5
	1-2 Occasions	0.8
	3-5 Occasions	0.3
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
<b>X9E</b> How many times in your lifetime have you used crack?	40+ Occasions	0.1
	0 Occasions	99.5
	1-2 Occasions	0.3
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
<b>X9F</b> How many times in your lifetime have you used heroin?	20-39 Occasions	0.0
	40+ Occasions	0.1
	0 Occasions	99.4
	1-2 Occasions	0.3
	3-5 Occasions	0.1
	6-9 Occasions	0.1
<b>X9G</b> How many times in your lifetime have you used hallucinogens(acid, LSD, shrooms)?	10-19 Occasions	0.1
	20-39 Occasions	0.0
	40+ Occasions	0.1
	0 Occasions	97.2
	1-2 Occasions	1.5
	3-5 Occasions	0.7
	6-9 Occasions	0.2
	10-19 Occasions	0.2
	20-39 Occasions	0.1
	40+ Occasions	0.2

Question	Response	%
<b>X9H</b> How many times in your lifetime have you used methamphetamine(meth, crystal meth, crank)?	0 Occasions	99.5
	1-2 Occasions	0.3
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X9I</b> How many times in your lifetime have you used Ecstasy?	0 Occasions	97.9
	1-2 Occasions	1.3
	3-5 Occasions	0.4
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X9J</b> How many times in your lifetime have you used metaclorazoles (such as Super MCZ serum, MCZ22)?	0 Occasions	100.0
<b>X9K</b> How many times in your lifetime have you taken performance enhancing drugs without a doctor's orders?	0 Occasions	99.0
	1-2 Occasions	0.5
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X9L</b> How many times in your lifetime have you used prescription pain relievers without a doctor's orders?	0 Occasions	93.7
	1-2 Occasions	3.0
	3-5 Occasions	1.3
	6-9 Occasions	0.6
	10-19 Occasions	0.5
	20-39 Occasions	0.3
	40+ Occasions	0.5

Question	Response	%
<b>X9M</b> How many times in your lifetime have you used prescription tranquilizers without a doctor's orders?	0 Occasions	97.7
	1-2 Occasions	1.0
	3-5 Occasions	0.5
	6-9 Occasions	0.2
	10-19 Occasions	0.2
	20-39 Occasions	0.1
	40+ Occasions	0.2
<b>X9N</b> How many times in your lifetime have you used prescription stimulants without a doctor's orders?	0 Occasions	96.3
	1-2 Occasions	1.5
	3-5 Occasions	0.8
	6-9 Occasions	0.4
	10-19 Occasions	0.4
	20-39 Occasions	0.2
	40+ Occasions	0.4
<b>X9O</b> How many times in your lifetime have you used synthetic drugs?	0 Occasions	97.3
	1-2 Occasions	1.4
	3-5 Occasions	0.5
	6-9 Occasions	0.2
	10-19 Occasions	0.2
	20-39 Occasions	0.1
	40+ Occasions	0.2
<b>X9P</b> How many times in your lifetime have you used over-the-counter medicine (cough syrup, cold medicine, etc.) in order to get high?	0 Occasions	96.0
	1-2 Occasions	1.8
	3-5 Occasions	0.8
	6-9 Occasions	0.5
	10-19 Occasions	0.3
	20-39 Occasions	0.2
	40+ Occasions	0.4

Question	Response	%
<b>X10A</b> How many times in the past 30 days have you had beer, wine, or hard liquor?	0 Occasions	81.8
	1-2 Occasions	10.9
	3-5 Occasions	4.1
	6-9 Occasions	1.6
	10-19 Occasions	1.0
	20-39 Occasions	0.4
	40+ Occasions	0.3
<b>X10B</b> How many times in the past 30 days have you used marijuana?	0 Occasions	90.6
	1-2 Occasions	3.8
	3-5 Occasions	1.6
	6-9 Occasions	0.9
	10-19 Occasions	1.0
	20-39 Occasions	0.8
	40+ Occasions	1.2
<b>X10C</b> How many times in the past 30 days have you used inhalants?	0 Occasions	98.7
	1-2 Occasions	0.8
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X10D</b> How many times in the past 30 days have you used cocaine?	0 Occasions	99.7
	1-2 Occasions	0.3
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10E</b> How many times in the past 30 days have you used crack?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0

Question	Response	%
<b>X10F</b> How many times in the past 30 days have you used heroin?	0 Occasions	99.8
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10G</b> How many times in the past 30 days have you used hallucinogens(acid, LSD, shrooms)?	0 Occasions	99.4
	1-2 Occasions	0.5
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10H</b> How many times in the past 30 days have you used methamphetamines(meth, crystal meth, crank)?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10I</b> How many times in the past 30 days have you used Ecstasy?	0 Occasions	99.4
	1-2 Occasions	0.4
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10J</b> How many times in the past 30 days have you used metaclorazoles (such as Super MCZ serum, MCZ22)?	0 Occasions	100.0

Question	Response	%
<b>X10K</b> How many times in the past 30 days have you taken performance enhancing drugs without a doctor's orders?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10L</b> How many times in the past 30 days have you used prescription pain relievers without a doctor's orders?	0 Occasions	98.1
	1-2 Occasions	1.2
	3-5 Occasions	0.4
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X10M</b> How many times in the past 30 days have you used prescription tranquilizers without a doctor's orders?	0 Occasions	99.3
	1-2 Occasions	0.4
	3-5 Occasions	0.1
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10N</b> How many times in the past 30 days have you used prescription stimulants without a doctor's orders?	0 Occasions	98.7
	1-2 Occasions	0.8
	3-5 Occasions	0.3
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
	40+ Occasions	0.0

Question	Response	%
<b>X10O</b> How many times in the past 30 days have you used synthetic drugs?	0 Occasions	99.4
	1-2 Occasions	0.4
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
<b>X10P</b> How many times in the past 30 days have you used over-the-counter medicine (cough syrup, cold medicine, etc.) in order to get high?	0 Occasions	98.6
	1-2 Occasions	0.8
	3-5 Occasions	0.3
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
	40+ Occasions	0.1
<b>X11</b> Have you ever smoked cigarettes?	Never	83.7
	Once or twice	8.4
	Once in a while but not regularly	4.1
	Regularly in the past	1.7
	Regularly now	2.1
<b>X12</b> How frequently have you smoked cigarettes during the past 30 days?	Never	93.6
	Once or twice	3.1
	Once or twice per week	1.0
	About once a day	0.6
	More than once a day	1.7
<b>X13</b> Have you ever used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?	Never	91.6
	Once or twice	3.9
	Once in a while but not regularly	1.8
	Regularly in the past	0.9
	Regularly now	1.7

Question	Response	%
<b>X14</b> How frequently have you used smokeless tobacco during the past 30 days?	Never	95.9
	Once or twice	1.6
	Once or twice per week	0.6
	About once a day	0.5
	More than once a day	1.4
<b>X15</b> How frequently have you used an electronic vapor product such as e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, or hookah pens during the past 30 days?	Never	84.5
	Once or twice	9.9
	Once or twice per week	2.6
	About once a day	0.9
	More than once a day	2.1
<b>If you used an electronic vapor product such as e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, or hookah pens during the past 12 months, with which substances did you use it? (Mark all that apply)</b>		
<b>X16A</b> I did not vape	Yes	71.3
	No	28.7
<b>X16B</b> Just flavoring	Yes	16.8
	No	83.2
<b>X16C</b> Nicotine	Yes	4.8
	No	95.2
<b>X16D</b> Marijuana or hash oil	Yes	2.2
	No	97.8
<b>X16E</b> Other substances	Yes	0.3
	No	99.7
<b>X16F</b> I don't know	Yes	4.3
	No	95.7
<b>X17</b> If you wanted to get prescription drugs not prescribed to you, how easy would it be for you to get some?	Very hard	52.7
	Sort of hard	19.5
	Sort of easy	16.6
	Very easy	11.2

Question	Response	%
<b>X18A</b> How do you feel about someone having 1-2 drinks nearly every day?	Strongly disapprove	57.0
	Somewhat disapprove	15.3
	Neither approve or disapprove	17.5
	Approve	3.2
	Don't know/Can't say	7.0
<b>X18B</b> How do you feel about someone smoking 1 + packs of cigarettes a day?	Strongly disapprove	79.5
	Somewhat disapprove	7.9
	Neither approve or disapprove	7.5
	Approve	1.0
	Don't know/Can't say	4.2
<b>X18C</b> How do you feel about someone using marijuana once a month or more?	Strongly disapprove	59.3
	Somewhat disapprove	10.3
	Neither approve or disapprove	16.6
	Approve	8.9
	Don't know/Can't say	4.9
<b>X18D</b> How do you feel about someone using prescription drugs not prescribed to them?	Strongly disapprove	73.4
	Somewhat disapprove	12.1
	Neither approve or disapprove	8.7
	Approve	0.8
	Don't know/Can't say	4.9
<b>X19</b> Think back over the last two weeks. How many times have you had five or more alcoholic drinks in a row?	None	92.2
	Once	3.9
	Twice	2.0
	3-5 times	1.1
	6-9 times	0.3
	10 or more times	0.4
<b>X20A</b> How willing are you to try alcohol (beer, wine, coolers, hard liquor)?	I would never use it	40.5
	I probably wouldn't use it	14.5
	I'm not sure whether or not I would use it	17.7
	I would like to try it or use it	18.0
	I would use it any chance I got	9.3

Question	Response	%
<b>X20B</b> How willing are you to try marijuana (pot, hash, hemp, weed)?	I would never use it	67.8
	I probably wouldn't use it	8.8
	I'm not sure whether or not I would use it	8.6
	I would like to try it or use it	7.6
	I would use it any chance I got	7.1
<b>A1</b> During the last 4 weeks, how many whole days of school did you skip or 'cut'?	None	85.4
	1 day	7.8
	2 days	3.0
	3 days	1.7
	4 to 5 days	1.2
	6 to 10 days	0.4
	11 or more days	0.5
<b>A2</b> How important do you think the things you are learning in school are going to be for your later life?	Very important	39.1
	Quite important	22.6
	Fairly important	20.0
	Slightly important	13.5
	Not at all important	4.8
<b>A3</b> How interesting are most of your courses to you?	Very interesting and stimulating	18.3
	Quite interesting	28.1
	Fairly interesting	31.9
	Slightly Dull	13.5
	Very Dull	8.1
<b>A4</b> Putting them all together, what were your grades like last year?	Mostly A's	50.6
	Mostly B's	34.8
	Mostly C's	11.4
	Mostly D's	2.3
	Mostly F's	0.8
<b>A5</b> How often do you feel that the school work you are assigned is meaningful and important?	Never	9.6
	Seldom	15.1
	Sometimes	31.4
	Often	25.5
	Almost Always	18.4

Question	Response	%
<b>In the past year, how often did you:</b>		
<b>A6A</b> Enjoy being in school?	Never	11.2
	Seldom	12.1
	Sometimes	33.2
	Often	27.4
	Almost Always	16.0
<b>A6B</b> Hate being in school?	Never	15.7
	Seldom	21.1
	Sometimes	33.5
	Often	17.8
	Almost Always	11.8
<b>A6C</b> Try to do your best work in school?	Never	2.6
	Seldom	3.1
	Sometimes	11.7
	Often	28.4
	Almost Always	54.2
<b>A7</b> Are your school grades better than the grades of most students in your class?	NO!	5.8
	no	24.7
	yes	50.7
	YES!	18.8
<b>A8</b> Teachers ask me to work on special classroom projects.	NO!	14.5
	no	46.0
	yes	29.7
	YES!	9.8
<b>A9</b> There are lots of chances for students in my school to talk one-on-one with a teacher.	NO!	6.3
	no	15.2
	yes	48.2
	YES!	30.3
<b>A10</b> I have lots of chances to be part of class discussions or activities.	NO!	4.1
	no	9.3
	yes	51.9
	YES!	34.7

Question	Response	%
<b>A11</b> In my school, students have lots of chances to help decide things like class activities and rules.	NO!	12.5
	no	33.3
	yes	39.3
	YES!	15.0
<b>A12</b> There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.	NO!	3.1
	no	4.3
	yes	37.7
	YES!	54.9
<b>A13</b> My teacher(s) notices when I am doing a good job and lets me know about it.	NO!	7.1
	no	23.3
	yes	47.9
	YES!	21.6
<b>A14</b> I feel safe at my school.	NO!	5.2
	no	10.7
	yes	50.3
	YES!	33.8
<b>A15</b> The school lets my parents know when I have done something well.	NO!	18.6
	no	40.2
	yes	27.8
	YES!	13.4
<b>A16</b> My teachers praise me when I work hard in school.	NO!	11.9
	no	34.4
	yes	38.8
	YES!	14.9
<b>A17</b> My neighbors notice when I am doing a good job and let me know.	NO!	33.7
	no	40.3
	yes	18.7
	YES!	7.2

Question	Response	%
<b>A18</b> There are people in my neighborhood who are proud of me when I do something well.	NO!	26.8
	no	32.2
	yes	30.0
	YES!	11.0
<b>A19</b> There are people in my neighborhood who encourage me to do my best.	NO!	23.5
	no	27.4
	yes	34.0
	YES!	15.1
<b>A20</b> I like my neighborhood.	NO!	8.7
	no	12.7
	yes	46.2
	YES!	32.4
<b>A21</b> I'd like to get out of my neighborhood.	NO!	35.9
	no	35.4
	yes	17.5
	YES!	11.2
<b>A22</b> If I had to move, I would miss the neighborhood I now live in.	NO!	10.9
	no	18.9
	yes	36.0
	YES!	34.1
<b>How wrong do your friends feel it would be for you to:</b>		
<b>A23A</b> Have one or two drinks nearly every day?	Not Wrong at All	11.6
	A Little Bit Wrong	15.6
	Wrong	22.3
	Very wrong	50.4
<b>A23B</b> Smoke tobacco?	Not Wrong at All	11.3
	A Little Bit Wrong	10.2
	Wrong	18.7
	Very wrong	59.7

Question	Response	%
<b>A23C</b> Smoke marijuana?	Not Wrong at All	17.1
	A Little Bit Wrong	12.5
	Wrong	14.5
	Very wrong	55.9
<b>A23D</b> Use prescription drugs not prescribed to you?	Not Wrong at All	6.6
	A Little Bit Wrong	7.4
	Wrong	17.9
	Very wrong	68.1
<b>A24A</b> How easy is it to get beer, wine, or hard liquor?	Very hard	39.2
	Sort of hard	16.1
	Sort of easy	20.7
	Very easy	23.9
<b>A24B</b> How easy is it to get cigarettes?	Very hard	52.1
	Sort of hard	13.0
	Sort of easy	13.5
	Very easy	21.4
<b>A24C</b> How easy is it to get a handgun?	Very hard	71.4
	Sort of hard	13.4
	Sort of easy	7.2
	Very easy	8.0
<b>A24D</b> How easy is it to get a drug like cocaine, LSD, or amphetamines?	Very hard	77.9
	Sort of hard	11.0
	Sort of easy	5.7
	Very easy	5.4
<b>A24E</b> How easy is it to get marijuana?	Very hard	59.1
	Sort of hard	9.5
	Sort of easy	10.9
	Very easy	20.5

Question	Response	%
<b>A25</b> If a kid drank some beer, wine, or hard liquor (for example: vodka, whiskey, or gin) in your neighborhood, would he or she be caught by the police?	NO!	16.9
	no	42.8
	yes	25.2
	YES!	15.1
<b>A26</b> If a kid smoked marijuana in your neighborhood would he or she be caught by the police?	NO!	16.8
	no	38.7
	yes	25.3
	YES!	19.2
<b>How wrong would adults (over 21) in your neighborhood think it was for kids your age:</b>		
<b>A27A</b> How wrong would most adults in your neighborhood think it is for kids your age to drink alcohol	Not Wrong at All	5.2
	A Little Bit Wrong	14.4
	Wrong	28.7
	Very wrong	51.6
<b>A27B</b> To smoke cigarettes?	Not Wrong at All	5.8
	A Little Bit Wrong	9.8
	Wrong	24.4
	Very wrong	60.0
<b>A27C</b> To use marijuana?	Not Wrong at All	5.5
	A Little Bit Wrong	8.8
	Wrong	20.4
	Very wrong	65.3
<b>A28A</b> Have you ever belonged to a gang?	Yes	5.2
	No	94.8
<b>A28B</b> If you have ever belonged to a gang, did that gang have a name?	Yes	4.4
	No	7.3
	I have never belonged to a gang	88.3

Question	Response	%
<b>A29</b> How old were you when you first belonged to a gang?	Never have	94.8
	10 or younger	1.9
	11	0.8
	12	0.7
	13	0.7
	14	0.4
	15	0.3
	16	0.2
<b>A30</b> In the past 12 months, how many of your best friends have been a member of a gang?	17 or Older	0.2
	None	91.3
	1	3.3
	2	1.7
	3	0.9
<b>B1</b> My parents ask me what I think before most family decisions affecting me are made.	4	2.8
	NO!	11.4
	no	22.9
	yes	44.2
<b>B2</b> If I had a personal problem, I could ask my mom or dad for help.	YES!	21.5
	NO!	7.4
	no	10.7
	yes	38.3
<b>B3</b> My parents give me lots of chances to do fun things with them.	YES!	43.6
	NO!	5.9
	no	14.9
	yes	41.0
<b>B4</b> My parents notice when I am doing a good job and let me know about it.	YES!	38.1
	Never or Almost Never	8.5
	Sometimes	25.9
	Often	30.2
	All the time	35.3

Question	Response	%
<b>B5</b> How often do your parents tell you they're proud of you for something you've done?	Never or Almost Never	9.5
	Sometimes	23.6
	Often	31.3
	All the time	35.6
<b>B6A</b> Do you feel very close to your mother?	NO!	5.1
	no	8.3
	yes	26.6
	YES!	60.0
<b>B6B</b> Do you feel very close to your father?	NO!	11.0
	no	13.4
	yes	29.6
	YES!	46.1
<b>B7A</b> Do you share your thoughts and feelings with your mother?	NO!	9.9
	no	19.4
	yes	34.1
	YES!	36.6
<b>B7B</b> Do you share your thoughts and feelings with your father?	NO!	18.3
	no	27.5
	yes	31.5
	YES!	22.7
<b>B8A</b> Do you enjoy spending time with your mother?	NO!	4.2
	no	5.5
	yes	34.8
	YES!	55.5
<b>B8B</b> Do you enjoy spending time with your father?	NO!	8.3
	no	7.5
	yes	33.7
	YES!	50.5

Question	Response	%
<b>B9</b> When I am not at home, one of my parents knows where I am and who I am with.	NO!	2.5
	no	5.7
	yes	37.6
	YES!	54.1
<b>B10</b> If you skipped school, would you be caught by your parents?	NO!	4.6
	no	10.1
	yes	29.7
	YES!	55.6
<b>B11</b> My parents ask if I've gotten my homework done.	NO!	5.2
	no	13.2
	yes	34.3
	YES!	47.3
<b>B12</b> Would your parents know if you did not come home on time?	NO!	3.6
	no	12.9
	yes	36.5
	YES!	47.0
<b>B13</b> The rules in my family are clear.	NO!	2.9
	no	10.0
	yes	41.4
	YES!	45.8
<b>B14</b> If you carried a handgun without your parent's permission, would you be caught by them?	NO!	4.1
	no	8.7
	yes	21.4
	YES!	65.8
<b>B15</b> People in my family often insult or yell at each other.	NO!	25.1
	no	39.7
	yes	23.5
	YES!	11.7

Question	Response	%
<b>B16</b> We argue about the same things in my family over and over.	NO!	24.4
	no	35.7
	yes	27.6
	YES!	12.3
<b>B17</b> People in my family have serious arguments.	NO!	32.8
	no	39.4
	yes	18.4
	YES!	9.4
<b>B18</b> If you drank some alcohol without your parent's permission, would you be caught by them?	NO!	7.9
	no	23.1
	yes	23.0
	YES!	46.0
<b>B19</b> My family has clear rules about alcohol and drug use.	NO!	3.2
	no	10.7
	yes	28.5
	YES!	57.6
<b>About how many adults (over 21) have you known personally who in the past year have:</b>		
<b>B20A</b> Gotten drunk or high?	None	41.0
	1	13.8
	2	11.9
	3 or 4	12.4
	5 or more	20.9
<b>B20B</b> Used marijuana, crack, cocaine, or other drugs?	None	73.0
	1	9.4
	2	5.8
	3 or 4	5.0
	5 or more	6.8

Question	Response	%
<b>B20C Sold or dealt drugs?</b>	None	85.0
	1	5.8
	2	3.4
	3 or 4	2.3
	5 or more	3.5
<b>B20D Done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?</b>	None	83.7
	1	6.9
	2	3.3
	3 or 4	2.3
	5 or more	3.7
<b>How many of your brothers or sisters ever:</b>		
<b>B21A Drank beer, wine, or hard liquor?</b>	I don't have any	13.4
	None	61.8
	1	14.6
	2	6.0
	3 or 4	2.6
	5 or more	1.5
<b>B21B Smoked cigarettes?</b>	I don't have any	14.3
	None	67.5
	1	11.8
	2	3.6
	3 or 4	1.5
	5 or more	1.3
<b>B21C Smoked marijuana?</b>	I don't have any	14.7
	None	69.2
	1	9.9
	2	3.7
	3 or 4	1.6
	5 or more	1.0
<b>B21D Took a handgun to school?</b>	I don't have any	15.6
	None	83.4
	1	.5
	2	.1
	3 or 4	.1
	5 or more	.3
<b>B21E Been suspended or expelled from school?</b>	I don't have any	13.9
	None	69.6
	1	11.5
	2	3.0
	3 or 4	1.1
	5 or more	1.0
<b>B22 Has anyone in your family ever had a severe alcohol or drug problem?</b>	Yes	26.2
	No	73.8

Question	Response	%
<b>How wrong do your parents feel it would be for you to:</b>		
<b>B23A Pick a fight with someone?</b>	Not Wrong at All	4.6
	A Little Bit Wrong	17.7
	Wrong	34.9
	Very wrong	42.8
<b>B23B Steal anything worth more than \$5?</b>	Not Wrong at All	2.8
	A Little Bit Wrong	3.7
	Wrong	21.3
	Very wrong	72.2
<b>B23C Draw graffiti on buildings or other property (without the owner's permission)?</b>	Not Wrong at All	3.3
	A Little Bit Wrong	4.6
	Wrong	19.8
	Very wrong	72.3
<b>B23D Drink beer, wine, or hard liquor regularly?</b>	Not Wrong at All	3.6
	A Little Bit Wrong	6.7
	Wrong	18.1
	Very wrong	71.6
<b>B23E Smoke cigarettes?</b>	Not Wrong at All	3.5
	A Little Bit Wrong	3.4
	Wrong	12.5
	Very wrong	80.6
<b>B23F Smoke marijuana?</b>	Not Wrong at All	4.2
	A Little Bit Wrong	4.9
	Wrong	11.9
	Very wrong	79.0
<b>B24A How often do you worry that food at home will run out before your family gets money to buy more?</b>	Never	76.9
	I've done it but not in the past year	9.3
	Less than once a month	4.7
	About once a month	3.4
	2-3 times a month	2.8
	Once or more a week	2.8
<b>B24B How often do you skip a meal because your family didn't have enough money to buy food?</b>	Never	88.8
	I've done it but not in the past year	4.6
	Less than once a month	2.4
	About once a month	1.2
	2-3 times a month	1.3
	Once or more a week	1.6
<b>C1 I like to see how much I can get away with.</b>	Very false	51.9
	Somewhat false	23.9
	Somewhat true	19.4
	Very true	4.7
<b>C2 I ignore the rules that get in my way.</b>	Very false	57.7
	Somewhat false	24.8
	Somewhat true	13.8
	Very true	3.6

Question	Response	%
<b>C3 I do the opposite of what people tell me, just to get them mad.</b>	Very false	65.3
	Somewhat false	21.2
	Somewhat true	10.5
	Very true	2.9
<b>C4 In the past 12 months have you felt depressed or sad MOST days, even if you feel OK sometimes?</b>	NO!	34.2
	no	27.5
	yes	25.1
	YES!	13.3
<b>C5 Sometimes I think that life is not worth it.</b>	NO!	53.5
	no	22.5
	yes	16.2
	YES!	7.7
<b>C6 At times I think I am no good at all.</b>	NO!	41.8
	no	23.5
	yes	24.4
	YES!	10.2
<b>C7 All in all, I am inclined to think that I am a failure.</b>	NO!	52.1
	no	28.0
	yes	13.0
	YES!	6.9
<b>How much do you think people risk harming themselves (physically or in other ways) if they:</b>		
<b>C8A Take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?</b>	No risk	13.6
	Slight risk	19.9
	Moderate risk	28.5
	Great risk	38.0
<b>C8B Take five or more drinks of an alcoholic beverage (beer, wine, liquor) once or twice a week?</b>	No risk	11.8
	Slight risk	16.1
	Moderate risk	31.3
	Great risk	40.8
<b>C8C Smoke one or more packs of cigarettes a day?</b>	No risk	10.8
	Slight risk	8.1
	Moderate risk	16.4
	Great risk	64.8
<b>C8D Try marijuana once or twice?</b>	No risk	29.9
	Slight risk	23.8
	Moderate risk	17.6
	Great risk	28.6
<b>C8E Smoke marijuana once or twice a week?</b>	No risk	21.8
	Slight risk	16.8
	Moderate risk	23.1
	Great risk	38.3

Question	Response	%
<b>C8F Smoke marijuana regularly?</b>	No risk	17.8
	Slight risk	10.4
	Moderate risk	15.4
	Great risk	56.4
<b>C8G Use prescription drugs not prescribed to them?</b>	No risk	9.6
	Slight risk	8.0
	Moderate risk	21.0
	Great risk	61.4
<b>C9 How often do you attend religious services or activities?</b>	Never	28.7
	Rarely	29.2
	1-2 times a month	14.6
	Once a week or more	27.6
<b>How wrong do you think it is for someone your age to:</b>		
<b>C10A Stay away from school all day when their parents think they are at school?</b>	Not Wrong at All	4.8
	A Little Bit Wrong	13.7
	Wrong	29.9
	Very wrong	51.7
<b>C10B Take a handgun to school?</b>	Not Wrong at All	2.8
	A Little Bit Wrong	1.2
	Wrong	5.5
	Very wrong	90.5
<b>C10C Steal anything worth more than \$5?</b>	Not Wrong at All	3.6
	A Little Bit Wrong	8.4
	Wrong	26.5
	Very wrong	61.5
<b>C10D Pick a fight with someone?</b>	Not Wrong at All	6.2
	A Little Bit Wrong	16.3
	Wrong	31.6
	Very wrong	45.9
<b>C10E Attack someone with the idea of seriously hurting them?</b>	Not Wrong at All	3.7
	A Little Bit Wrong	4.9
	Wrong	17.1
	Very wrong	74.3
<b>C10F Drink beer, wine, or hard liquor regularly?</b>	Not Wrong at All	5.5
	A Little Bit Wrong	11.3
	Wrong	21.4
	Very wrong	61.8
<b>C10G Smoke cigarettes?</b>	Not Wrong at All	5.4
	A Little Bit Wrong	7.9
	Wrong	18.0
	Very wrong	68.7

Question	Response	%
<b>C10H Use LSD, cocaine, amphetamines or another illegal drug?</b>	Not Wrong at All	3.4
	A Little Bit Wrong	3.5
	Wrong	10.5
	Very wrong	82.6
<b>C10I Smoke marijuana?</b>	Not Wrong at All	13.2
	A Little Bit Wrong	12.4
	Wrong	13.5
	Very wrong	60.9
<b>C11A How many times have you done what feels good no matter what?</b>	Never	52.1
	I've done it, but not in the past year	12.1
	Less than once a month	9.6
	About once a month	7.2
	2 or 3 times a month	7.5
	Once a week or more	11.5
<b>C11B How many times have you done something dangerous because someone dared you to do it?</b>	Never	64.0
	I've done it, but not in the past year	17.7
	Less than once a month	9.1
	About once a month	4.5
	2 or 3 times a month	2.6
	Once a week or more	2.1
<b>C11C How many times have you done crazy things even if they are a little dangerous?</b>	Never	50.5
	I've done it, but not in the past year	20.7
	Less than once a month	12.8
	About once a month	6.8
	2 or 3 times a month	4.9
	Once a week or more	4.2
<b>What are the chances you would be seen as cool if you:</b>		
<b>C12A Carried a handgun?</b>	No or Very Little Chance	84.3
	Little Chance	8.2
	Some Chance	3.6
	Pretty Good Chance	1.7
	Very Good Chance	2.1
<b>C12B Began drinking alcoholic beverages once or twice a month?</b>	No or Very Little Chance	68.0
	Little Chance	13.4
	Some Chance	9.7
	Pretty Good Chance	5.4
	Very Good Chance	3.4
<b>C12C Smoked cigarettes?</b>	No or Very Little Chance	78.7
	Little Chance	11.2
	Some Chance	5.4
	Pretty Good Chance	2.3
	Very Good Chance	2.5
<b>C12D Smoked marijuana?</b>	No or Very Little Chance	67.2
	Little Chance	10.7
	Some Chance	9.6
	Pretty Good Chance	6.6
	Very Good Chance	5.9

Question	Response	%
<b>C13 I think it is okay to take something without asking as long as you get away with it.</b>	NO!	64.8
	no	29.9
	yes	4.1
	YES!	1.3
<b>C14 It is all right to beat up people if they start the fight.</b>	NO!	36.9
	no	23.5
	yes	24.1
	YES!	15.5
<b>C15 I think sometimes it's okay to cheat at school.</b>	NO!	49.6
	no	32.5
	yes	15.1
	YES!	2.8
<b>C16 It is important to be honest with your parents, even if they become upset or you get punished.</b>	NO!	7.8
	no	9.8
	yes	38.2
	YES!	44.3
<b>In the past year, how many of your four best friends have:</b>		
<b>C17A Been arrested?</b>	None	91.9
	1	4.5
	2	1.6
	3	0.7
	4	1.3
<b>C17B Dropped out of school?</b>	None	95.4
	1	3.1
	2	0.8
	3	0.2
	4	0.4
<b>C17C Stolen or tried to steal a motor vehicle?</b>	None	97.0
	1	1.8
	2	0.6
	3	0.2
	4	0.5
<b>C17D Been suspended from school?</b>	None	82.7
	1	10.0
	2	3.6
	3	1.3
	4	2.4
<b>C17E Carried a handgun?</b>	None	96.5
	1	1.8
	2	0.7
	3	0.3
	4	0.7

Question	Response	%
<b>C17F</b> Tried beer, wine, or hard liquor when their parents don't know about it?	None	63.5
	1	11.1
	2	8.8
	3	4.5
	4	12.0
<b>C17G</b> Smoked cigarettes?	None	80.2
	1	9.0
	2	4.7
	3	2.3
	4	3.9
<b>C17H</b> Sold illegal drugs?	None	90.7
	1	4.6
	2	2.3
	3	0.7
	4	1.8
<b>C17I</b> Used LSD, cocaine, amphetamines or another illegal drug?	None	93.8
	1	3.1
	2	1.4
	3	0.5
	4	1.2
<b>C17J</b> Used marijuana?	None	72.1
	1	8.9
	2	5.9
	3	3.5
	4	9.5
<b>During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways:</b>		
<b>D1A</b> Table games like poker or other card games, dice, backgammon, or dominoes	Not at all	87.5
	Less than once a month	8.3
	1 to 3 times a month	2.5
	More than 3 times a month	1.7
<b>D1B</b> Lottery (scratch cards, numbers, etc.)	Not at all	78.2
	Less than once a month	14.6
	1 to 3 times a month	4.9
	More than 3 times a month	2.2
<b>D1C</b> Sporting events or sports pools	Not at all	85.9
	Less than once a month	7.8
	1 to 3 times a month	3.1
	More than 3 times a month	3.2
<b>D1D</b> Online (Internet) gambling	Not at all	95.7
	Less than once a month	2.0
	1 to 3 times a month	1.0
	More than 3 times a month	1.3

Question	Response	%
<b>D1E</b> Personal skill games (such as pool, darts, coin tossing, video games)	Not at all	81.5
	Less than once a month	9.6
	1 to 3 times a month	4.4
	More than 3 times a month	4.5
<b>D1F</b> Bet/gambled in some other way	Not at all	87.9
	Less than once a month	7.9
	1 to 3 times a month	2.4
	More than 3 times a month	1.9
<b>D2</b> How many times (if any) have you, in your lifetime bet/gambled for money or anything of value?	0	63.2
	1-2	14.9
	3-5	9.3
	6-9	4.3
	10-19	3.7
	20-39	1.7
	40 or more	2.9
<b>D3</b> In the past 30 days have you gambled for money or anything of value?	Yes	10.9
	No	89.1
<b>D4A</b> Have you ever felt the need to bet more and more money?	Yes	4.5
	No	95.5
<b>D4B</b> Have you ever felt the need to lie to important people about how much you gamble?	Yes	2.5
	No	97.5
<b>If you drank alcohol during the past 12 months, how did you usually get it?</b>		
<b>D5A</b> Did not drink any alcohol	Yes	67.6
	No	32.4
<b>D5B</b> Was part of family or religious celebration	Yes	10.7
	No	89.3
<b>D5C</b> Bought it in a store	Yes	1.5
	No	98.5
<b>D5D</b> Bought it at a restaurant, bar, or club	Yes	1.2
	No	98.8
<b>D5E</b> Bought it at a public event such as a concert or sporting event	Yes	1.1
	No	98.9
<b>D5F</b> Gave someone money to buy it for me	Yes	7.6
	No	92.4
<b>D5G</b> Parents or friends' parents provided it to me	Yes	7.9
	No	92.1
<b>D5H</b> Friends, brothers, or sisters provided it to me	Yes	10.7
	No	89.3
<b>D5I</b> Other relatives (uncles, aunts, cousins, grandparents, etc.) provided it to me	Yes	4.0
	No	96.0

Question	Response	%
D5J Other source provided it to me	Yes	5.7
	No	94.3
D5K Took without permission, stole, or found it (my home, friends' home, store, etc.)	Yes	7.4
	No	92.6
If you used any prescription drugs without a prescription during the last 12 months, how did you get them?		
D6A I did not take any prescription drugs without a doctor's prescription.	Yes	90.5
	No	9.5
D6B Took them from a family member living in my home.	Yes	2.3
	No	97.7
D6C Took them from other relatives not living in my home.	Yes	0.7
	No	99.3
D6D Took them from someone not related to me.	Yes	0.8
	No	99.2
D6E A friend or family member gave them to me.	Yes	2.4
	No	97.6
D6F Bought them from someone.	Yes	1.6
	No	98.4
D6G Ordered them over the Internet.	Yes	0.5
	No	99.5
D7A How often have you driven a car while or shortly after drinking?	I don't drive	64.1
	Never	32.4
	Before, but not in the past year	1.0
	About once or twice a year	1.5
	About once or twice a month	0.4
	About once or twice a week	0.1
D7B How often have you driven a car while or shortly after smoking pot?	I don't drive	63.7
	Never	31.7
	Before, but not in the past year	1.1
	About once or twice a year	1.4
	About once or twice a month	0.8
	About once or twice a week	0.5
E1A In the past year, how often have you been threatened to be hit or beaten up on school property?	Never	79.7
	Once	10.0
	2 or 3 times	5.9
	4 or 5 times	1.5
	6 to 9 times	0.7
	10 or more times	2.0

Question	Response	%
E1B Been attacked and hit by someone or beaten up on school property?	Never	91.6
	Once	5.2
	2 or 3 times	1.7
	4 or 5 times	0.6
	6 to 9 times	0.3
	10 or more times	0.6
E1C Been threatened by someone with a weapon on school property?	Never	96.0
	Once	2.4
	2 or 3 times	0.8
	4 or 5 times	0.2
	6 to 9 times	0.1
	10 or more times	0.4
E1D Been attacked by someone with a weapon on school property?	Never	98.4
	Once	0.7
	2 or 3 times	0.3
	4 or 5 times	0.1
	6 to 9 times	0.0
	10 or more times	0.4
E2 How often in the past year, have you been offered, given, or sold an illegal drug at school?	Never	91.2
	1 or 2 times	5.6
	3 to 5 times	1.6
	6 to 9 times	0.5
	10 or more times	1.2
In the past 12 months, in which of the following activities did you participate?		
E3A Organized community activities (such as scouting, 4-H, service clubs, YMCA, etc.)	Yes	24.3
	No	75.7
E3B Family supported activities or hobbies (such as dance, gymnastics, hiking, biking, skating, etc.)	Yes	43.2
	No	56.8
E3C School-sponsored activities (such as sports, music, clubs, after school programs, etc.)	Yes	60.6
	No	39.4
E3D Faith-based activities (such as choir, youth group, missions, church leagues, etc.)	Yes	25.1
	No	74.9
E3E Job, employment	Yes	23.7
	No	76.3
E3F Volunteer	Yes	28.6
	No	71.4
E3G Other activities	Yes	31.2
	No	68.8
E3H I do not participate.	Yes	12.0
	No	88.0

Question	Response	%
<b>E4</b> How many times in your lifetime have you: Brought a weapon (such as a handgun, knife, etc.) to school?	0 times	94.4
	1 or 2 times	3.9
	3 to 5 times	0.6
	6 to 9 times	0.3
	10 to 19 times	0.2
	20 to 39 times	0.1
	40 or more times	0.6
<b>E5</b> How many times in the last 30 days have you: Brought a weapon (such as a handgun, knife, etc.) to school?	Never	98.4
	1 or 2 times	0.8
	3 to 5 times	0.2
	6 to 9 times	0.1
	10 or more times	0.5
How many times in the past year have you:		
<b>E6A</b> Attacked someone with the idea of seriously hurting them?	0 times	93.8
	1 or 2 times	4.5
	3 to 5 times	0.8
	6 to 9 times	0.3
	10 to 19 times	0.2
	20 to 39 times	0.1
	40 or more times	0.3
<b>E6B</b> Been arrested?	0 times	97.5
	1 or 2 times	1.9
	3 to 5 times	0.3
	6 to 9 times	0.1
	10 to 19 times	0.0
	20 to 39 times	0.0
	40 or more times	0.2
<b>E6C</b> Been drunk or high at school?	0 times	94.1
	1 or 2 times	3.0
	3 to 5 times	0.8
	6 to 9 times	0.6
	10 to 19 times	0.4
	20 to 39 times	0.2
	40 or more times	0.8
<b>E6D</b> Been suspended from school?	0 times	92.2
	1 or 2 times	5.4
	3 to 5 times	1.2
	6 to 9 times	0.5
	10 to 19 times	0.2
	20 to 39 times	0.1
	40 or more times	0.3
<b>E6E</b> Sold illegal drugs?	0 times	96.8
	1 or 2 times	1.2
	3 to 5 times	0.6
	6 to 9 times	0.3
	10 to 19 times	0.3
	20 to 39 times	0.2
	40 or more times	0.5

Question	Response	%
<b>E6F</b> In the past 12 months, have you done anything to harm yourself (such as cutting, scraping, burning) as a way to relieve difficult feelings, or to communicate emotions that may be difficult to express verbally?	0 times	84.9
	1 or 2 times	7.0
	3 to 5 times	2.7
	6 to 9 times	1.5
	10 to 19 times	1.3
	20 to 39 times	0.8
	40 or more times	1.8
<b>E7</b> In the past 12 months, have you or your family lived in a shelter, hotel, motel, car, campground, or someone else's home, etc. due to loss of housing, lack of money, or did not have another place to stay?	No	96.1
	Yes, but for less than a month	1.9
	Yes, but for more than a month	1.0
	Yes, for most of the year	1.0
<b>E8</b> In the past 12 months, did you ever live away from your parents or guardians because you were kicked out, ran away, or were abandoned?	Yes	6.3
	No	93.7
<b>E9A</b> How many times have you changed homes in the last year?	Never	84.0
	1	10.6
	2	2.8
	3 or more	2.6
<b>E9B</b> How many times have you changed homes in the last three years?	Never	74.2
	1	14.7
	2	5.6
	3 or more	5.4
<b>F1A</b> During the past 12 months, have you been bullied through texting and social media?	NO!	58.0
	no	25.6
	yes	11.0
	YES!	5.3
<b>F1B</b> Have you stayed home from school this year because you were worried about being bullied?	NO!	73.6
	no	21.1
	yes	3.2
	YES!	2.0
<b>F1C</b> Do adults at your school stop bullying when they see/hear it or when a student tells them about it?	NO!	16.5
	no	18.4
	yes	36.2
	YES!	28.9
<b>F1D</b> If you have been bullied in the past 12 months, how frequently were you bullied?	I was not bullied	83.1
	Everyday	3.7
	3 to 4 times a week	10.6
	4 to 5 times a week	1.0
	More than 5 times a week	1.6

Question	Response	%
<b>If you have been bullied in any way in the past 12 months, where were you bullied?</b>		
<b>F1E I was not bullied</b>	Yes	77.3
	No	22.7
<b>F1E On school property</b>	Yes	15.8
	No	84.2
<b>F1E At a school-sponsored event</b>	Yes	3.3
	No	96.7
<b>F1E While going to or from school</b>	Yes	5.0
	No	95.0
<b>F1E In the community</b>	Yes	4.9
	No	95.1
<b>F1E At home</b>	Yes	7.2
	No	92.8
<b>If you have been bullied in the past 12 months by other students, why were you bullied?</b>		
<b>F1F I have not been made fun of by other students</b>	Yes	68.3
	No	31.7
<b>F1F I don't know why</b>	Yes	9.6
	No	90.4
<b>F1F The color of my skin</b>	Yes	2.5
	No	97.5
<b>F1F My religion</b>	Yes	2.2
	No	97.8
<b>F1F My size (height, weight, etc.)</b>	Yes	10.2
	No	89.8
<b>F1F My accent</b>	Yes	1.3
	No	98.7
<b>F1F The country I was born in</b>	Yes	1.1
	No	98.9
<b>F1F The country my family (parents, grandparents) was born in</b>	Yes	1.3
	No	98.7
<b>F1F The way I look (clothing, hairstyle, etc.)</b>	Yes	12.6
	No	87.4
<b>F1F How much money my family has or does not have</b>	Yes	3.4
	No	96.6
<b>F1F My gender</b>	Yes	1.9
	No	98.1

Question	Response	%
<b>F1F My grades or social standing</b>	Yes	3.9
	No	96.1
<b>F1F My social standing</b>	Yes	5.3
	No	94.7
<b>F1F Social conflict</b>	Yes	4.3
	No	95.7
<b>F1F My sexual-orientation</b>	Yes	2.6
	No	97.4
<b>F1F I have a disability (learning or physical)</b>	Yes	1.7
	No	98.3
<b>F1F Some other reason</b>	Yes	10.8
	No	89.2
<b>F1G How wrong do you think it is for someone your age to bully another student or peer?</b>	Not Wrong at All	3.5
	A Little Bit Wrong	4.4
	Wrong	20.9
	Very wrong	71.1
<b>F1H How wrong do your parents feel it would be for you to bully another student or peer?</b>	Not Wrong at All	2.5
	A Little Bit Wrong	2.2
	Wrong	13.1
	Very wrong	82.1
<b>If you were hurt or abused by another person in the past 12 months, how were you hurt or abused?</b>		
<b>F2A Physical Injury</b>	Yes	8.4
	No	91.6
<b>F2B Threats</b>	Yes	9.2
	No	90.8
<b>F2C Emotional abuse, insults, name-calling</b>	Yes	21.4
	No	78.6
<b>F2D Isolation from friends and family</b>	Yes	4.4
	No	95.6
<b>F2E Control of what you were wearing</b>	Yes	3.1
	No	96.9
<b>F2F Control of whom you socialized</b>	Yes	4.5
	No	95.5
<b>F2G Other injury or abuse</b>	Yes	4.5
	No	95.5
<b>F3 In the past 12 months, did anyone on the Internet ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual?</b>	Yes	20.3
	No	79.7

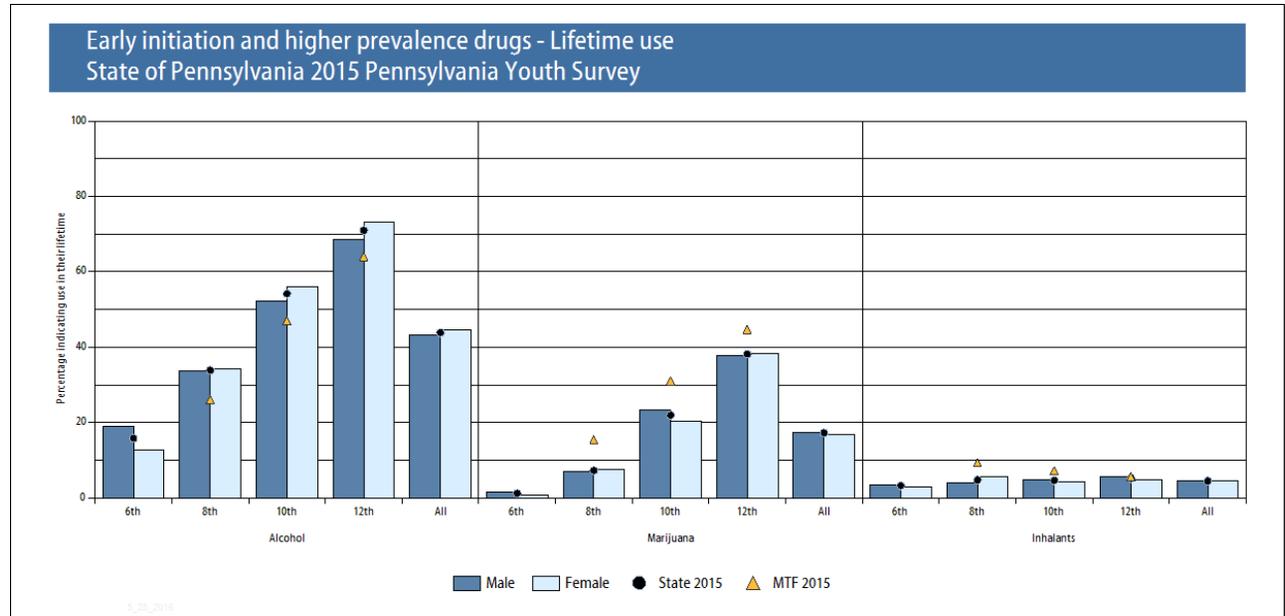
Question	Response	%
<b>F4A</b> Did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	Yes	21.5
	No	78.5
<b>F4B</b> Did you ever seriously consider attempting suicide?	Yes	16.0
	No	84.0
<b>F4C</b> Did you make a plan about how you would attempt suicide?	Yes	12.7
	No	87.3
<b>F4D</b> How many times did you actually attempt suicide?	0 times	90.5
	1 time	4.3
	2 or 3 times	3.3
	4 or 5 times	0.8
	6 or more times	1.1
<b>F4E</b> If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?	I did not attempt suicide	79.3
	Yes	2.3
	No	18.4
<b>F5</b> In the past 12 months, have any of your friends or family members close to you died?	Yes	40.3
	No	59.7

## Appendix C: PAYS Summary Data by Gender

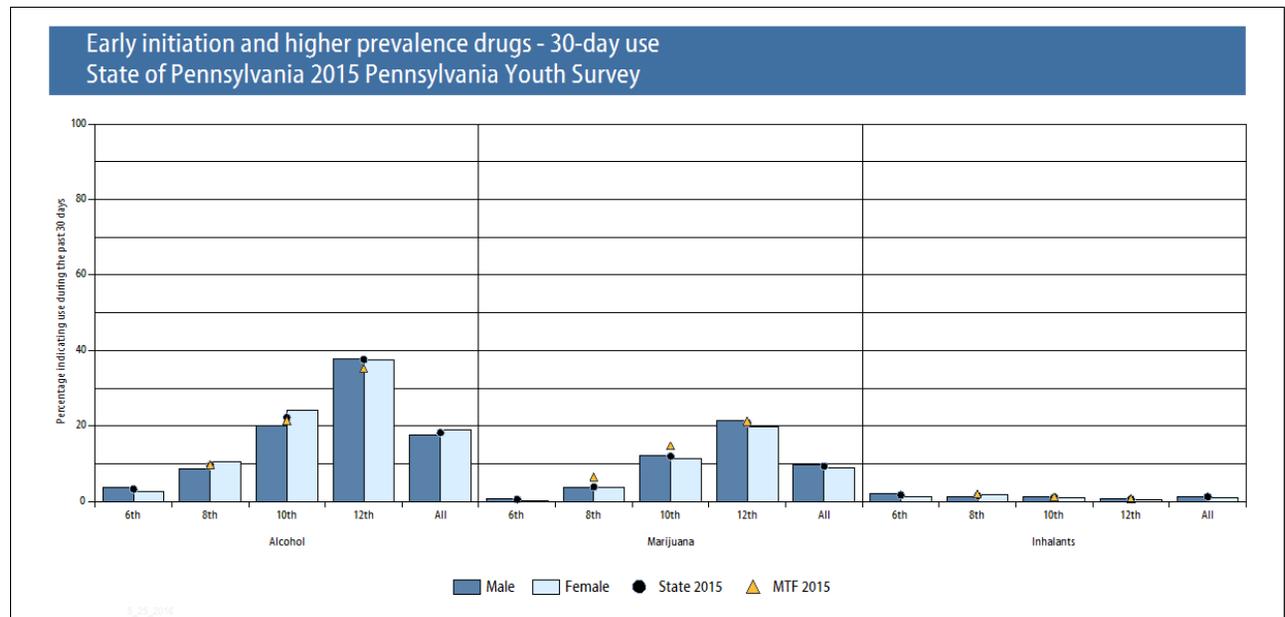
This Appendix presents data comparing male and female students. Please note that these data come from the weighted State Sample. To further review data by gender, please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) which allows users to run gender-level data by category, variable, or individual item

# ATOD Use and Access by Gender

## Early initiation and higher prevalence drugs - Lifetime use, Statewide Sample 2015 PAYS



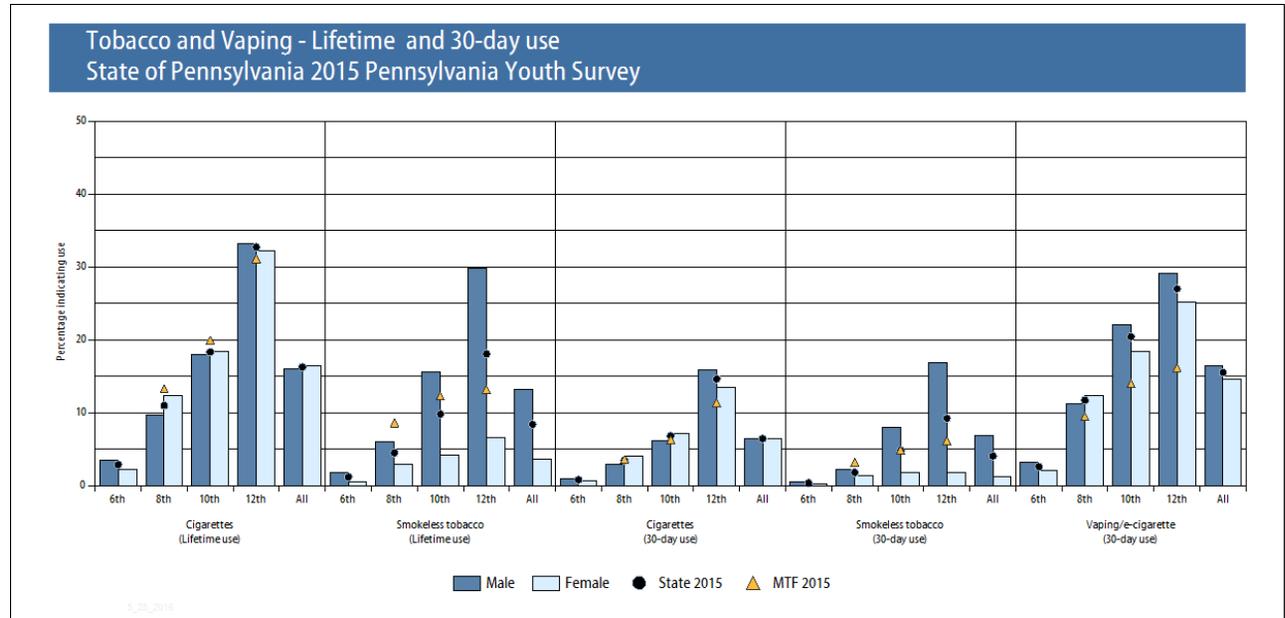
## Early initiation and higher prevalence drugs - 30-day use, Statewide Sample 2015 PAYS



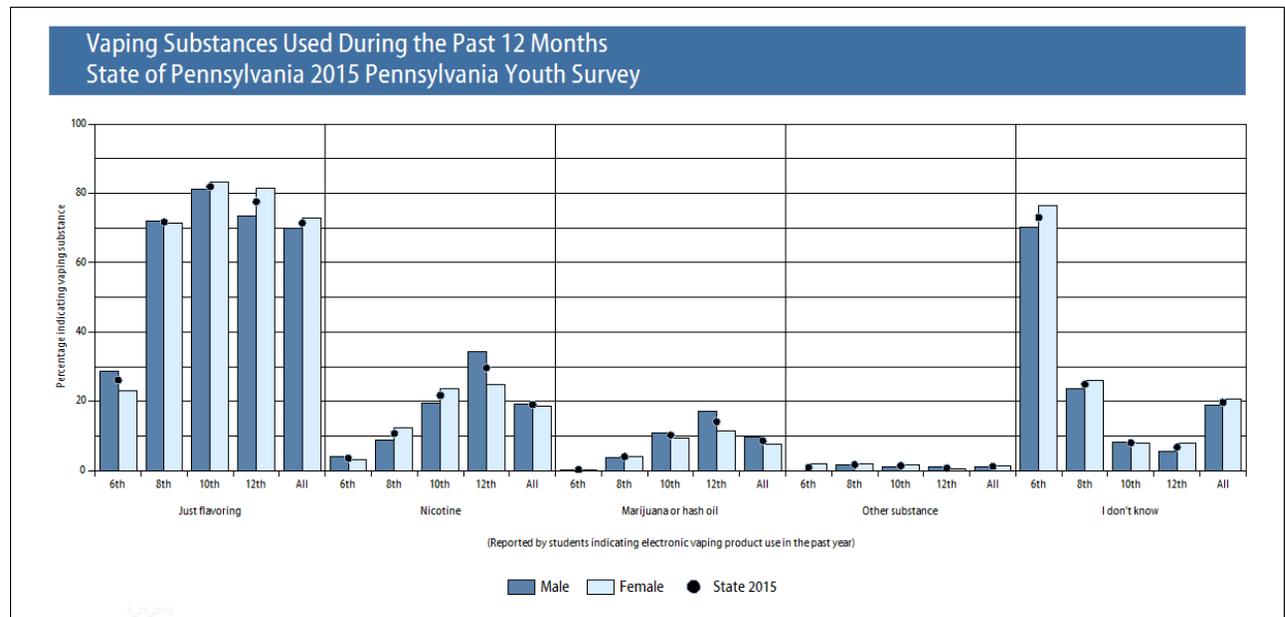
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Tobacco and Vaping - Lifetime and 30-day use, Statewide Sample 2015 PAYS



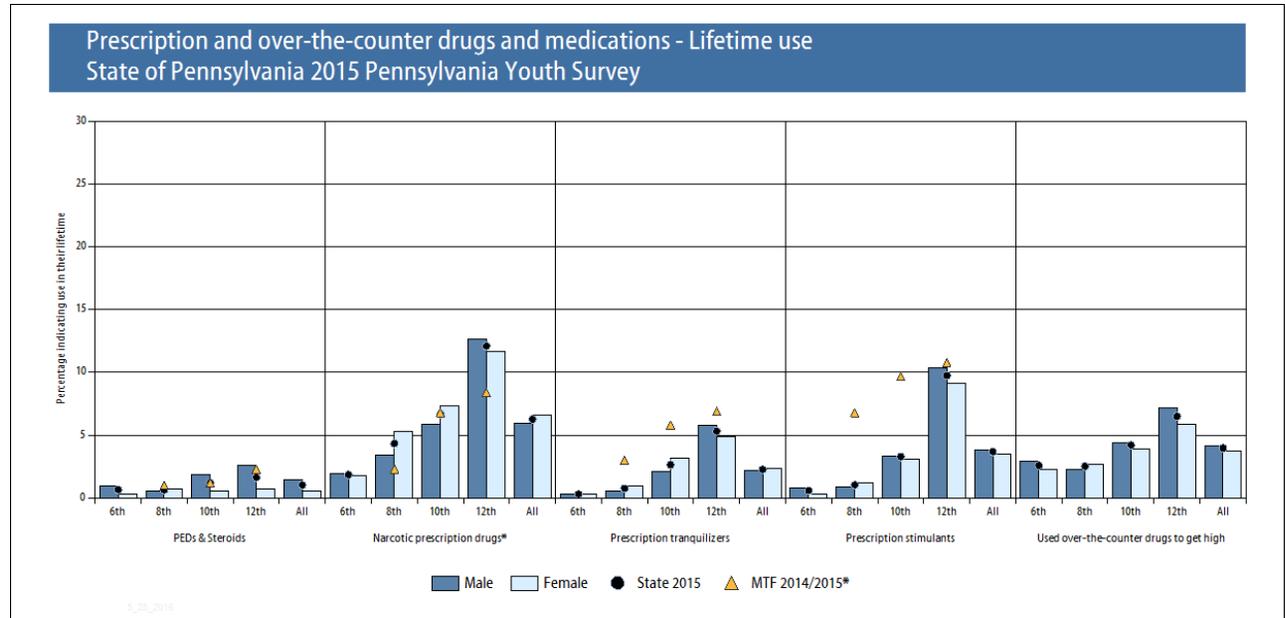
## Vaping Substances Used During the Past 12 Months (of past-year users), Statewide Sample 2015 PAYS



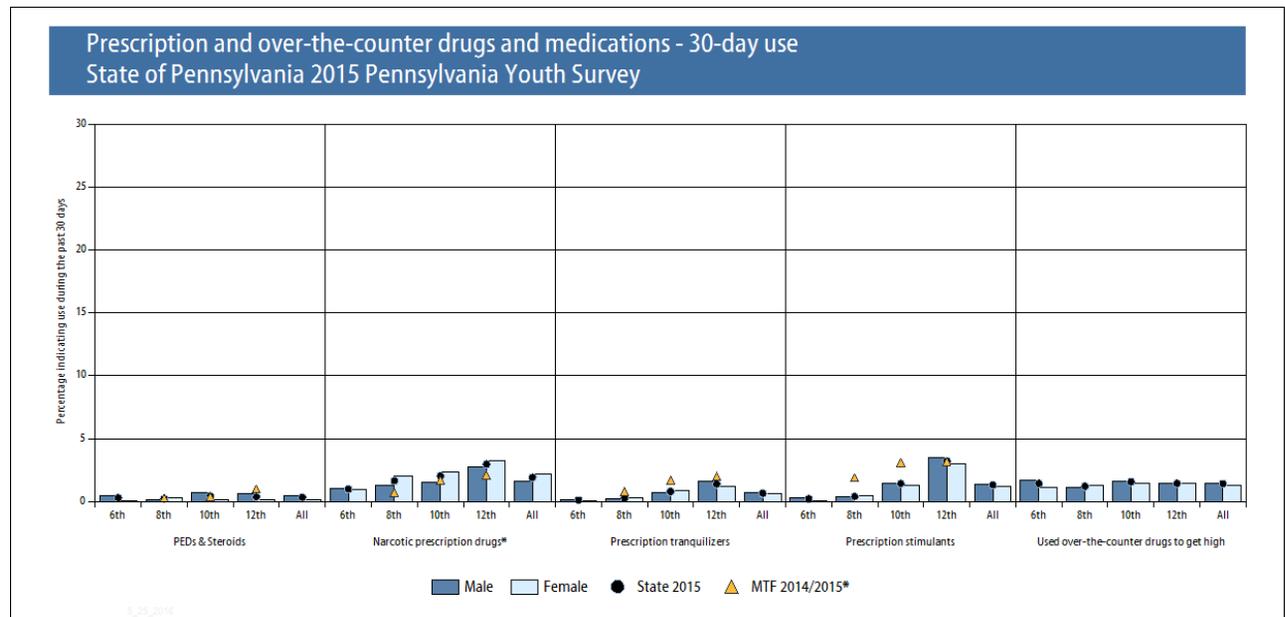
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Prescription and over-the-counter drugs and medications - Lifetime, Statewide Sample 2015 PAYS



## Prescription and over-the-counter drugs and medications - 30-day use, Statewide Sample 2015 PAYS

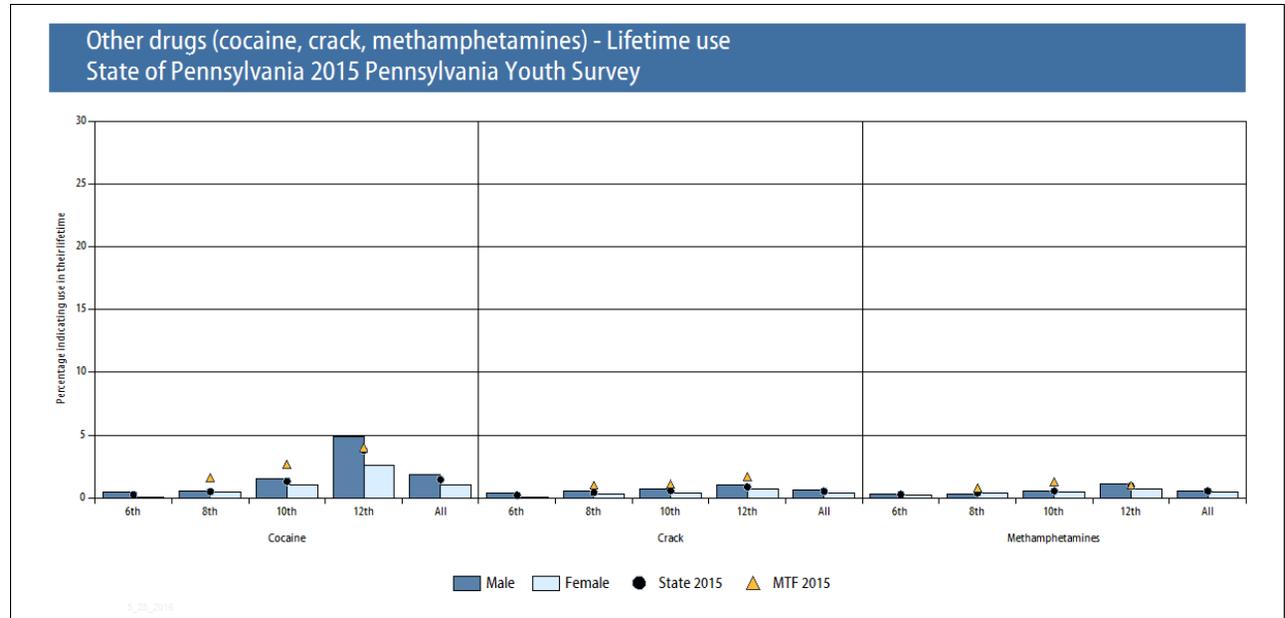


NOTE:  
\*The most recent national data available for lifetime narcotic prescription drug use in 8th and 10th graders are from the 2014 Monitoring the Future administration. (However, 12th grade data are from the 2015 administration.)

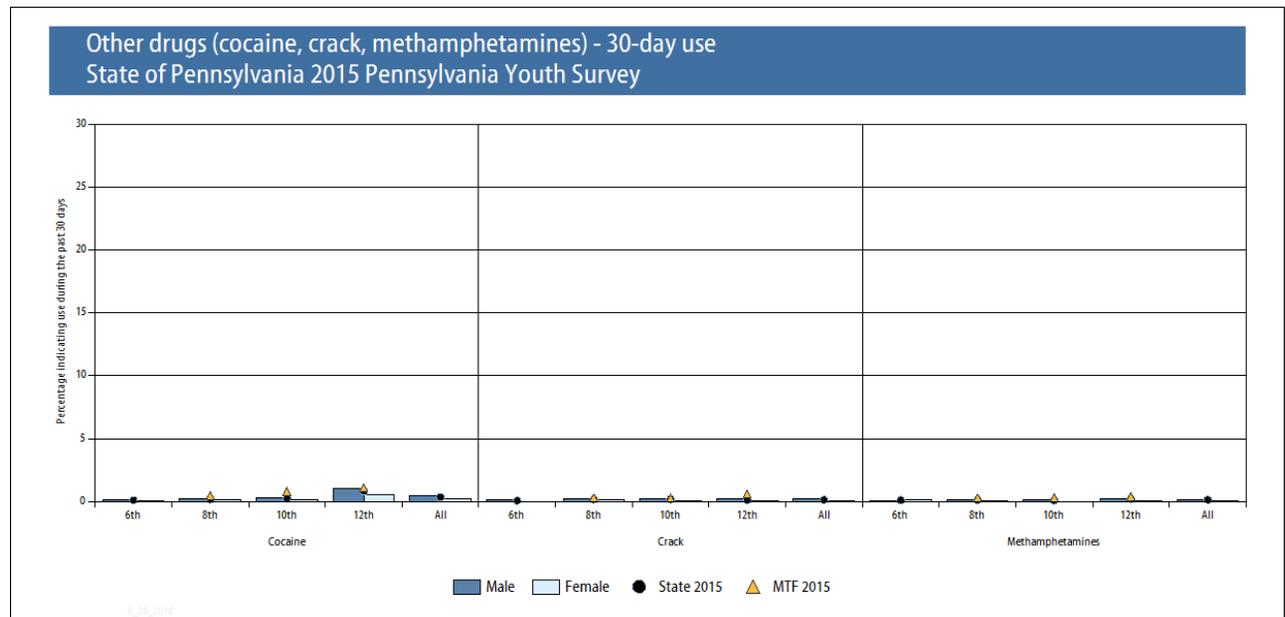
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Other drugs (cocaine, crack, methamphetamines) - Lifetime, Statewide Sample 2015 PAYS



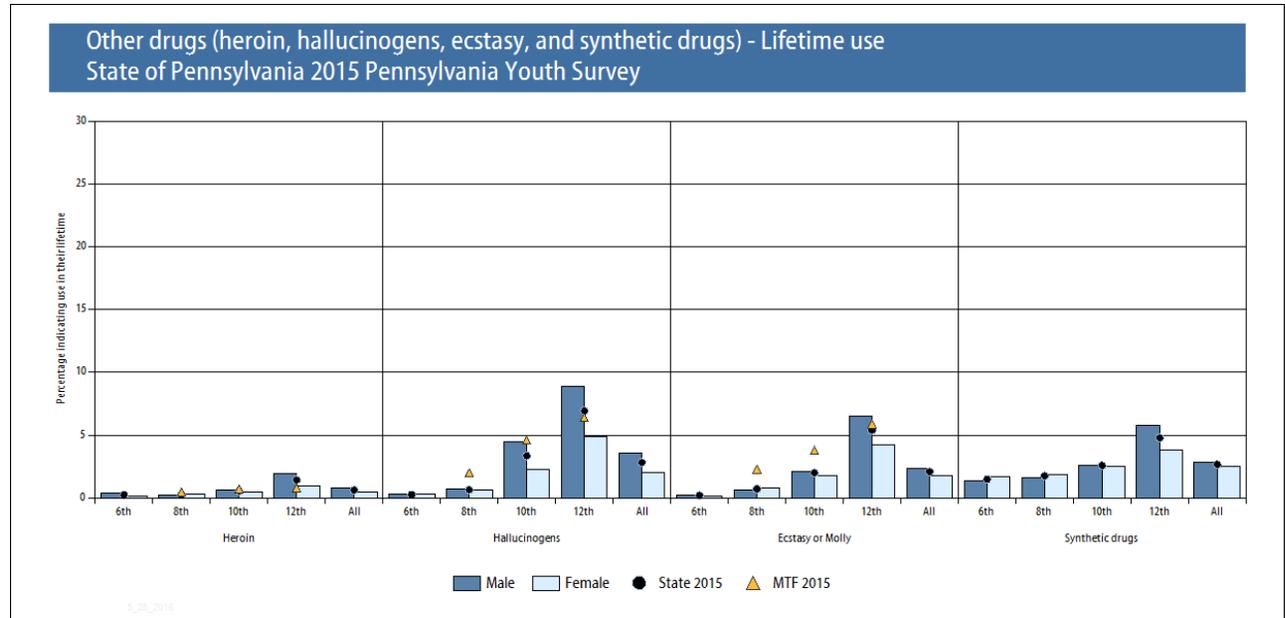
## Other drugs (cocaine, crack, methamphetamines) - 30-day use, Statewide Sample 2015 PAYS



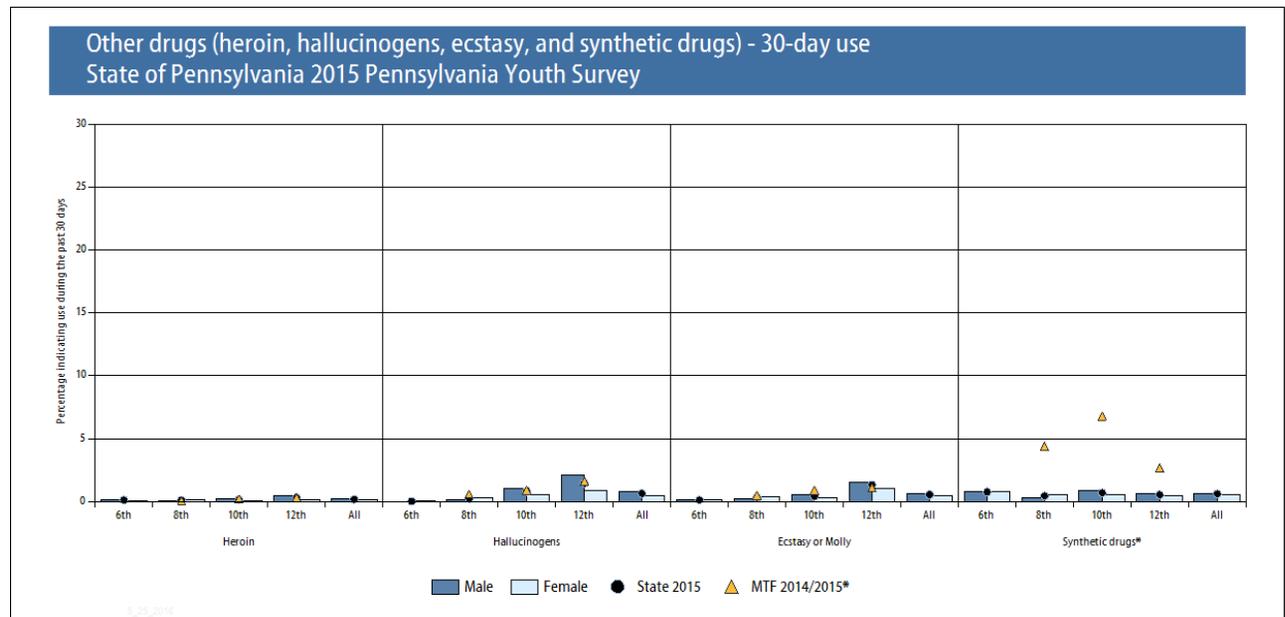
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use, Statewide Sample 2015 PAYS



## Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use, Statewide Sample 2015 PAYS

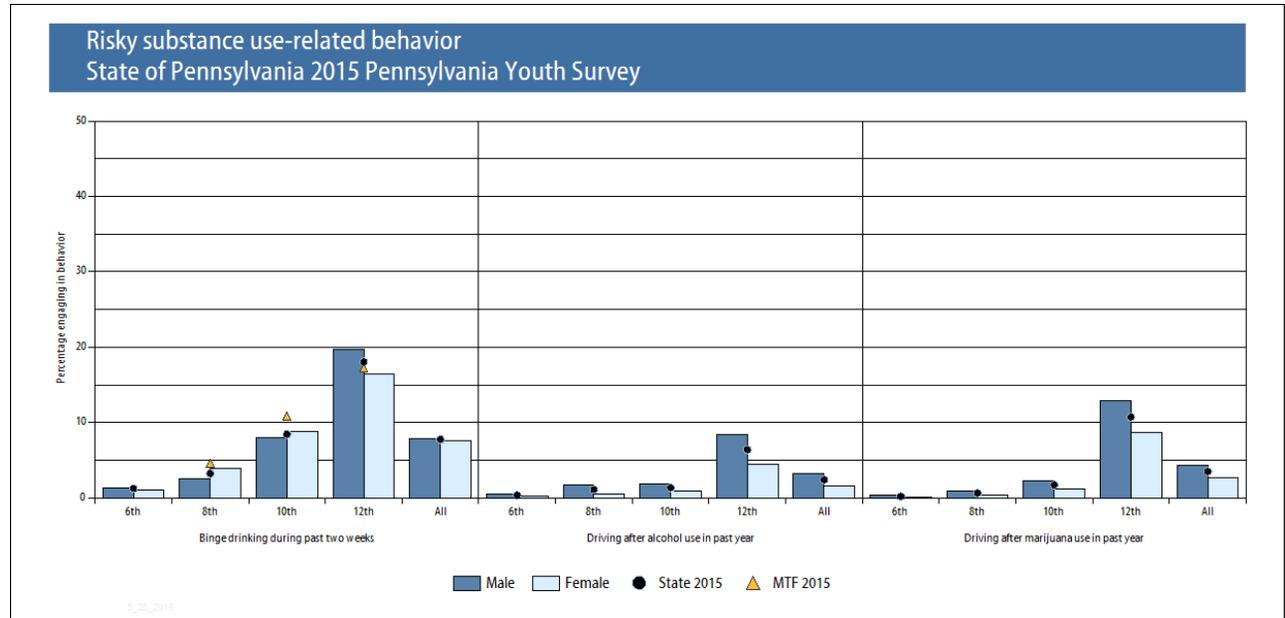


NOTE:  
\*The most recent national data available for 30-day synthetic drug use are from the 2014 Monitoring the Future administration.

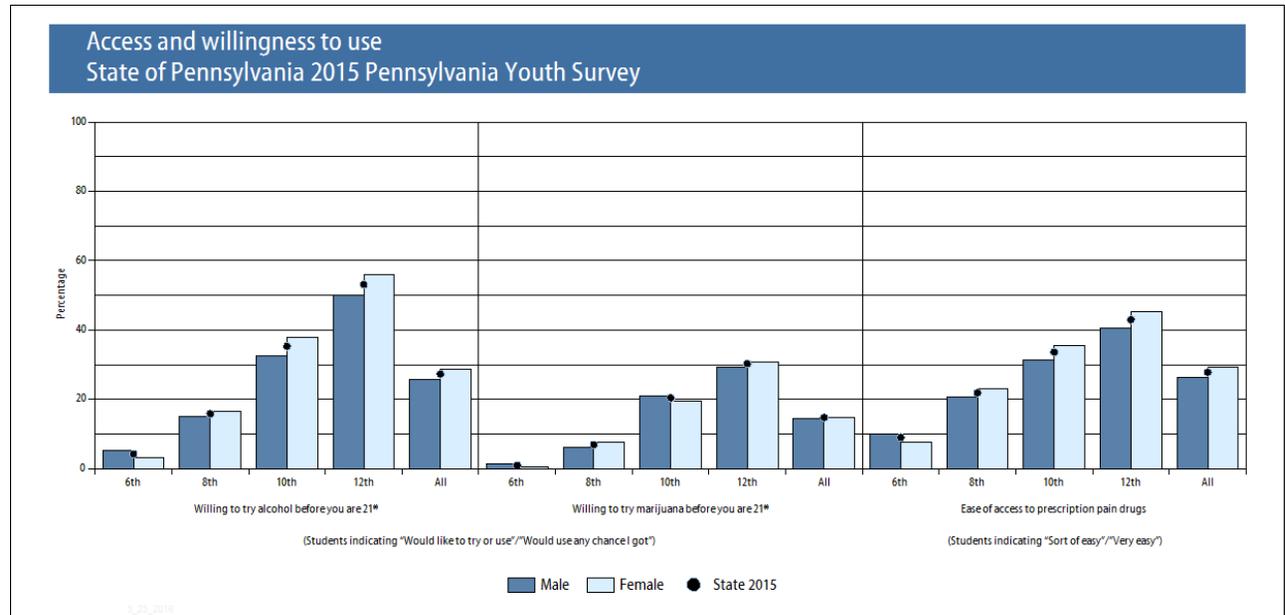
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Risky substance use-related behavior, Statewide Sample 2015 PAYS



## Access and willingness to use, Statewide Sample 2015 PAYS

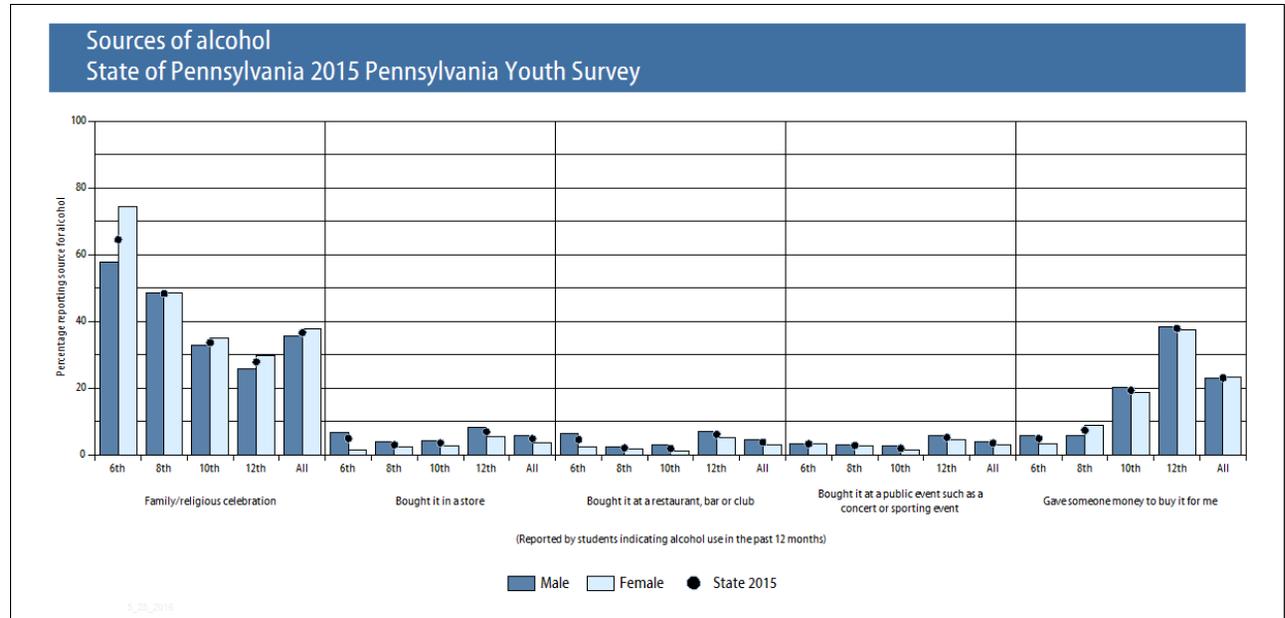


NOTE:  
\*Questions were revised in 2015 to add the qualifier "before you are 21." Rates reported in 2015 may be lower than previous years' data.

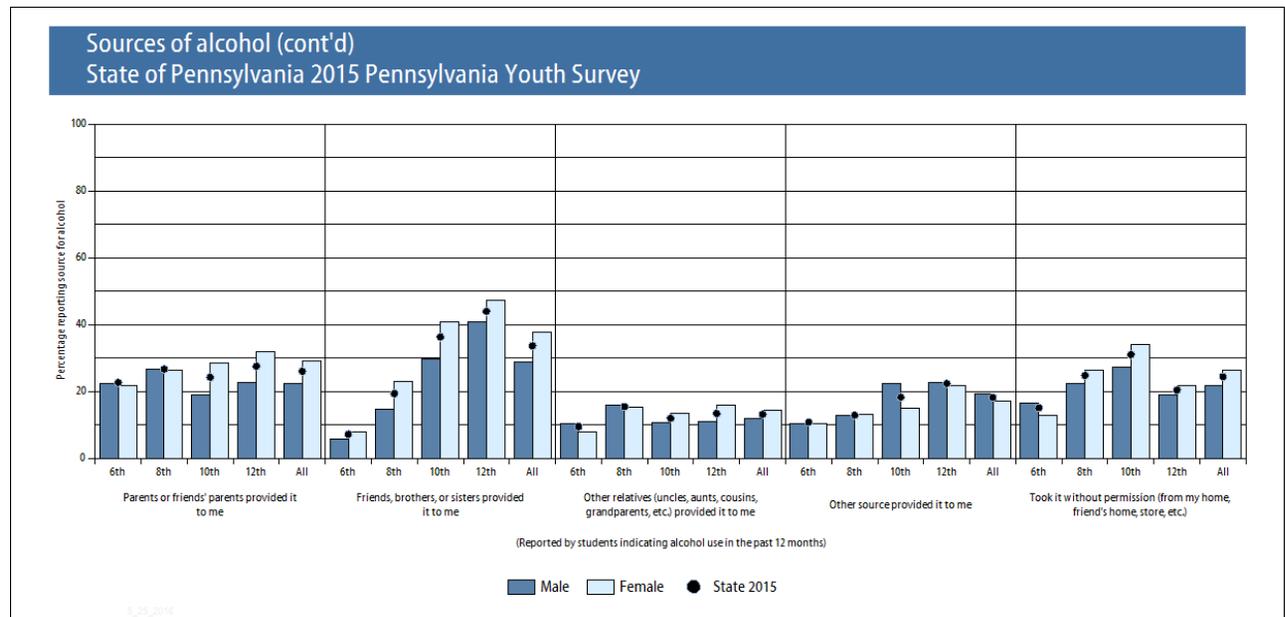
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# ATOD Use and Access by Gender

## Sources of alcohol, Statewide Sample 2015 PAYS



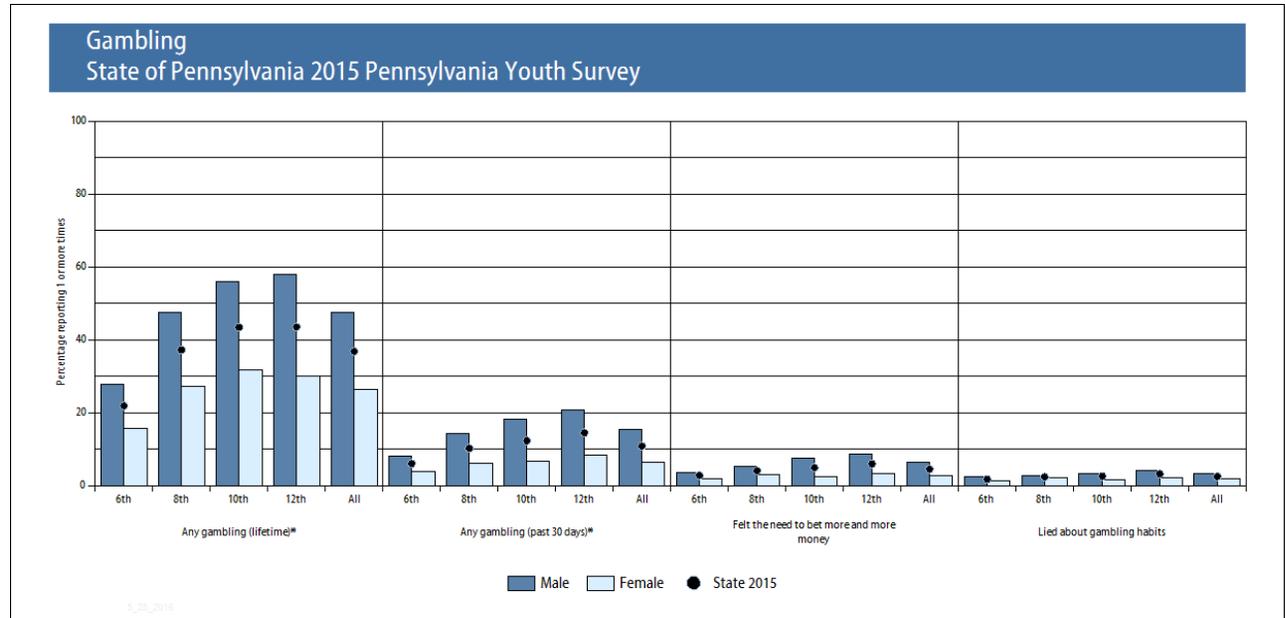
## Sources of alcohol, continued, Statewide Sample 2015 PAYS



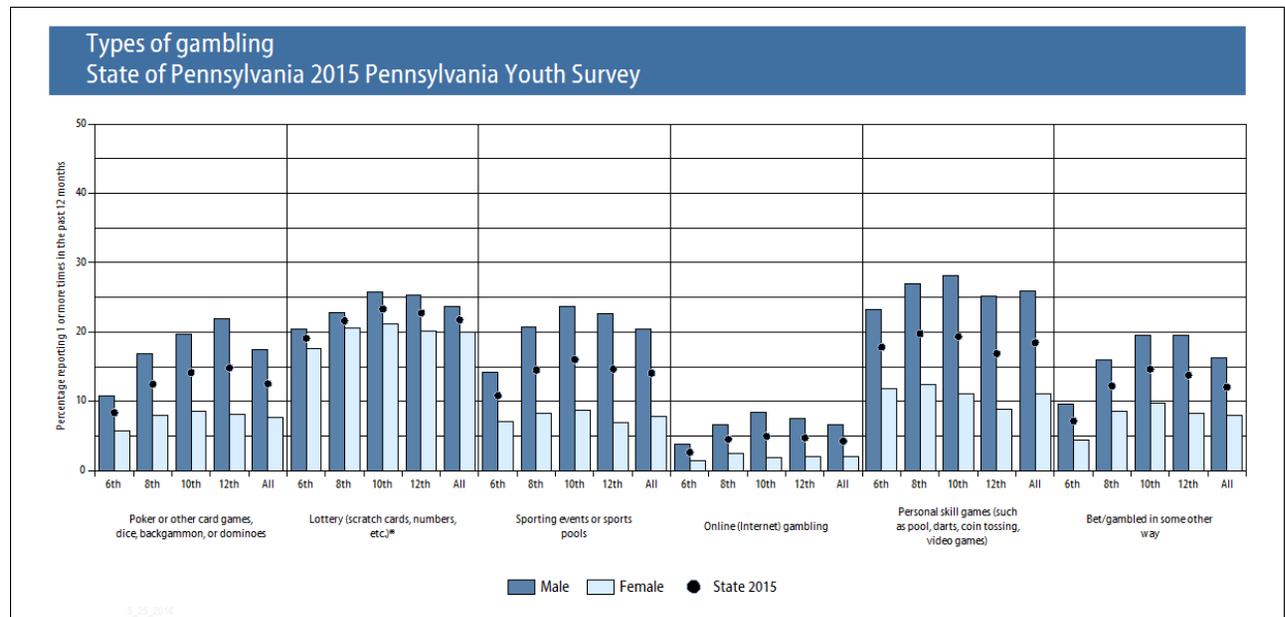
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Antisocial Behavior by Gender

## Gambling, Statewide Sample 2015 PAYS



## Types of gambling, Statewide Sample 2015 PAYS



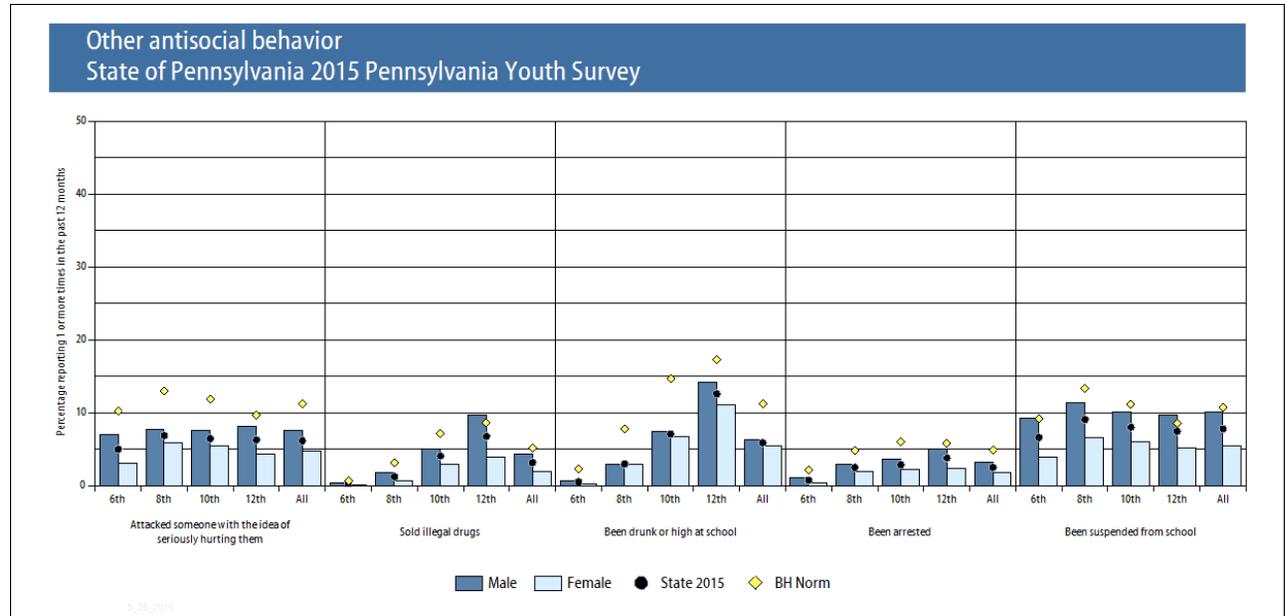
NOTE:  
\*Lifetime and 30 day gambling were not measured prior to 2015. (Previous PAYS administrations measured gambling over the past 12 months.)

\*The lottery response category was revised in 2015 with additional examples (scratch cards, numbers, etc.) Rates reported in 2015 may be higher than previous years' data.

Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Antisocial Behavior by Gender

## Other Antisocial behavior, Statewide Sample 2015 PAYS

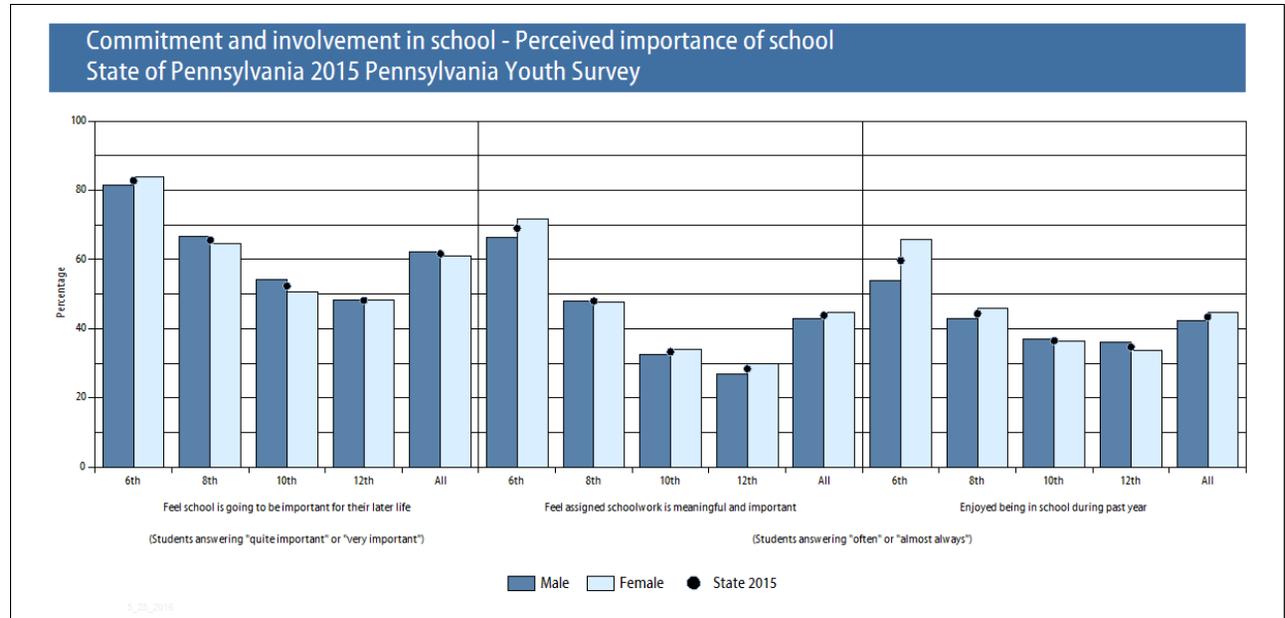


**NOTE:**

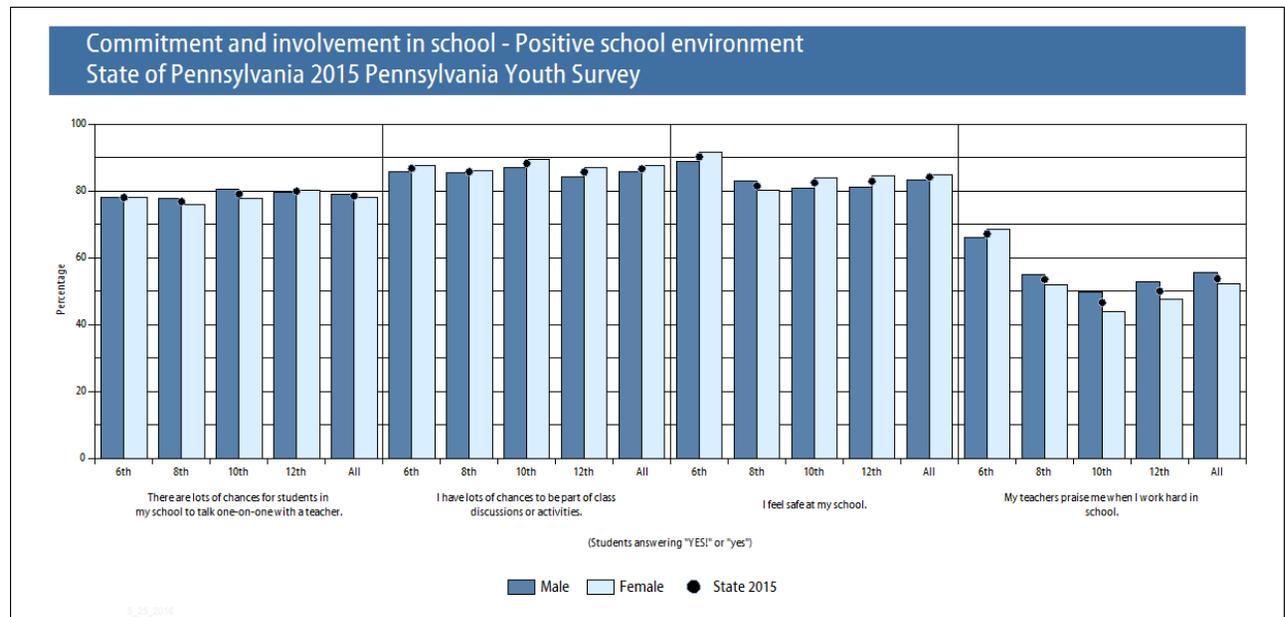
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Community and School Climate and Safety by Gender

## Perceived importance of school, Statewide Sample 2015 PAYS



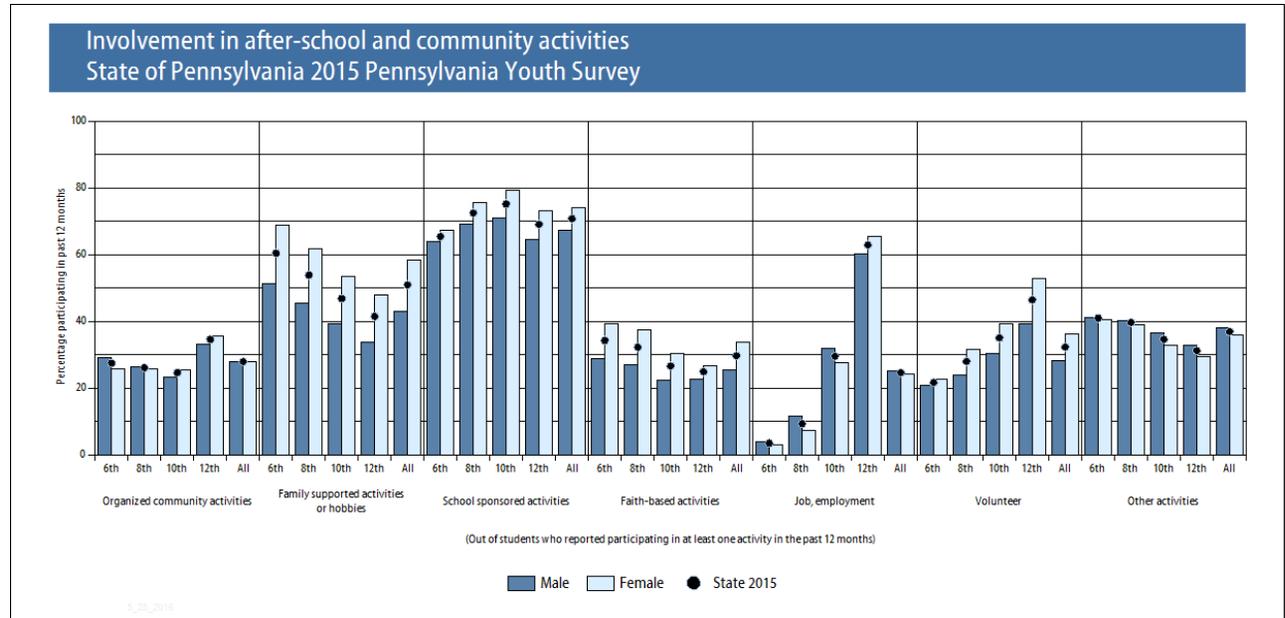
## Positive school environment, Statewide Sample 2015 PAYS



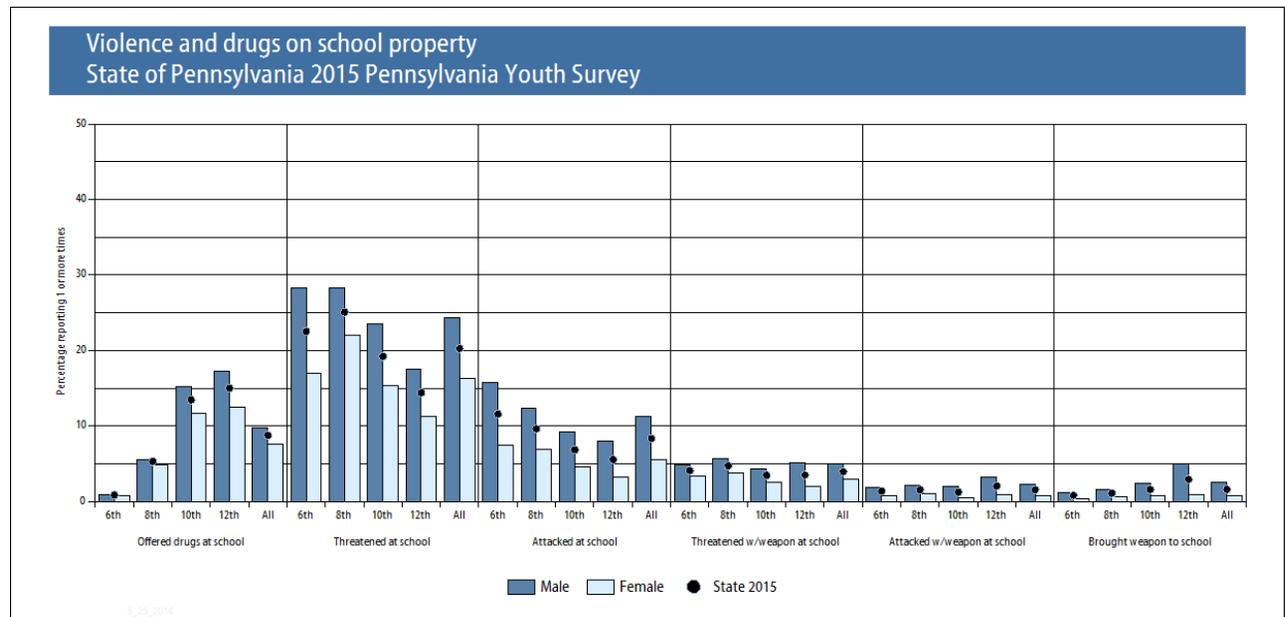
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Community and School Climate and Safety by Gender

## Involvement in after-school and community activities, Statewide Sample 2015 PAYS



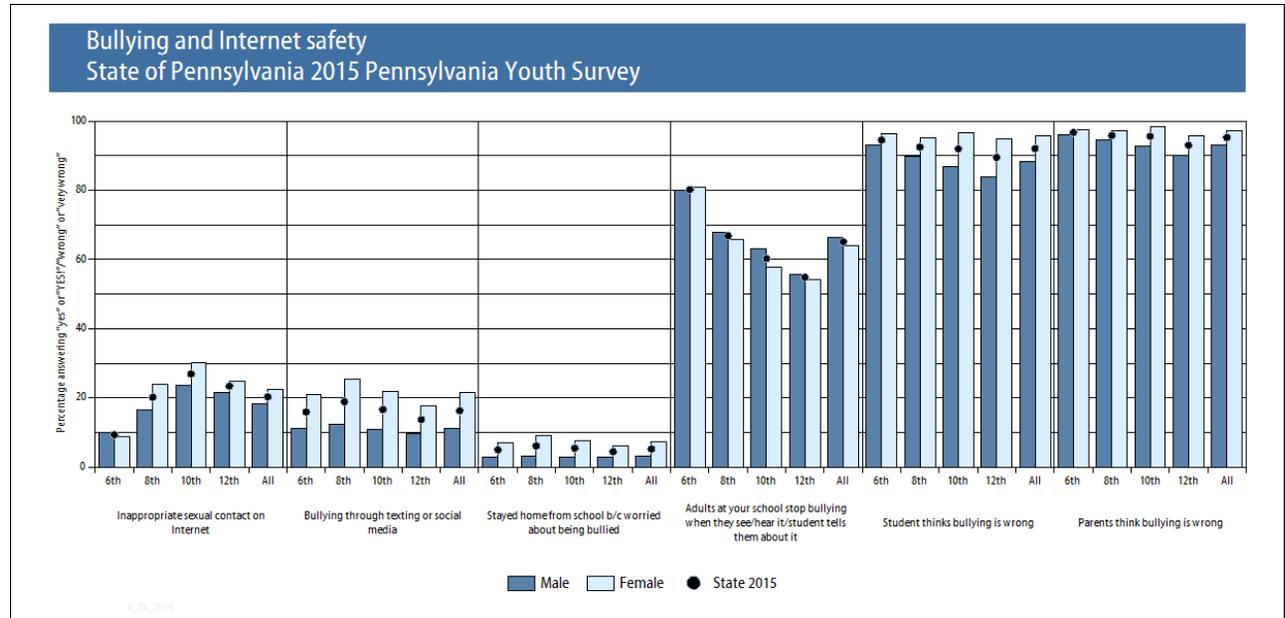
## Violence and drugs on school property, Statewide Sample 2015 PAYS



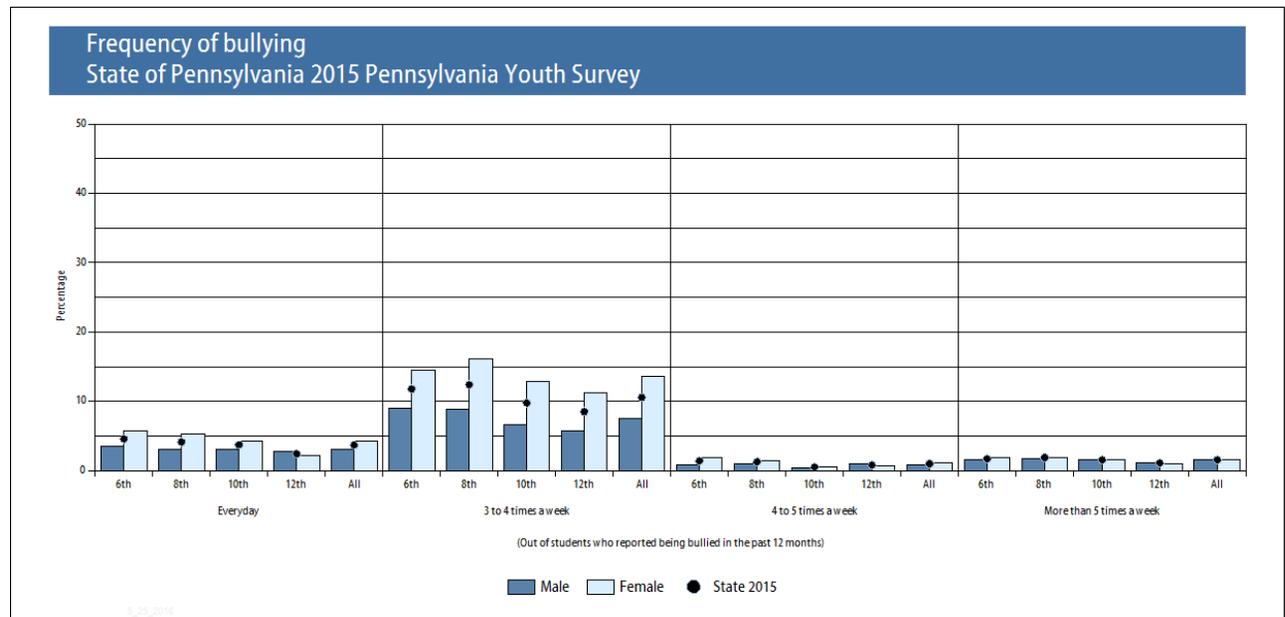
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Community and School Climate and Safety by Gender

## Bullying and Internet safety, Statewide Sample 2015 PAYS



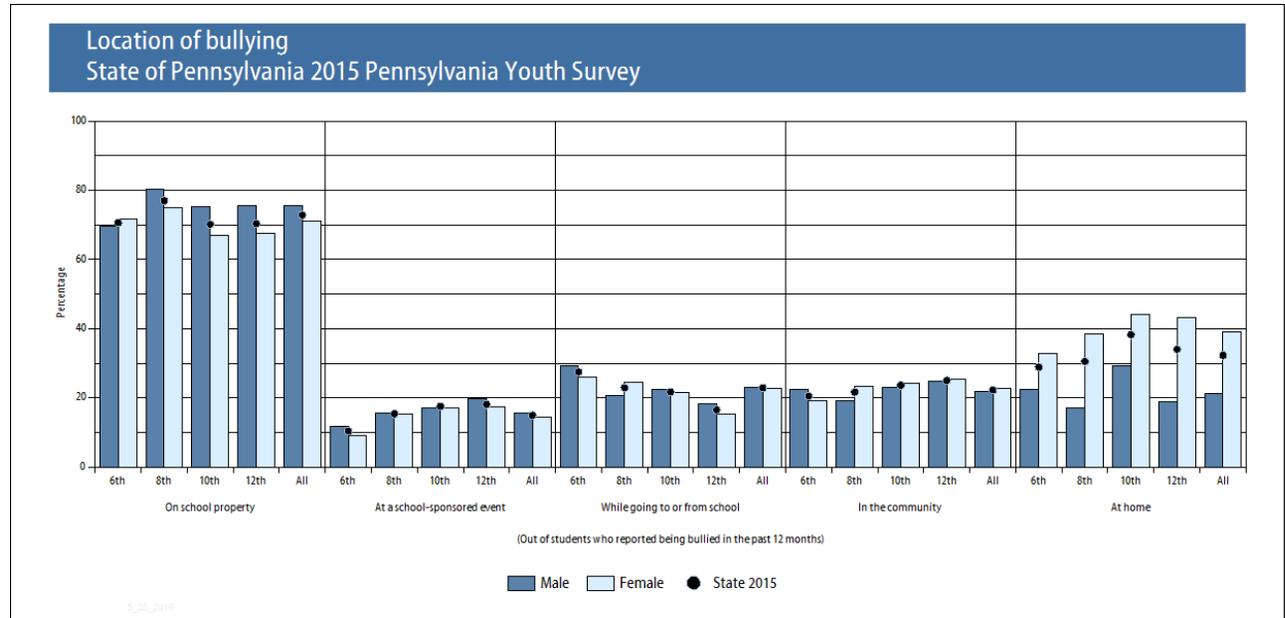
## Frequency of bullying, Statewide Sample 2015 PAYS



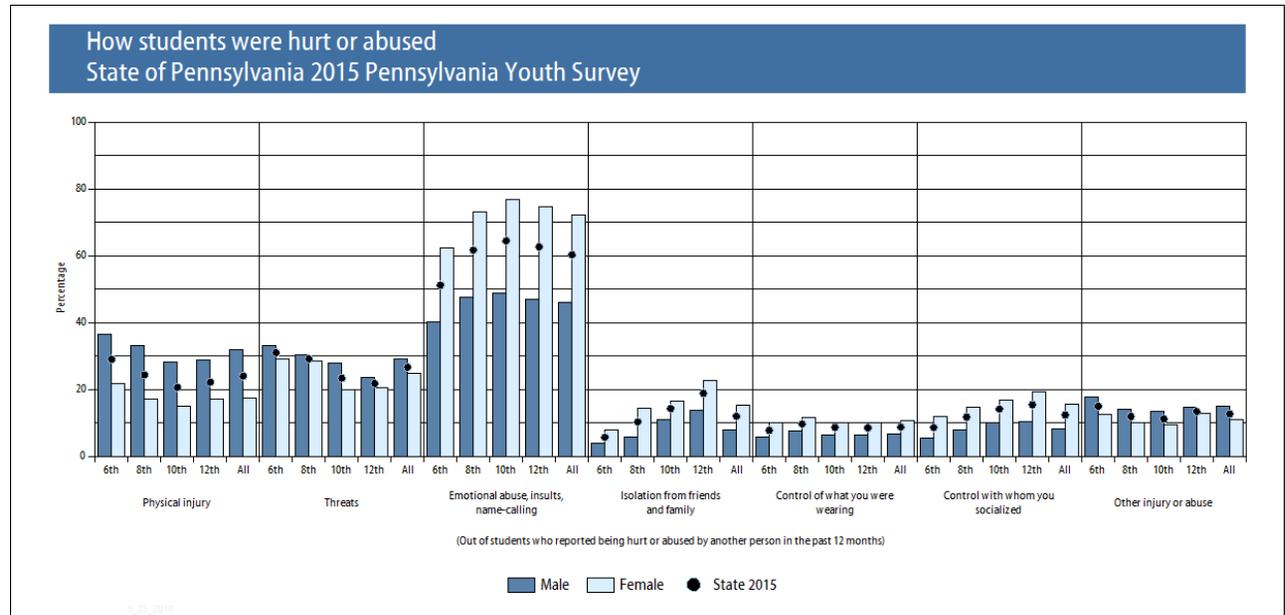
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Community and School Climate and Safety by Gender

## Location of bullying, Statewide Sample 2015 PAYS



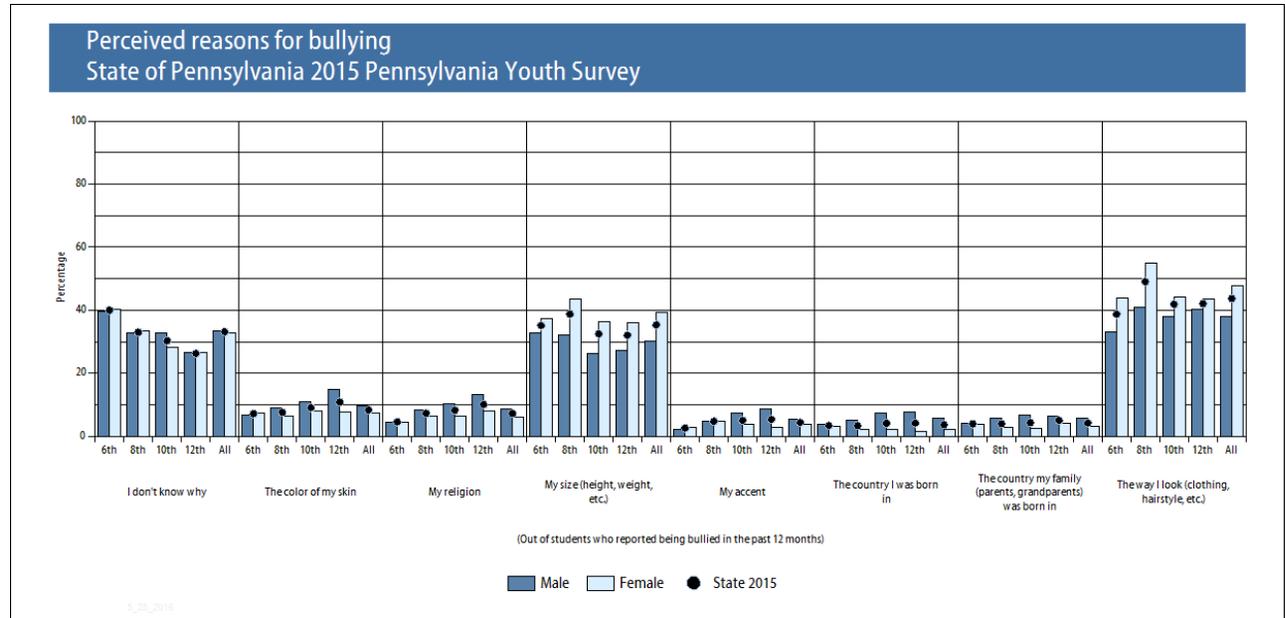
## How students were hurt or abused, Statewide Sample 2015 PAYS



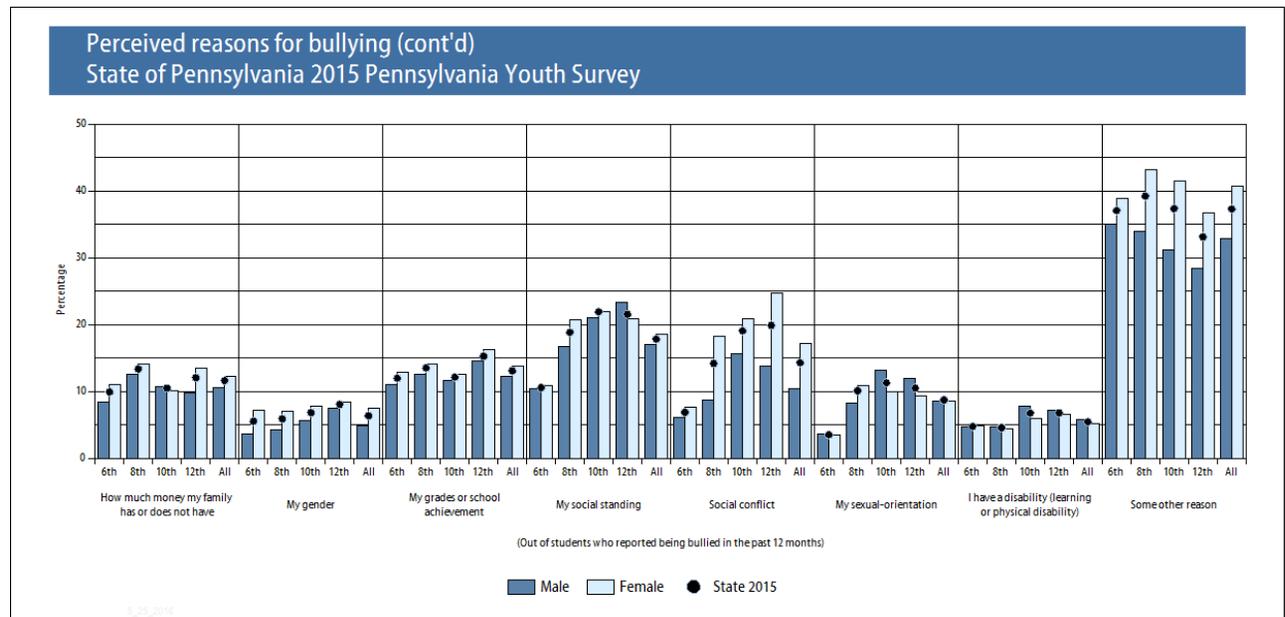
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Community and School Climate and Safety by Gender

## Perceived reasons for bullying, Statewide Sample 2015 PAYS



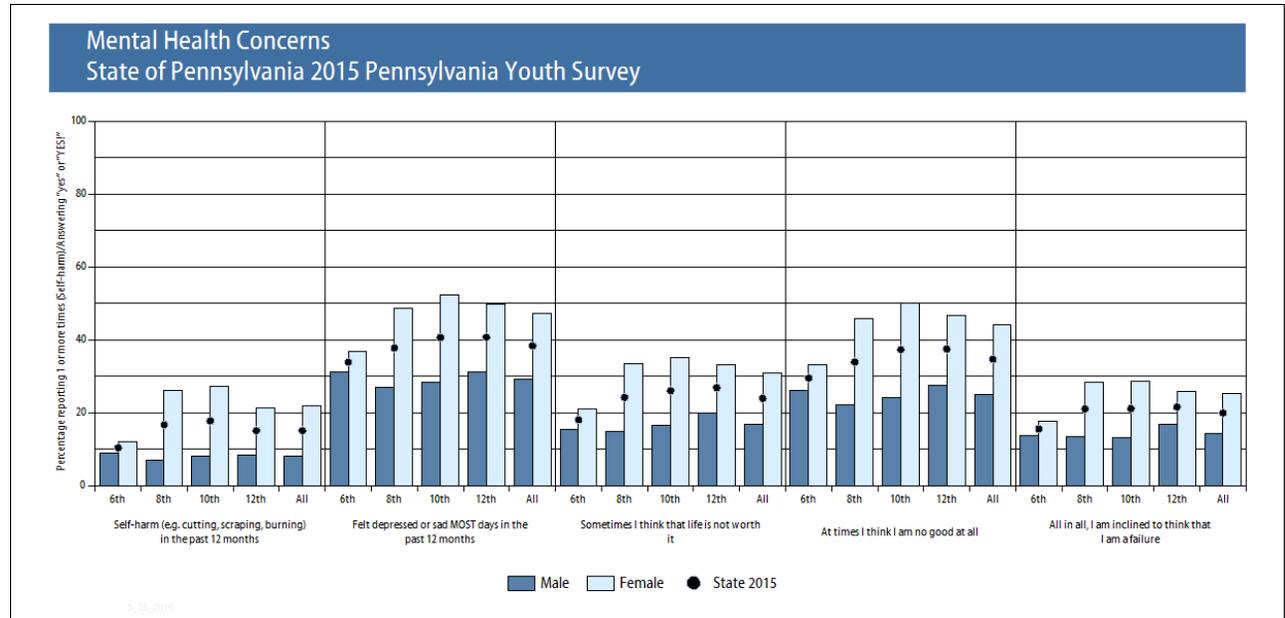
## Perceived reasons for bullying, continued, Statewide Sample 2015 PAYS



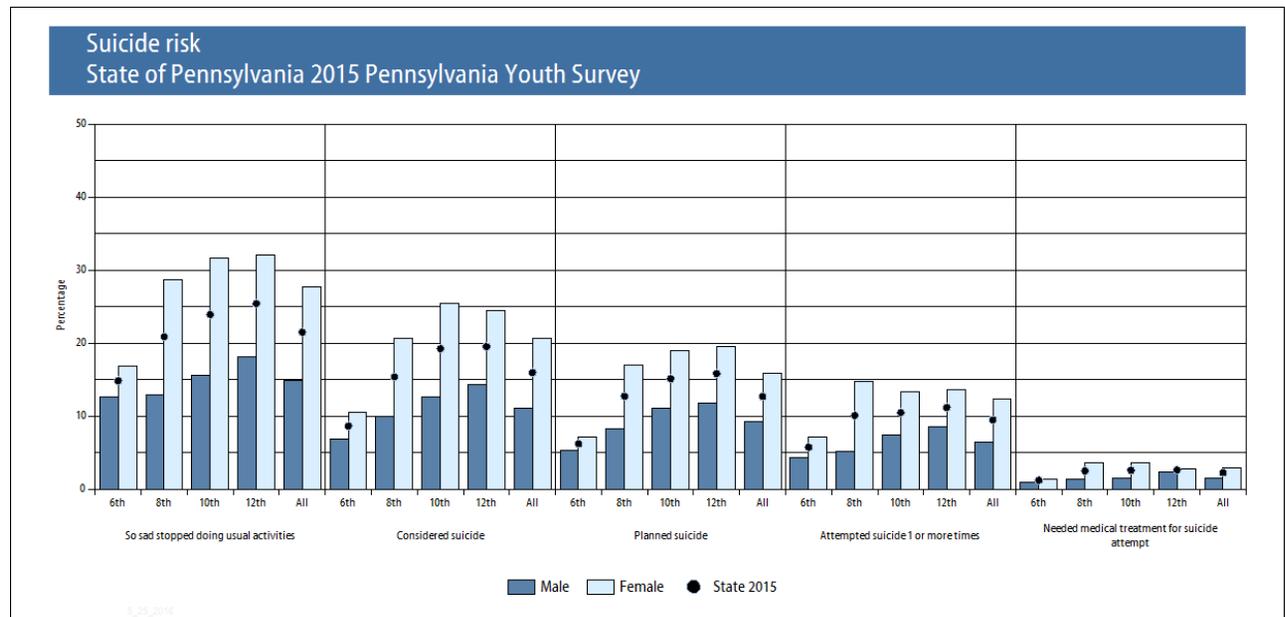
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Social and Emotional Health by Gender

## Mental Health Concerns, Statewide Sample 2015 PAYS



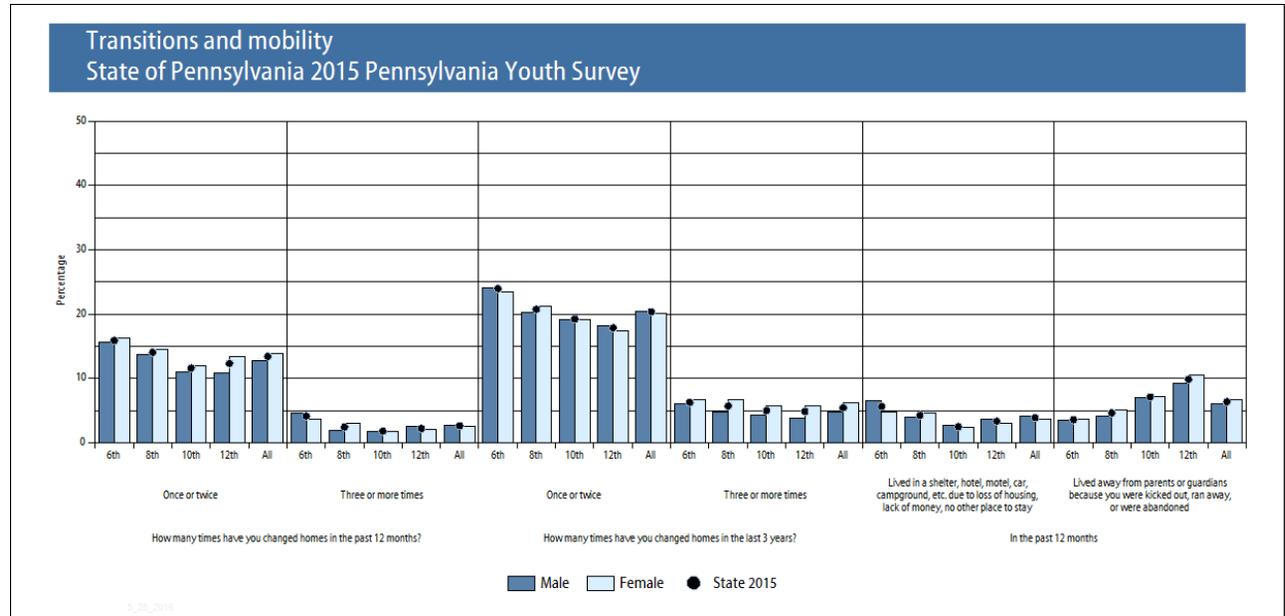
## Suicide risk, Statewide Sample 2015 PAYS



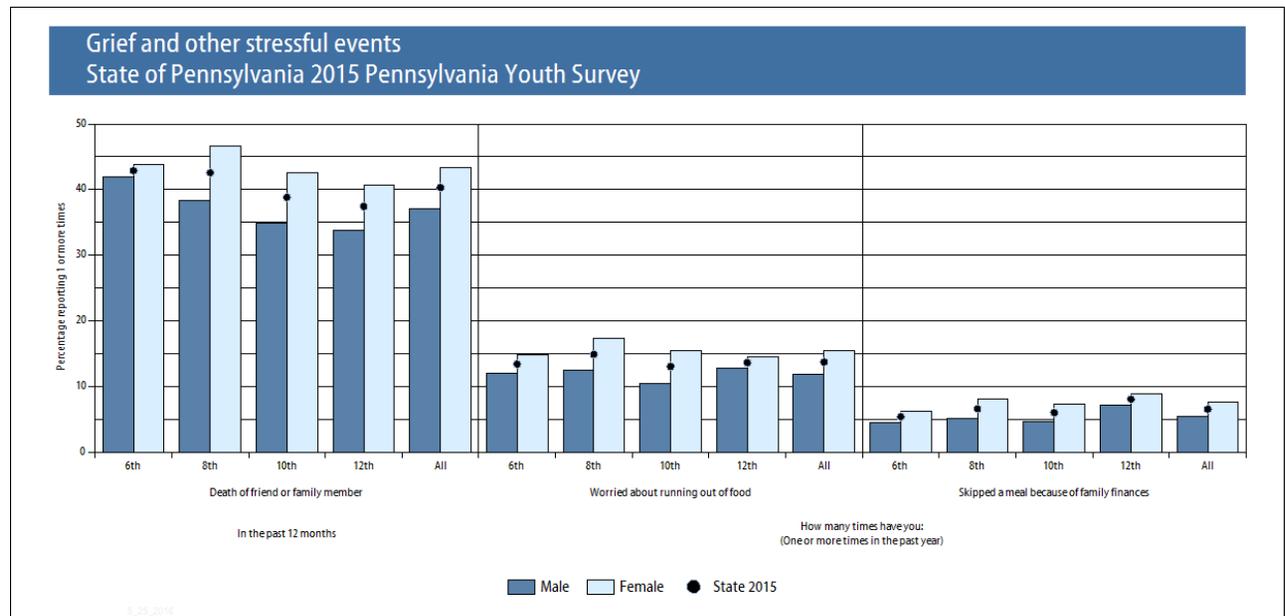
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Social and Emotional Health by Gender

## Transitions and mobility, Statewide Sample 2015 PAYS



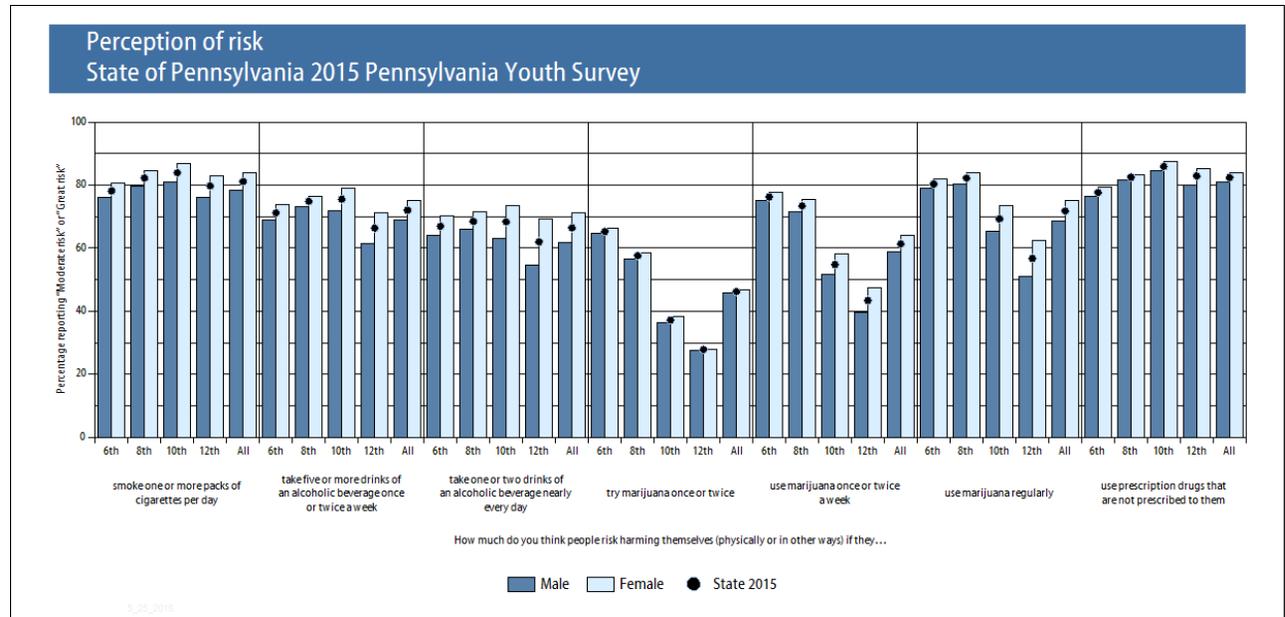
## Grief and other stressful events, Statewide Sample 2015 PAYS



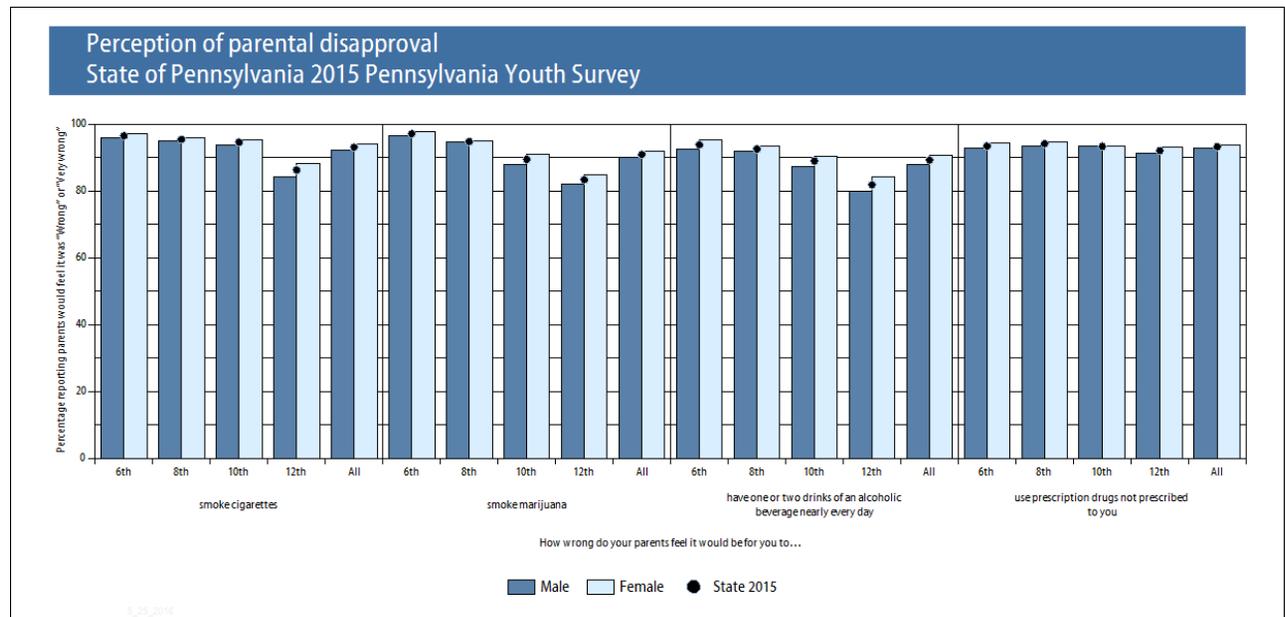
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Systemic Factors by Gender

## Perception of risk, Statewide Sample 2015 PAYS



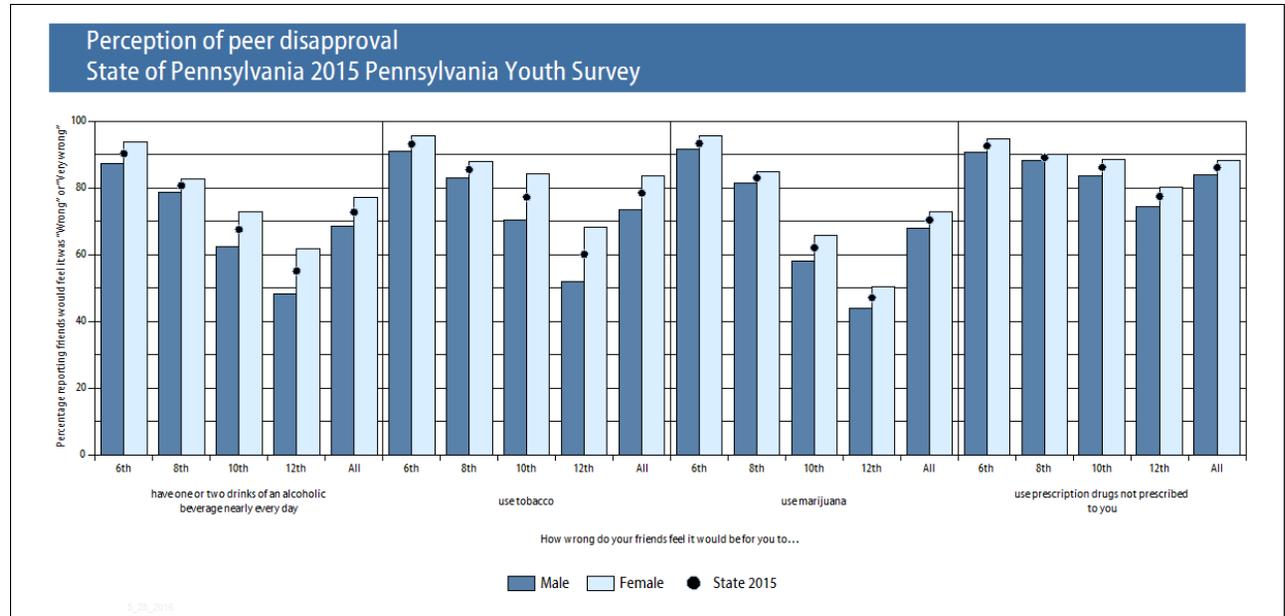
## Perception of parental disapproval, Statewide Sample 2015 PAYS



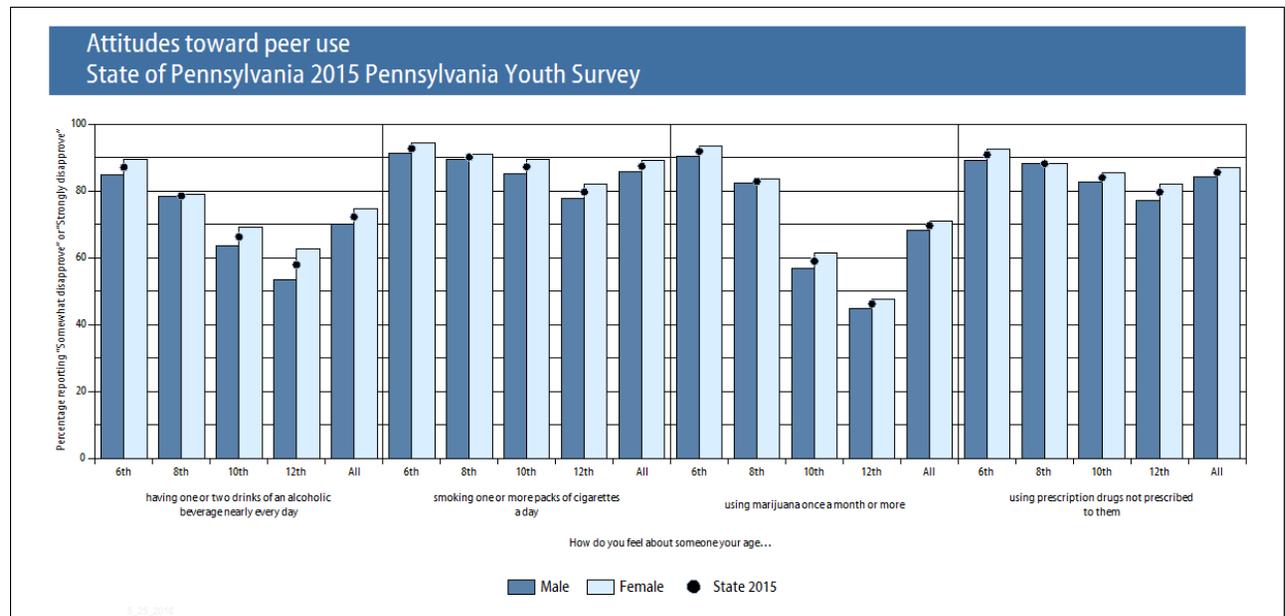
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Systemic Factors by Gender

## Perception of peer disapproval, Statewide Sample 2015 PAYS



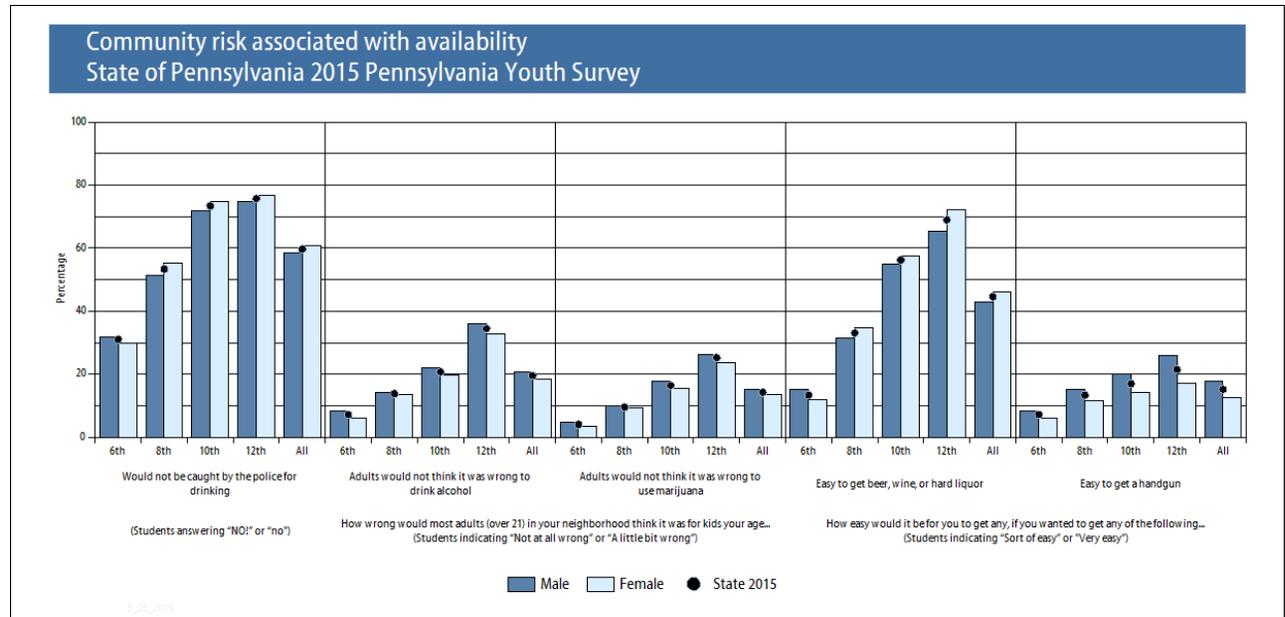
## Attitudes toward peer use, Statewide Sample 2015 PAYS



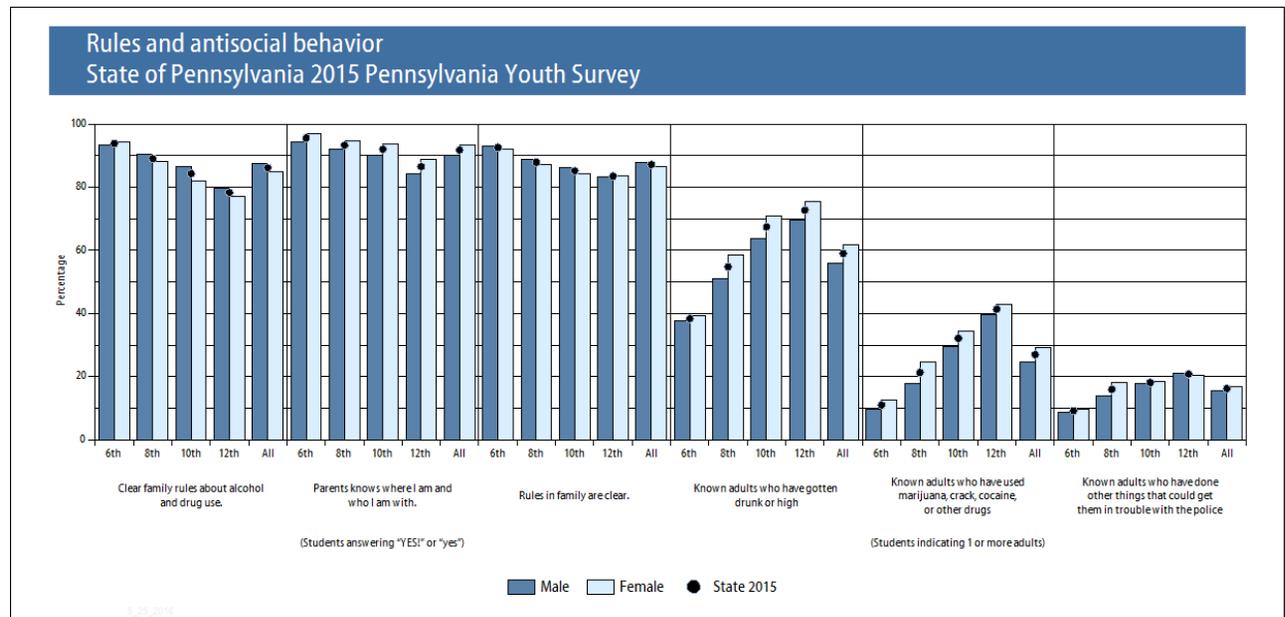
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Systemic Factors by Gender

## Community risk associated with availability, Statewide Sample 2015 PAYS



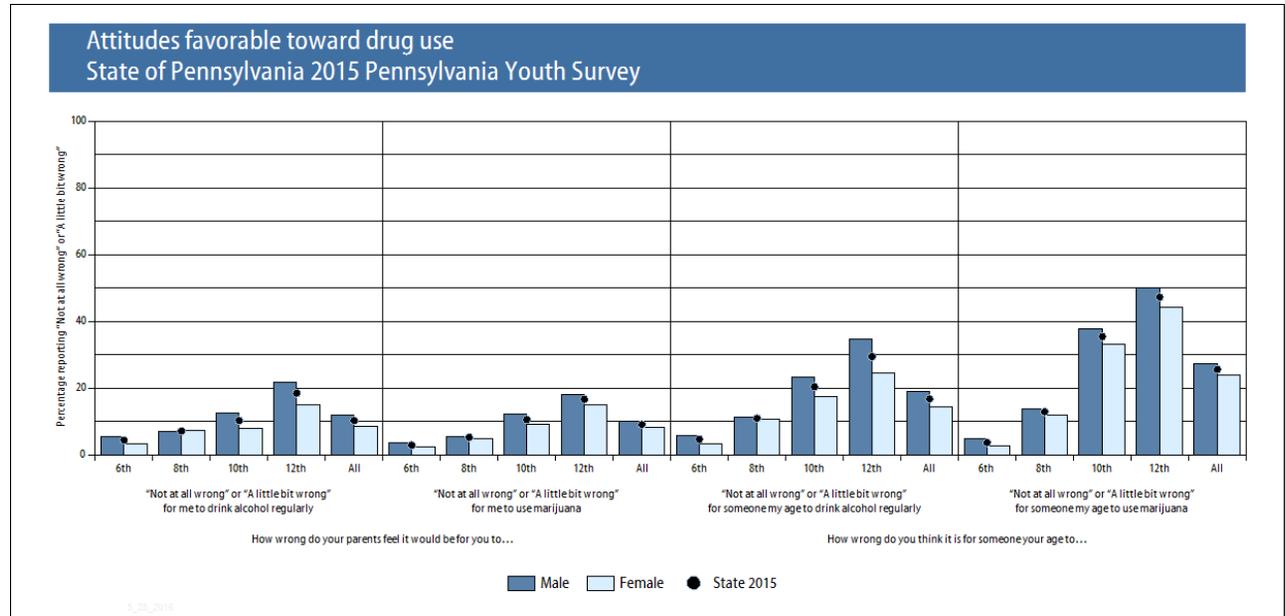
## Rules and antisocial behavior, Statewide Sample 2015 PAYS



NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Systemic Factors by Gender

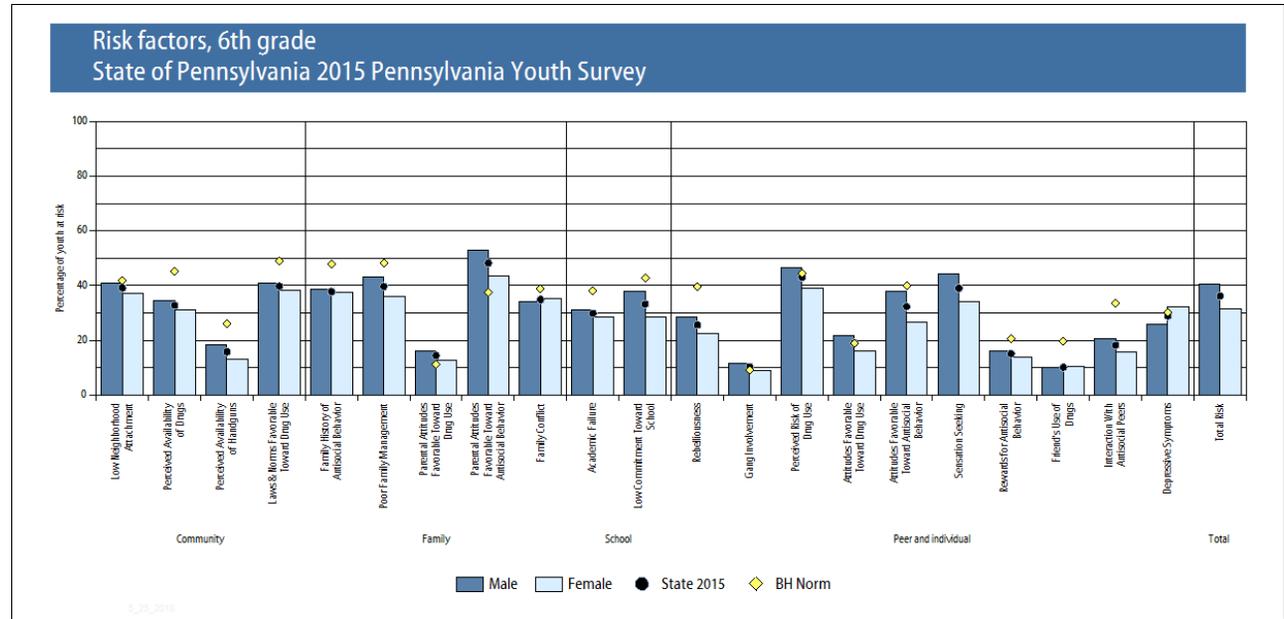
## Attitudes favorable toward drug use, Statewide Sample 2015 PAYS



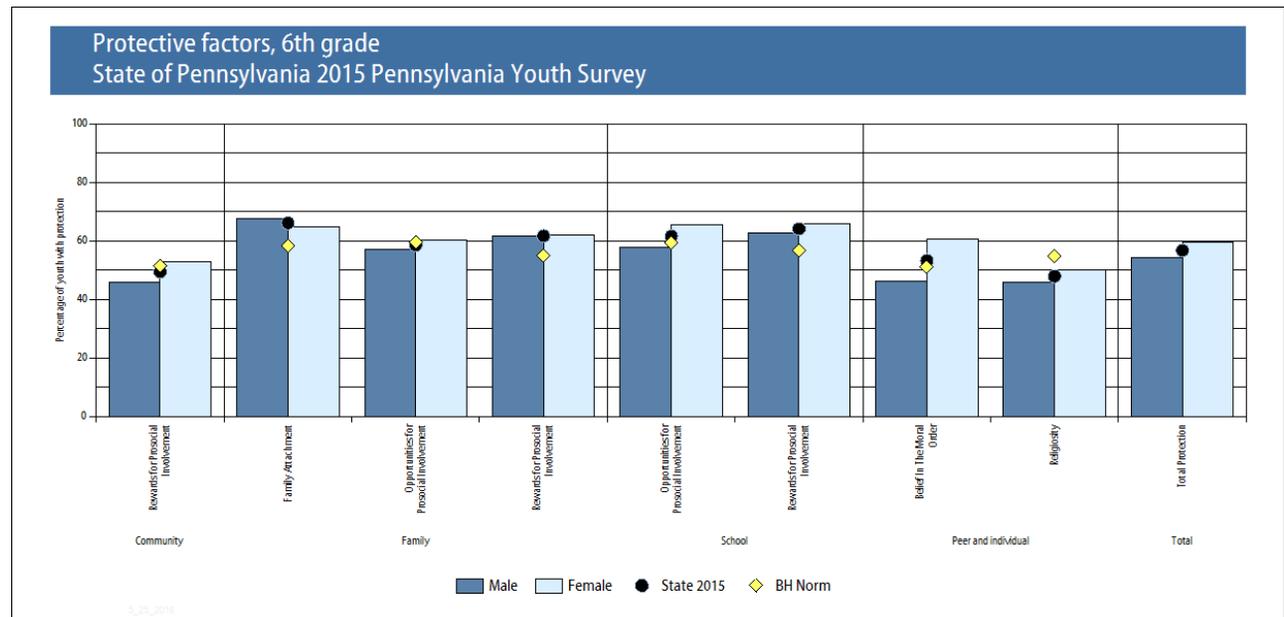
NOTE:  
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: 6th Grade

## Risk factor scales by Gender, 6th grade, Statewide Sample 2015 PAYS



## Protective factor scales by Gender, 6th grade, Statewide Sample 2015 PAYS



NOTE:

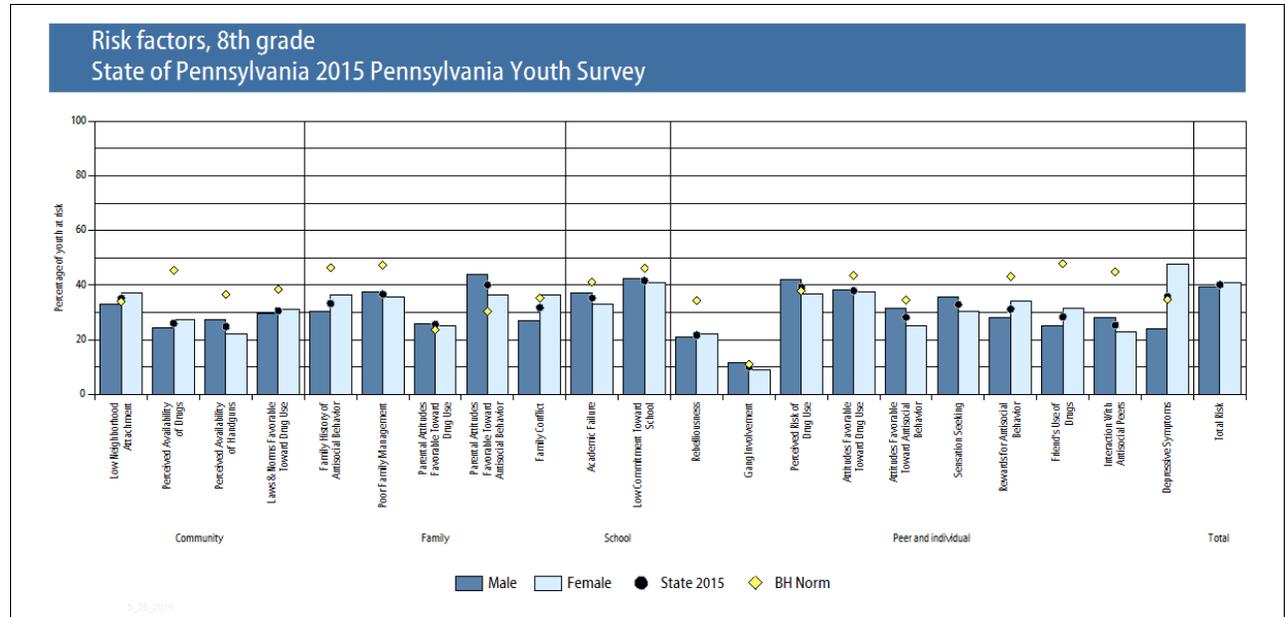
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

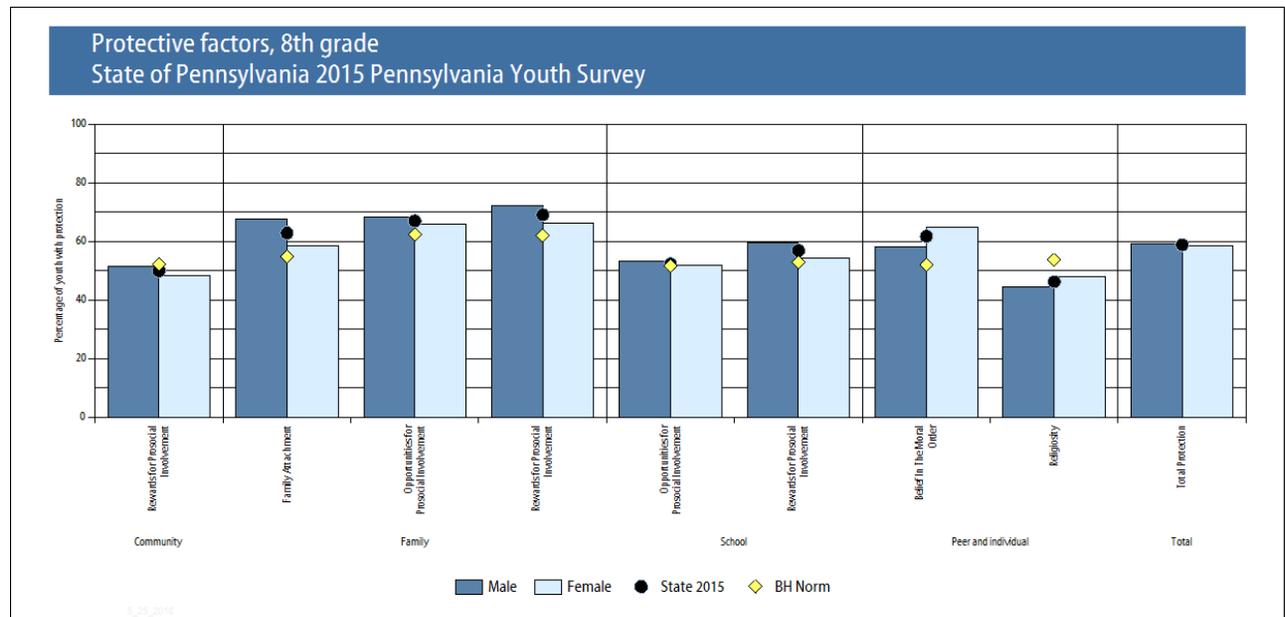
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: 8th Grade

## Risk factor scales by Gender, 8th grade, Statewide Sample 2015 PAYS



## Protective factor scales by Gender, 8th grade, Statewide Sample 2015 PAYS



NOTE:

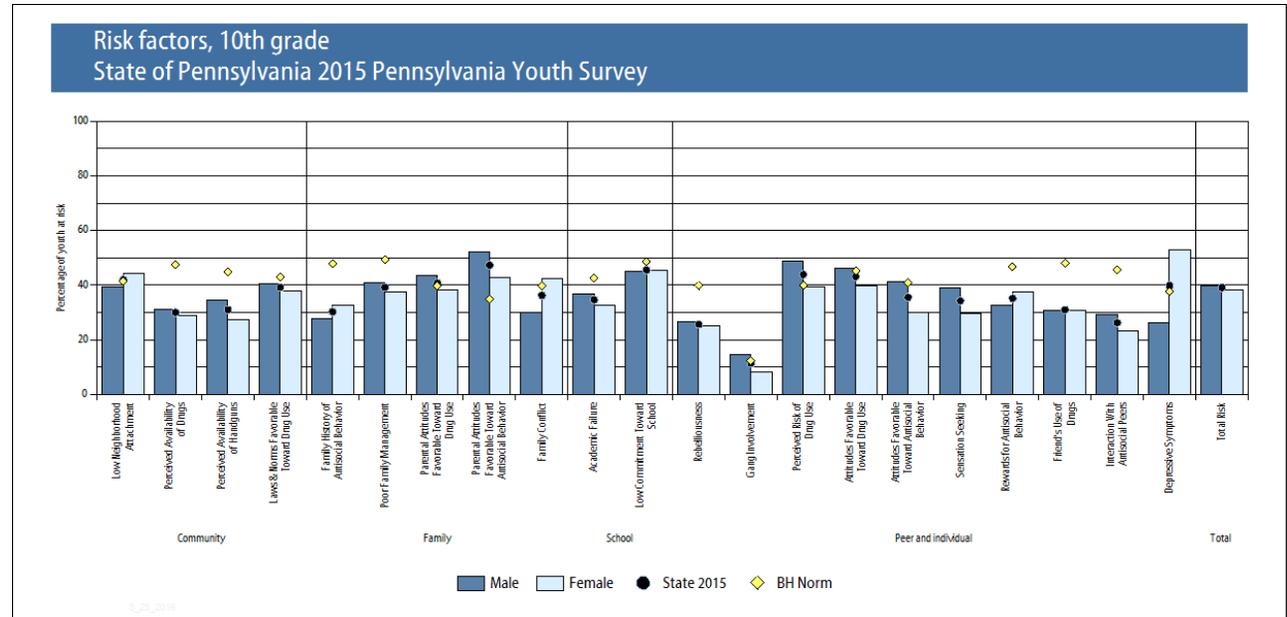
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

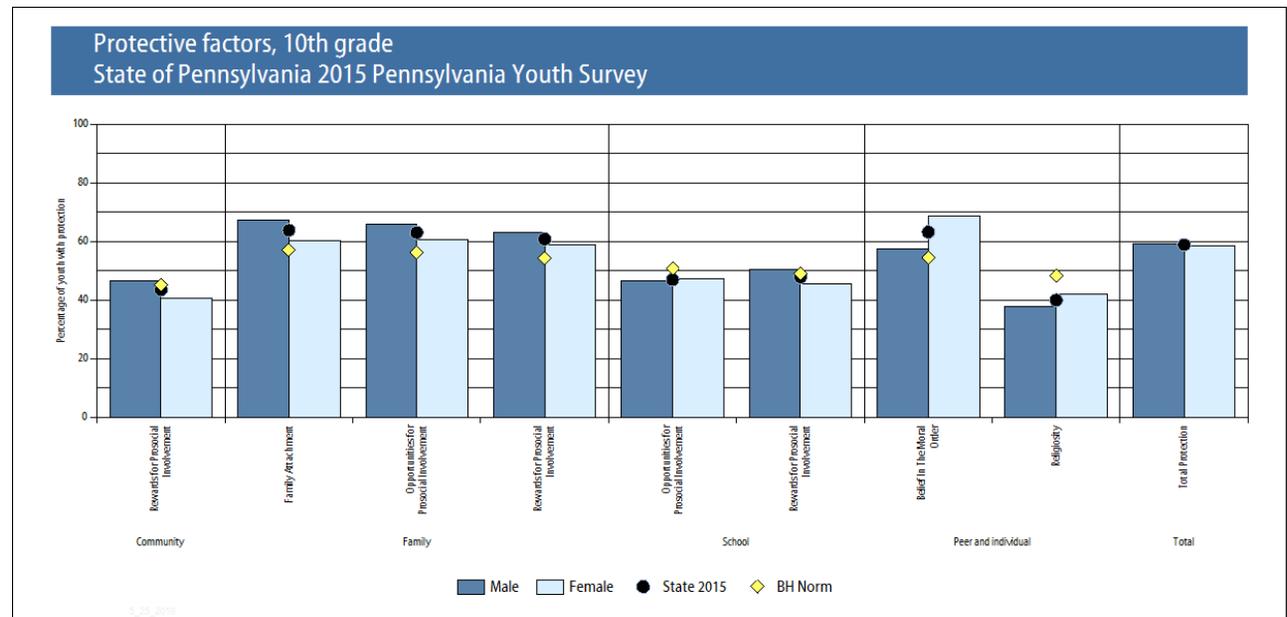
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: 10th Grade

## Risk factor scales by Gender, 10th grade, Statewide Sample 2015 PAYS



## Protective factor scales by Gender, 10th grade, Statewide Sample 2015 PAYS



NOTE:

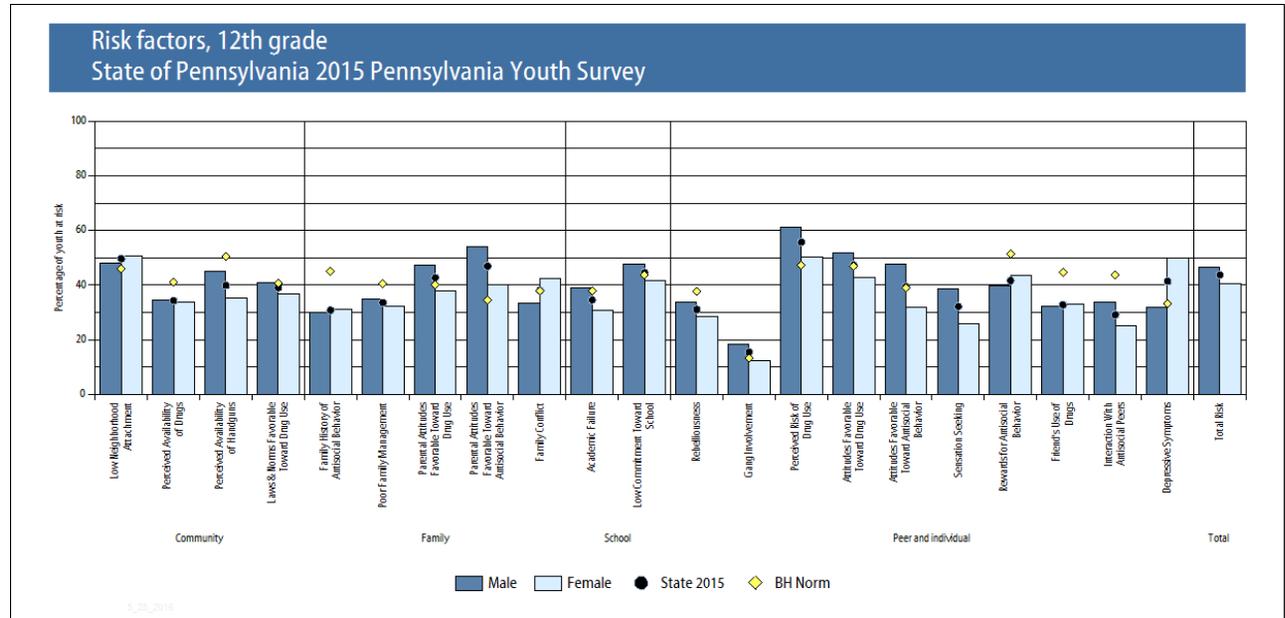
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

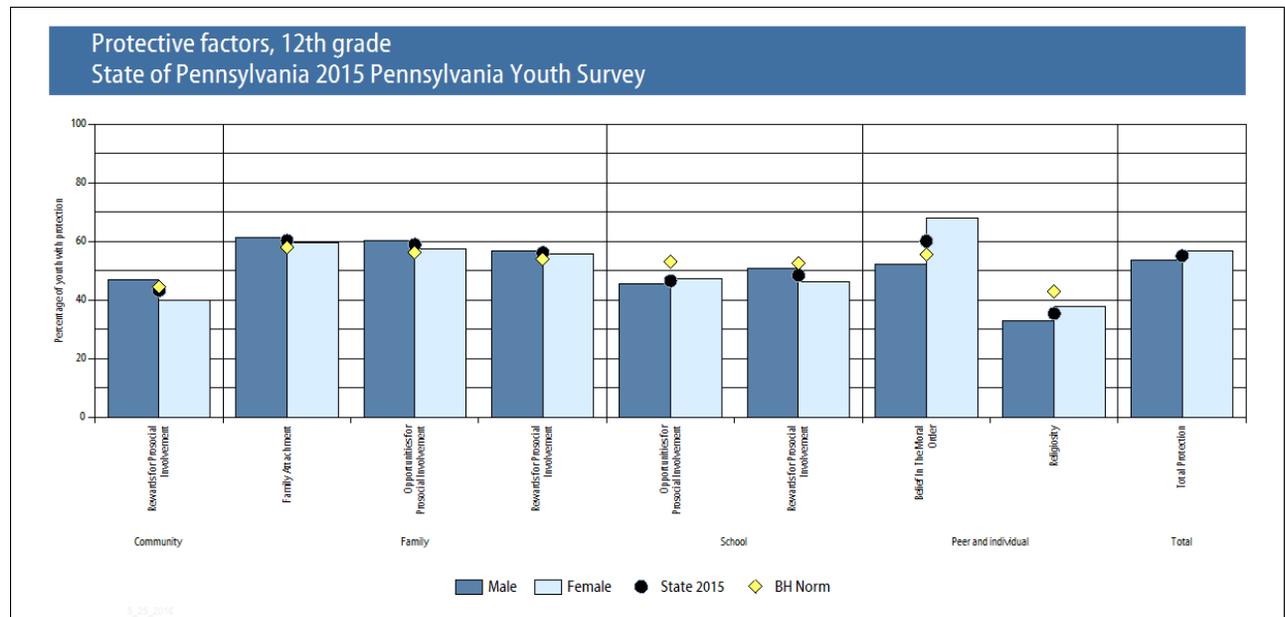
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: 12th Grade

## Risk factor scales by Gender, 12th grade, Statewide Sample 2015 PAYS



## Protective factor scales by Gender, 12th grade, Statewide Sample 2015 PAYS



NOTE:

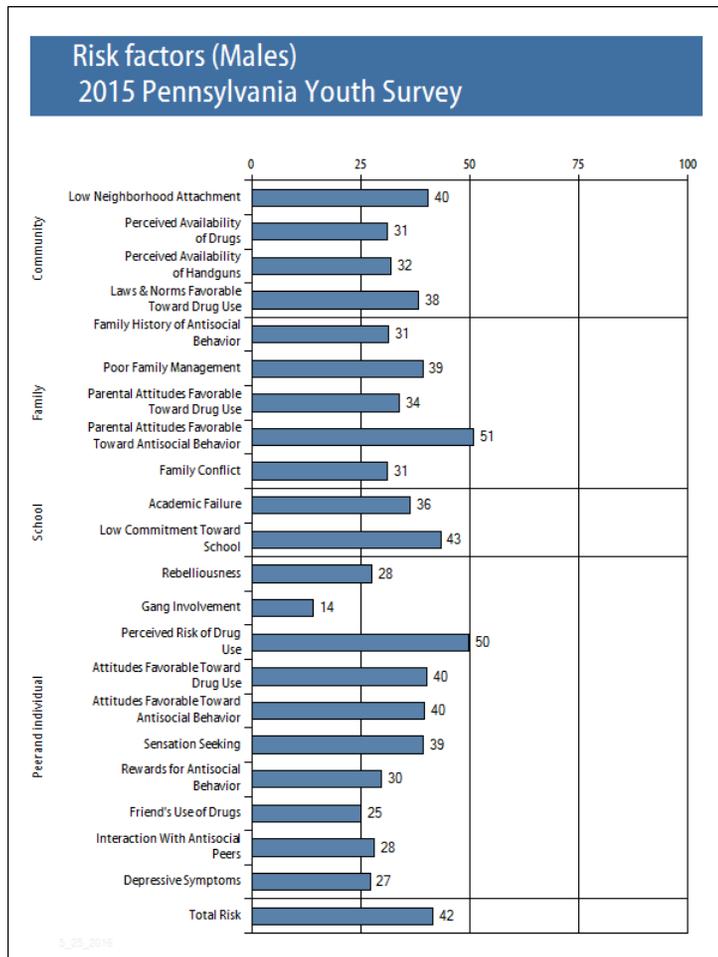
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

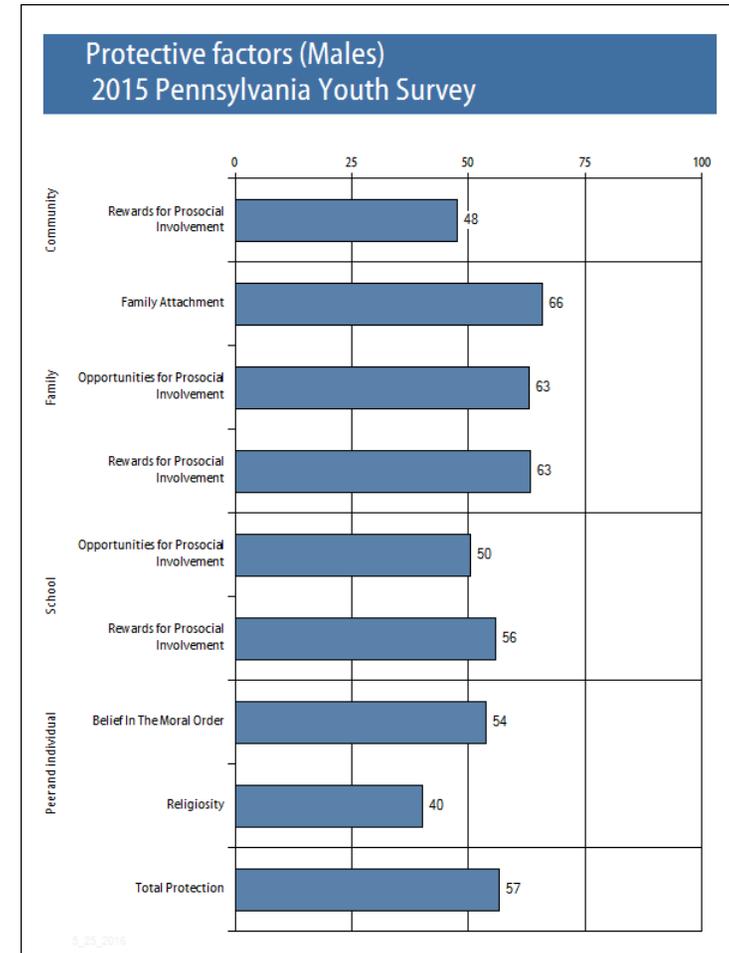
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: All Grades Combined

## Risk factor scales by Gender - Males, All Grades, Statewide Sample 2015 PAYS



## Protective factor scales by Gender - Males, All Grades, Statewide Sample 2015 PAYS



NOTE:

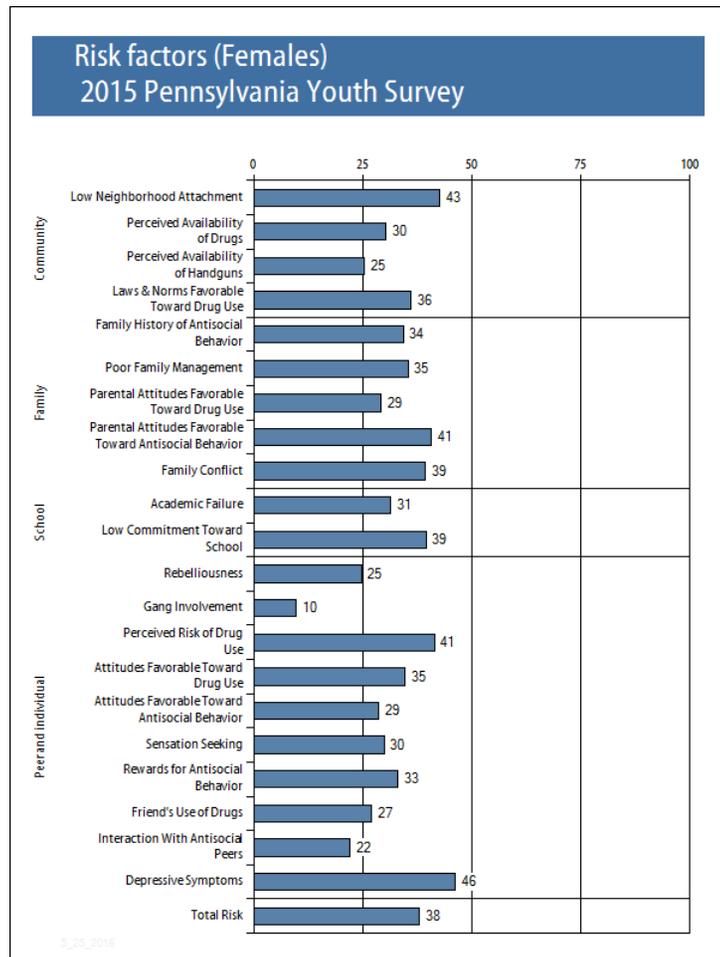
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

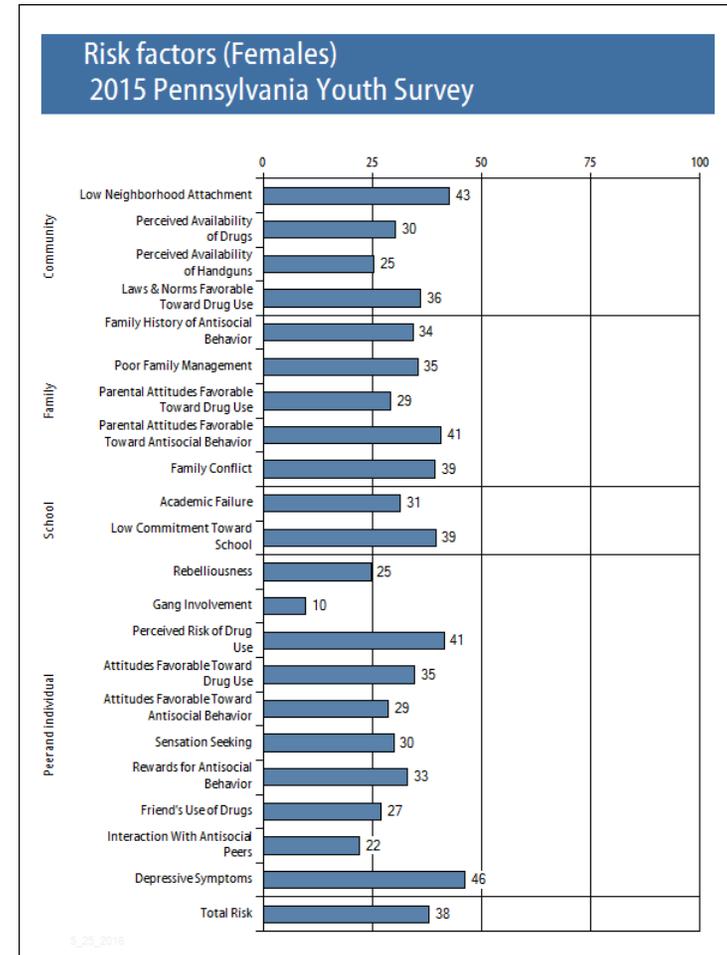
Please see the PAYS Web Tool at [www.bach-harrison.com/PAYSWebTool](http://www.bach-harrison.com/PAYSWebTool) for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

# Risk and Protective Factor Scales by Gender: All Grades Combined

## Risk factor scales by Gender - Females, All Grades, Statewide Sample 2015 PAYS



## Protective factor scales by Gender - Females, All Grades, Statewide Sample 2015 PAYS



NOTE:

"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"Total protection" is defined as the percentage of students who have more than a specified number of protective factors operating in their lives. (6th, 8th, 10th, and 12th grades: 3 or more protective factors.)

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