

Pennsylvania Youth Survey (PAYS)

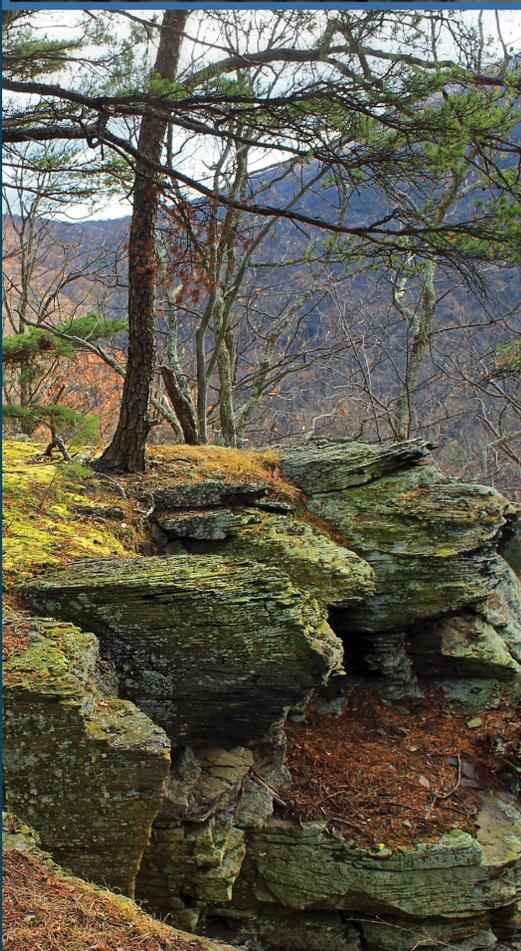
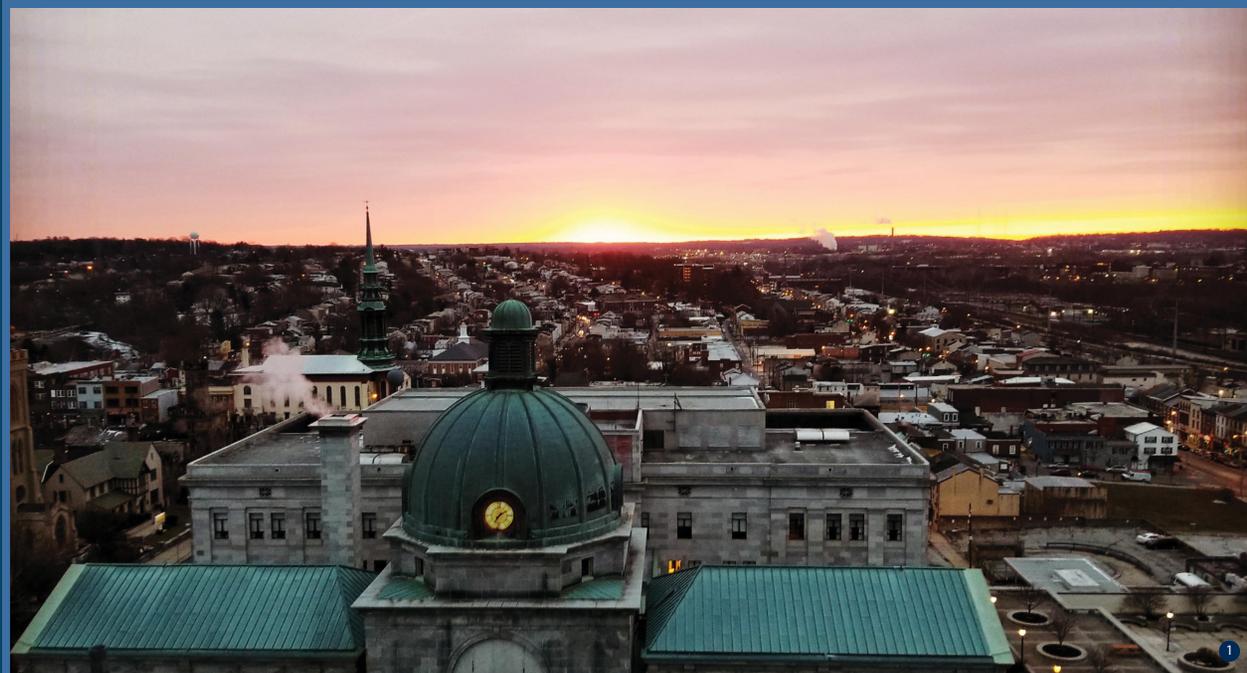
Empowering Communities to
Develop Strategic Prevention
Programming

Conducted by

Pennsylvania Commission on
Crime and Delinquency

Pennsylvania Department of
Drug and Alcohol Programs

Pennsylvania Department
of Education



State Report PAYS 2017

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Pennsylvania Youth Survey

State Report 2017

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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Acknowledgements

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We would like to extend our sincere appreciation to the 1013 schools that participated in administering this survey. A special “thank you” goes out to the students who completed the survey and their parents who supported their endeavors.

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 2017 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 2017 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 2019 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 2017 PAYS was the fourteenth biennial administration (1989-2017). Comparisons in this report were made between the results of the 2013, 2015, and 2017 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.

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 14 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 265,751 public and private school students throughout the State participated in the Fall 2017 Pennsylvania Youth Survey. After odd-grade and invalid/dishonest surveys were removed, a total of 253,566 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 418 school districts and charter/private schools.

There were 1,013 schools that chose to participate in the 2017 PAYS. 2016-2017 PDE enrollment figures show that there were a total of 336,082 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 253,566 valid participants in grades 6, 8, 10, and 12 (a participation rate of 75.5%), 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, 86.6% of participants were non-Hispanic and 13.4% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (71.0%), Black/African American (8.8%), or left their race unmarked (7.9%). The other race groups accounted for 12.3% 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 2017 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 a 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 2017 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (10.9 – 13.6 percentage points higher than the BH Norm in each grade), Parental Attitudes Favorable to Drug Use (4.2 – 6.5 percentage points higher than the BH Norm in each grade), Gang Involvement (3.6 – 7.8 percentage points higher than the BH Norm in each grade), and Peer/Individual Attitudes Favorable Toward Drug Use (2.8 – 5.2 percentage points 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. Only one scale (Religiosity) in Pennsylvania showed protection scores were lower than the BH Norm for grades 6, 8, and 10 (1.4 – 6.1 percentage points lower for grades 6, 8, and 10).

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 2017 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 (9.9 percentage points higher in Pennsylvania compared to the national MTF rates), 10th grade (10.8 percentage points higher in Pennsylvania compared to the nation), and 12th grade (7.7 percentage points higher in Pennsylvania). In regard to tobacco use, the rate of lifetime cigarette use in Pennsylvania was higher than the nation in the 12th grade (29.0% for PA, 26.6% for MTF) and lifetime smokeless tobacco use in Pennsylvania was higher than the nation in the 12th grade (15.9% for Pennsylvania, 11.0% for MTF). Narcotic prescription drug use was also slightly higher than the national rate for the 12th grade (8.8% lifetime 12th grade use for PA, 6.8% use for the 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 0.9 percentage points in the 8th grade, a decrease of 1.2 percentage points in the 10th grade, and a decrease of 1.8 percentage points in the 12th grade) since the 2015 survey; the lifetime cigarette use rate decreased 1.6 percentage points in the 8th grade, 2.1 percentage points in the 10th grade, 3.7 percentage points in the 12th grade, and 1.8 percentage points for all grades combined since 2015; lifetime smokeless tobacco use decreased 2.2 percentage points in the 12th

grade. Marijuana experimentation rates were largely unchanged, though the 8th grade showed an increase of 1.1 percentage points from 2015 (7.3%) to 2017 (8.4%). Lifetime prescription narcotics decreased 3.3 percentage points for the 12th grade since 2015. The only lifetime substance use rates to show a significant increase (i.e., increase of roughly 1 percentage point or more) since the 2015 survey were lifetime 6th grade alcohol use (1.0 percentage point increase, from 15.8% in 2015 to 16.8% in 2017) and lifetime 8th grade marijuana use (1.1 percentage points increase, from 7.3% in 2015 to 8.4% in 2017).

As with lifetime use, there are few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. Past-month alcohol use rates were higher in Pennsylvania for all grades in comparison to MTF rates (1.3 percentage points higher for the 8th grade, 2.6 percentage points higher for the 8th grade, and 2.7 percentage points higher for the 12th grade). Past-month cigarette use is also slightly higher for Pennsylvania 10th graders (1.0 percentage point higher) and 12th graders (3.5 percentage points higher).

Pennsylvania 12th graders also indicated a past-month smokeless tobacco use rate that was 2.6 percentage points higher than the national rate. 2017 was the second PAYS administration to gather past-month e-cigarette use data; and these data show significantly higher use for PA students in comparison to the nation (4.3 percentage points higher 8th grade use in Pennsylvania vs. the MTF, 8.8 percentage points higher 10th grade use in Pennsylvania vs. the MTF, and 12.7 percentage points higher 12th grade use in Pennsylvania vs. the MTF).

In regard to data changes from 2015 to 2017, many decreases were seen for the most commonly-used substances. Past-month alcohol use decreased 1.8 percentage points in the 12th grade (from 37.6% in 2015 to 35.9% in 2017). Past-month cigarette use decreased 1.0 percentage point in the 8th grade (from 3.5% in 2015 to 2.5% in 2017) and 1.4 percentage points in the 12th grade (from 14.6% in 2015 to 13.2% in 2017). Past-month narcotic prescription drug use decreased 1.3 percentage points in the 12th grade (from 3.0% in 2015 to 1.7% in 2015) and prescription stimulant use decreased 1.5 percentage points in the 12th grade (from 3.2% in 2015 to 1.7% in 2017).

**Table ES-1
Risk Factor Scales**

	6th				8th				10th				12th				All Grades			
	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
Community																				
Low Neighborhood Attachment	36.2	39.2	41.0	42.1	29.4	35.2	35.1	35.7	39.6	42.0	42.8	42.8	43.3	49.7	50.5	49.4	37.3	41.7	42.5	42.5
Perceived Availability of Drugs	31.7	32.9	32.8	35.8	29.1	26.0	25.9	34.9	33.3	30.1	28.5	34.5	32.6	34.4	30.8	32.7	31.7	30.8	29.4	34.4
Perceived Availability of Handguns	13.8	15.9	15.7	22.4	25.1	24.9	23.4	33.2	33.7	31.1	31.0	38.3	39.7	39.9	37.9	45.5	29.0	28.6	27.7	35.6
Laws & Norms Favorable Toward Drug Use	37.7	39.8	43.6	43.6	29.6	30.7	31.8	33.5	42.3	39.2	38.8	42.1	40.8	39.1	38.9	44.2	37.8	37.2	38.1	40.6
Family																				
Family History of Antisocial Behavior	37.6	37.8	37.3	44.0	34.6	33.3	34.0	40.4	37.0	30.3	30.3	39.1	35.8	30.9	30.3	37.4	36.2	32.9	32.8	39.9
Poor Family Management	40.1	39.7	39.0	44.8	36.6	36.7	35.7	41.4	39.2	39.2	37.6	41.6	34.6	33.7	32.2	35.0	37.6	37.3	36.0	40.2
Parental Attitudes Favorable Toward Drug Use	11.6	14.5	15.6	11.4	23.9	25.7	27.3	22.7	39.9	40.9	42.1	35.6	42.1	42.8	42.9	36.8	30.2	31.6	32.8	28.0
Parental Attitudes Favorable Toward Antisocial Behavior	39.2	48.3	50.1	36.9	33.9	40.1	40.9	30.0	43.0	47.3	47.2	33.6	43.6	47.0	47.1	34.1	40.0	45.7	46.2	33.3
Family Conflict	31.4	34.9	34.0	36.9	28.6	31.8	30.9	32.7	35.6	36.3	35.8	37.5	35.3	38.1	38.0	37.5	32.8	35.3	34.8	36.1
School																				
Academic Failure	28.1	29.9	30.7	32.6	32.5	35.3	36.3	32.5	35.9	34.7	37.4	35.1	33.4	34.6	35.9	33.4	32.8	33.8	35.3	33.5
Low Commitment Toward School	30.4	33.3	37.2	47.0	39.6	41.7	46.8	50.1	44.0	45.5	49.8	53.8	39.6	44.6	43.8	49.5	38.8	41.5	44.7	50.3
Peer And Individual																				
Rebelliousness	25.4	25.7	25.8	33.8	21.3	21.7	20.8	26.0	29.7	25.7	26.1	30.4	33.4	31.1	28.4	31.7	27.6	26.1	25.3	30.1
Gang Involvement	8.2	10.4	11.3	7.7	7.4	10.3	11.3	6.4	9.1	11.5	11.2	6.2	12.8	15.6	14.6	6.8	---	12.0	12.1	6.6
Perceived Risk of Drug Use	42.2	43.0	47.2	50.9	30.0	39.3	43.8	47.7	42.1	43.9	46.3	48.8	52.3	55.7	58.6	58.6	41.7	45.6	49.1	51.4
Attitudes Favorable Toward Drug Use	14.7	19.1	21.5	17.3	36.6	38.0	40.2	37.4	44.5	43.1	44.2	39.7	48.8	47.4	46.6	41.4	37.1	37.4	38.7	35.7
Attitudes Favorable Toward Antisocial Behavior	28.9	32.4	36.8	38.8	26.7	28.3	29.2	29.4	38.5	35.6	37.7	35.1	38.6	39.4	38.3	35.3	33.5	34.0	35.6	34.2
Sensation Seeking	32.1	39.1	36.7	36.8	30.6	33.0	31.5	34.8	34.5	34.3	33.7	34.9	31.8	32.2	30.3	31.5	32.3	34.5	32.9	34.4
Rewards for Antisocial Behavior	16.4	15.2	16.4	21.6	35.1	31.2	33.0	41.4	43.5	35.2	36.9	39.5	45.4	41.7	40.1	44.1	36.1	31.4	32.3	38.2
Friend's Use of Drugs	8.9	10.2	10.5	14.6	29.4	28.4	30.2	35.3	35.4	31.0	31.7	35.1	37.8	32.8	32.8	34.4	28.9	26.1	27.0	31.7
Interaction With Antisocial Peers	18.1	18.3	20.7	31.7	22.8	25.4	27.0	38.0	28.2	26.3	26.4	36.6	32.3	29.2	28.6	36.1	25.8	25.0	25.9	36.0
Depressive Symptoms	23.3	28.9	27.9	31.1	32.4	35.9	36.8	37.4	39.1	39.9	41.5	43.2	36.6	41.5	43.2	41.8	33.3	36.7	37.7	38.7
Total																				
Total Risk	32.1	36.2	37.1	37.4	39.1	40.2	42.3	44.8	41.9	39.2	39.5	36.2	45.0	43.8	41.8	37.3	40.0	39.8	40.2	39.1

Table ES-2

Protective Factor Scales

	6th				8th				10th				12th				All Grades			
	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
Community																				
Rewards for Prosocial Involvement	51.5	49.4	45.8	41.4	51.8	49.9	45.9	45.1	43.9	43.5	40.6	39.7	42.9	43.3	40.1	38.9	47.2	46.4	42.9	41.3
Family																				
Family Attachment	69.5	66.1	65.6	63.5	67.1	62.9	61.8	59.9	66.5	63.8	63.7	61.6	64.4	60.3	61.0	59.1	66.8	63.2	62.9	60.7
Opportunities for Prosocial Involvement	65.3	58.6	58.3	57.2	69.7	67.0	68.4	65.9	60.6	63.0	61.4	60.6	57.3	58.9	59.5	58.3	63.0	61.9	61.9	60.7
Rewards for Prosocial Involvement	66.3	61.7	60.7	56.9	72.5	69.1	69.0	65.7	62.7	60.8	60.4	57.9	58.7	56.2	56.0	54.6	64.9	61.9	61.5	58.9
School																				
Opportunities for Prosocial Involvement	62.8	61.6	60.8	58.8	56.9	52.3	51.9	54.4	50.2	47.0	43.7	51.3	52.2	46.5	45.5	52.1	55.1	51.4	49.9	53.6
Rewards for Prosocial Involvement	66.1	64.1	62.9	54.6	59.2	56.9	55.5	51.6	49.4	47.9	43.8	46.2	53.9	48.5	47.6	49.4	56.6	53.9	51.9	50.2
Peer And Individual																				
Religiosity	51.4	47.9	44.4	50.5	49.0	46.2	43.7	45.9	42.0	40.0	38.8	40.2	37.4	35.4	34.5	34.0	44.5	42.2	40.1	42.1
Belief In The Moral Order	56.6	53.3	52.1	50.5	62.9	61.7	58.5	58.0	61.9	63.2	61.9	60.6	61.4	60.1	59.7	58.8	60.9	59.8	58.3	57.9
Total																				
Total Protection	60.6	56.7	52.5	46.7	66.4	58.8	59.3	51.2	59.6	58.9	55.0	49.8	59.7	55.1	54.3	48.2	62.0	57.4	55.3	49.2

Table ES-3

Alcohol Use: Lifetime, Past-Month, Binge Drinking

Grade	Alcohol (Lifetime Use)				Alcohol (30-Day Use)				Binge Drinking			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	13.3	15.8	16.8	n/a	3	3.3	3.3	n/a	1.3	1.3	1.3	n/a
8th	35.1	33.9	33.0	23.1	9.6	9.5	9.3	8.0	3.1	3.2	3.3	3.7
10th	61.5	54.2	53.0	42.2	26.2	22.3	22.3	19.7	11.7	8.4	8.7	9.8
12th	74.2	71.0	69.2	61.5	40.6	37.6	35.9	33.2	21.8	18.0	16.5	16.6
All	46.9	43.9	43.3	n/a	20.3	18.2	17.9	n/a	9.7	7.8	7.5	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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	2.4	2.9	2.7	n/a	0.5	0.8	0.6	n/a	1.0	1.2	1.1	n/a	0.3	0.4	0.3	n/a	n/a	2.6	2.3	n/a
8th	10.2	11.0	9.4	9.4	3.9	3.5	2.5	1.9	4.6	4.5	4.4	6.2	1.9	1.8	1.8	1.7	n/a	11.7	10.9	6.6
10th	21.2	18.3	16.2	15.9	9.9	6.8	6.0	5.0	10.9	9.8	8.9	9.1	5.8	4.9	4.2	3.8	n/a	20.4	21.9	13.1
12th	35.2	32.7	29.0	26.6	17.0	14.6	13.2	9.7	18.9	18.1	15.9	11.0	10.3	9.2	7.5	4.9	n/a	27.0	29.3	16.6
All	17.6	16.3	14.5	n/a	8.0	6.4	5.6	n/a	9.0	8.4	7.6	n/a	4.7	4.1	3.5	n/a	n/a	15.5	16.3	n/a

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

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.8	1.2	0.9	n/a	0.4	0.6	0.5	n/a
8th	6.4	7.3	8.4	13.5	3.3	3.8	4.6	5.5
10th	25.8	22.0	22.4	30.7	14.4	12.0	12.0	15.7
12th	40.3	38.2	38.1	45.0	21.8	20.8	20.8	22.9
All	18.9	17.3	17.7	n/a	10.3	9.4	9.7	n/a

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

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	5.3	3.3	3.6	n/a	2.2	1.7	1.6	n/a
8th	6.9	4.8	5.2	8.9	2.5	1.5	1.6	2.1
10th	6.4	4.7	4.2	6.1	1.3	1.1	0.9	1.1
12th	5.9	5.2	4.2	4.9	1.0	0.7	0.6	0.8
All	6.1	4.5	4.3	n/a	1.7	1.3	1.1	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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.4	0.7	0.5	n/a	2.1	1.9	1.8	n/a	0.2	0.3	0.4	n/a	0.2	0.6	0.6	n/a	n/a	2.6	2.3	n/a
8th	0.7	0.6	0.6	1.1	4.1	4.3	3.9	n/a	0.8	0.8	1.1	3.4	1.1	1.0	1.1	5.7	n/a	2.5	2.9	n/a
10th	1.2	1.2	1.0	1.1	8.3	6.7	5.9	n/a	2.7	2.6	2.6	6.0	3.9	3.3	3.3	8.2	n/a	4.2	4.6	n/a
12th	2	1.6	1.2	1.6	12.1	12.1	8.8	6.8	5.9	5.3	4.5	7.5	9.1	9.7	6.8	9.2	n/a	6.5	5.1	n/a
All	1.1	1.0	0.8	n/a	6.8	6.3	5.1	n/a	2.5	2.3	2.2	n/a	3.7	3.7	3.0	n/a	n/a	4.0	3.8	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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.2	0.3	0.2	n/a	1.0	1.0	0.7	n/a	0.1	0.1	0.1	n/a	0.1	0.2	0.3	n/a	n/a	1.4	1.2	n/a
8th	0.2	0.2	0.2	0.3	1.5	1.6	1.2	n/a	0.2	0.3	0.5	0.7	0.4	0.4	0.4	1.7	n/a	1.2	1.2	n/a
10th	0.5	0.4	0.3	0.3	2.6	2.0	1.7	n/a	0.9	0.8	0.7	1.5	1.0	1.4	0.9	2.5	n/a	1.6	1.5	n/a
12th	0.5	0.4	0.3	0.8	3.0	3.0	1.7	1.6	1.4	1.4	1.3	2.0	2.8	3.2	1.7	2.6	n/a	1.4	1.1	n/a
All	0.4	0.3	0.3	n/a	2.1	1.9	1.3	n/a	0.7	0.7	0.7	n/a	1.1	1.3	0.8	n/a	n/a	1.4	1.3	n/a

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

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.1	0.2	0.1	n/a	0.2	0.3	0.2	n/a	0.1	0.2	0.2	n/a	1.1	1.5	1.8	n/a	0.2	0.3	0.1	n/a	0.2	0.2	0.2	n/a	0.1	0.3	0.1	n/a
8th	0.3	0.3	0.2	0.7	0.9	0.7	0.9	1.9	0.6	0.7	0.8	1.5	1.5	1.8	1.5	n/a	0.6	0.5	0.5	1.3	0.4	0.4	0.4	0.8	0.4	0.4	0.3	0.7
10th	0.9	0.6	0.4	0.4	3.8	3.4	2.8	4.2	2.6	2.0	1.6	2.8	4.0	2.6	1.6	n/a	1.5	1.3	1.1	2.1	0.9	0.6	0.6	0.8	0.8	0.6	0.4	0.9
12th	1.4	1.4	0.5	0.7	7.6	6.9	6.3	6.7	5.7	5.4	3.1	4.9	6.9	4.8	2.0	n/a	3.1	3.8	2.7	4.2	1.3	0.9	0.6	1.7	1.2	1.0	0.6	1.1
All	0.7	0.6	0.3	n/a	3.2	2.8	2.6	n/a	2.3	2.1	1.4	n/a	3.4	2.7	1.7	n/a	1.4	1.5	1.1	n/a	0.7	0.5	0.4	n/a	0.7	0.5	0.3	n/a

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

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0	0.1	0.0	n/a	0.1	0.0	0.1	n/a	0	0.1	0.1	n/a	0.4	0.8	0.8	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.0	n/a
8th	0.1	0.1	0.1	0.2	0.3	0.2	0.4	0.5	0.2	0.3	0.4	0.4	0.5	0.5	0.5	n/a	0.2	0.2	0.1	0.4	0.1	0.2	0.1	0.3	0.2	0.1	0.1	0.2
10th	0.3	0.2	0.2	0.1	1	0.8	0.9	1.1	0.7	0.4	0.4	0.5	0.9	0.7	0.4	n/a	0.4	0.3	0.2	0.5	0.3	0.2	0.2	0.3	0.3	0.1	0.1	0.1
12th	0.4	0.3	0.1	0.3	1.4	1.5	1.3	1.6	1.5	1.3	0.5	0.9	0.8	0.5	0.4	n/a	0.6	0.8	0.8	1.2	0.3	0.1	0.2	0.6	0.3	0.2	0.2	0.3
All	0.2	0.2	0.1	n/a	0.7	0.6	0.7	n/a	0.6	0.6	0.3	n/a	0.6	0.6	0.5	n/a	0.3	0.3	0.3	n/a	0.2	0.1	0.1	n/a	0.2	0.1	0.1	n/a

In the 2017 administration of PAYS, 1013 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 a 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 Pennsylvania that were higher than the BH Norm in 2017 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale, Parental Attitudes Favorable to Drug Use, Gang Involvement, and Peer/Individual Attitudes Favorable Toward Drug Use.

Protective Factor Profiles

In general, Pennsylvania protection tended to be higher than the BH Norm for most scales. Only one scale (Religiosity) in Pennsylvania showed protection scores were lower than the BH Norm for grades 6, 8, and 10 (1.4 – 6.1 percentage points lower for grades 6, 8, and 10).

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 (9.9 percentage points higher in Pennsylvania compared to the national MTF rates), 10th grade (10.8 percentage points higher in Pennsylvania compared to the nation), and 12th grade (7.7 percentage points higher in Pennsylvania). In regard to tobacco use, the rate of lifetime cigarette use in Pennsylvania was higher than the nation in the 12th grade (29.0% for PA, 26.6% for MTF) and lifetime smokeless tobacco use in Pennsylvania was higher than the nation in the 12th grade (15.9% for Pennsylvania, 11.0% for MTF). Narcotic prescription drug use was also slightly higher than the national rate for the 12th grade (8.8% lifetime 12th grade use for PA, 6.8% use for the MTF). For all other substances, State use rates were lower than, or equal to, the national rates.

Pennsylvania 12th graders also indicated a past-month smokeless tobacco use rate that was 2.6 percentage points higher than the national rate. 2017 was the second PAYS administration to gather past-month e-cigarette use data; and these data show significantly higher use for PA students in comparison to the nation (4.3 percentage points higher 8th grade use in Pennsylvania vs. the MTF, 8.8 percentage points higher 10th grade use in Pennsylvania vs. the MTF, and 12.7 percentage points higher 12th grade use in Pennsylvania 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 — over three times higher for all grades combined (10.3% lifetime use by males, 3.0% lifetime use by females). 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 16 of the 18 substances. In the 8th, however, females show slightly more use; 8th grade females indicate slightly higher use over males in 5 of the 18 substance categories. In the 10th grade, females indicate slightly higher use for 4 categories; and in the 12th grade, only 2 categories.

Perceived Harmfulness of ATODs:

Of the seven substance use categories, students perceived the greatest risk in using prescription drugs not prescribed to them (82.4% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (80.4% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (42.6% of students perceived moderate or great risk) and smoking marijuana once or twice a week (57.5% of students perceived great or moderate risk).

Sources of Obtaining Alcohol

For all grades combined, 33.3% of alcohol-using youth took the alcohol without permission, stole it, or found it; 29.6% gave someone money to buy it for them; 25.4% indicated that friends or siblings over 21 bought it for them; 23.1% indicated their parents provided it; 18.2% indicated their friends' parents provided it; 17.6% indicated friends or siblings under the age of 21 provided it; 14.1% indicated other relatives provided it; 4.7% bought it at a store; 3.1% bought it at a restaurant, bar, or club; 3.4% bought it at a public event such as a concert or sporting event; and 24.6% obtained it from another source not listed.

Sources of Obtaining Prescription Drugs

For all grades combined, 39.1% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 40.6% indicated that a friend or family member gave them to the student, 27.3% indicated that they bought them from someone, 10.6% indicated they took them from someone not related to them, 10.0% indicated they took them from relatives who were not living in their home, and 8.4% 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 this national average. Rates of attacking someone to seriously harm them are 1.3 percentage points to 3.5 percentage points lower in Pennsylvania vs. the BH Norm in each grade. Fewer students in Pennsylvania report being at school while drunk or high, in comparison to the BH national norm (5.6% for Pennsylvania, all grades combined; 8.8% for the BH Norm).

Although the data gathered from the 2017 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.

School-Related Violence and Drug Behaviors

Of all students surveyed, 8.2% have been offered drugs at least one time in the past 12 months. Of all students surveyed, 20.5% indicate having been threatened at school at least once in the past year, and 3.8% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 8.3% of all students indicated having been attacked at school, and 1.2% indicated having been attacked with a weapon at school. In the past month, 1.2% 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

Over one in four (28.2% of all students) indicated they had been bullied in the past year, 16.5% reported having been electronically bullied, and 4.6% said they had stayed home from school in the past year due to worries about bullying. Rates of being electronically bullied were highest in the 8th grade (18.7% of 8th graders reported having been electronically bullied). Students were also asked about inappropriate sexual contact through technology. Of all students, 22.6% marked “YES!” or “yes” to this question and 10th graders reported the highest response to this question (31.5% marked “YES!” or “yes”).

Gang Involvement

PAYS gathers some basic data regarding youth gang involvement. In 2017, 5.1% of all students indicated that they had belonged to a gang at some point in their life, and 4.5% indicated their gang had a name.

Gambling

The individual activities most often participated in during the past year were playing the lottery (21.4% of all students, a grade-level peak of 23.5% in the 10th grade), betting on personal games of skill (17.9% of all students, a grade-level peak of 19.7% in the 10th grade), and betting on sports (13.8% of all students, a grade-level peak of 15.7% in the 10th grade).

Dangerous Driving Behaviors

PAYS data show that 2.2% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 5.5% of that grade. More students reported driving after smoking marijuana in the past year (3.5% of the total survey sample population, and 10.3% 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 38.1% 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; 24.8% of all students indicated that they sometimes thought life is not worth it; 35.1% of all students indicated that “at times I think I am no good at all” and 20.6% indicated that they felt that they were a failure. Further 14.0% 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.
- There was a slight decrease in reported rates of past-year self-harm since 2015 for all grades combined (a decrease of 1.1 percentage points from 15.1% in 2015 to 14.0% in 2017), in the 8th grade (a decrease of 1.4 percentage points, from 16.7% in 2015 to 15.3% in 2017), and in the 12th grade (a decrease of 1.7 percentage points, from 15.1% in 2015 to 13.4% in 2017).
- 40.7% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 13.4% indicated having the stress of worrying that food at home would run out; and 6.8% indicated the stress of having to skip a meal due to a lack of money.
- 16.5% of students in all grades combined indicated that they had considered suicide in the past year. The grade-level rates for this question were as follows: 8.8% of 6th graders, 16.2% of 8th graders, 20.2% of 10th graders, and 19.9% of 12th graders indicated they had considered suicide in the past year.
- 13.4% of students in all grades combined indicated that they had gone so far as to create a suicide plan at least once in the past year. The grade-level

rates for this question were as follows: 6.8% of 6th graders, 13.2% of 8th graders, 16.4% of 10th graders, and 16.2% of 12th graders indicating they had created a suicide plan.

- In regard to those students who indicated they had attempted suicide in the past year, 5.9% of 6th graders, 10.1% of 8th graders, 11.5% of 10th graders, 12.0% of 12th graders, and 10.0% of all students indicated that they had attempted suicide at least one time in the past 12 months.

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 over three times higher than non-depressed students. Depressed students indicate use rates that are seven times higher for past-month cigarette use and over four 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, 17.5% 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, 49.0% 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, 38% had considered suicide in the past year, 30.8% had made a suicide plan in the past year, and 26.9% 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,” 40.6% indicated they had used alcohol in their lifetime and 15.3% indicated they had used alcohol in the past month. In contrast, of students who marked “NO!” or “no” to that statement, 69.9%

indicated they had used alcohol in their lifetime and 38.8% 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 nearly four times higher than the “A” students’ use rates, and past month cigarette use rates that are nearly 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, 8.7% 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 (10.1%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 11.0%. Of youth who indicated they worried about food once a month or more, 18.0% of those youth indicated regular marijuana use.

Perceived Parental Acceptability and Substance Use

A large majority of students perceive parental disapproval of substance use. Of all students, 93.6% indicated their parents felt it was “Wrong” or “Very wrong” to use tobacco, 89.5% perceived parental disapproval of marijuana use, 89.4% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.6% perceived parental disapproval of prescription drug use.

Relatively few students (9.8% lifetime, 4.4% 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 37.5% for lifetime use and 19.8% 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. When youth thought there was “No or very little chance” that they would be seen as cool if they used marijuana, only 7.9% had tried marijuana in their lifetime and only 3.8% 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 (28.3%) and over three times higher for past-month use (14.0%). Youth who thought that there was a “Very good chance” they would be seen as cool were over 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

The 2017 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 15.2% indicated having moved one or more times in the past year, and 26.1% indicated having moved one or more times in the past three years. The results also 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, 16.1% 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, 30.1% 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) 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 2017 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 2017 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 228 questions were asked of students across all four forms. The questions were printed in three test booklets that were machine scoreable.

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.

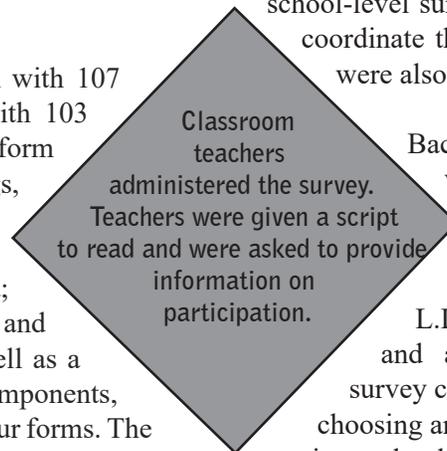
Administration

Prior to recruitment, the 2017 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 2017 that the survey was scheduled to be administered in the fall of 2017 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 through November, 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 one-third 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

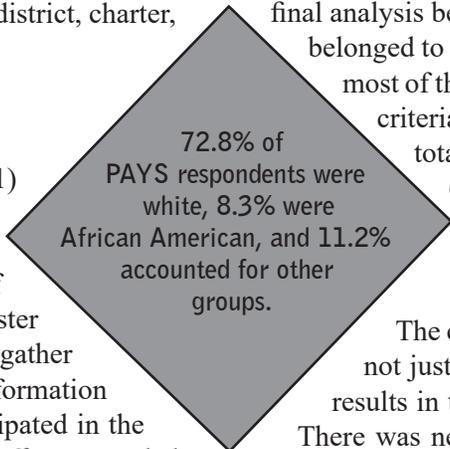
The survey goals for the 2017 PAYS were twofold — 1) to gather a valid statewide sample (the results of which are presented in this report), and 2) to offer the survey to districts and schools across the State (a census of students in grades 6, 8, 10, and 12) in order to administer enough surveys to 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 266,751 public and private school students throughout the State participated in the Fall 2017 Pennsylvania Youth Survey. After invalid/dishonest/odd-grade surveys were removed, a total of 253,566 surveys were represented in final local-level reports.

Enrollment figures from the 2016-2017 PDE Public School Enrollment Reports web site show that for the 2016-2017 school year (the most current enrollment available through project planning reporting) the total enrollment in grades 6, 8, 10, and 12 was 504,235. The enrollment in those grades for the school districts, charter schools, and private schools

that signed on to administer the 2017 PAYS was 336,082. Thus, the final participation rate for the full state eligible population was 50.3%, and the participation rate of eligible participating schools was 75.5%. 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 27,331 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 266,751 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 253,566 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, 86.6% of participants were non-Hispanic and 13.4% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (71.0%), Black/African American (8.8%), or left their race unmarked (7.9%). The other race groups accounted for 12.3% 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 2013, 2015, and 2017 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 2017 statewide sample continued and improved upon the 2011, 2013, and 2015 statewide samples to ensure continuity. Bach Harrison worked with the 2015 sample to update it based on current school availability and grade ranges.

The schools involved in the 2013, 2015, and 2017 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 sample frame and adjusted it to account for schools that had either closed or changed the range of grades that were housed at the school. The result for 2017 was that there were 241 schools included in the 2017 sample frame. Of these combinations, 168 participated in the 2017 Statewide Sample.

Of the 241 schools selected for the sample frame, 168 participated in the 2017 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 241 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 2013/2015/2017 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.

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: 241 schools (some with multiple grades) were included in the sample. Out of these, 168, or 69.7%, participated in the survey (an improvement on previous administrations).
- Student Participation: The 168 participating schools had enrollments totaling 39,952 students in selected grades, and there were a total of 439,108 students in the state’s eligible population (less students in Allegheny and Philadelphia counties). Out of the state sample, 27,331, or 68.4%, returned usable survey responses for the appropriate grade levels.
- Overall Participation: $69.7\% * 68.4\% = 47.7\%$.

Weighting the Statewide Sample

The same weighting strategies that were used in previous PAYS administrations were applied to 2017 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.

The same weighting strategies that were used in previous PAYS administrations were applied to 2017 data to maintain consistency.

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 precision of a statistical estimate. For example, a confidence interval of ± 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 to the right 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.

Of all PAYS respondents (includes ALL respondents, whether a part of the Statewide sample or not), there were a total of 265,751 survey questionnaires completed and returned to Bach Harrison for scanning analysis. However,

Table 1-1

State Sample Confidence Intervals

	State Enrollment of Eligible Schools		State Sample		Confidence Interval
	#	%	#	%	
All grades	439,108	100.0	27,331	100.0	+/- 0.82
6	106,307	24.2	6,845	25.0	+/- 1.65
8	109,226	24.9	8,019	29.3	+/- 1.52
10	113,970	26.0	6,459	23.6	+/- 1.7
12	109,605	25.0	6,008	22.0	+/- 1.76

not all of the questionnaires contained valid information for reporting in this State Report. Of these surveys, 6,819 (2.6%) were eliminated due to students either meeting a validity check or marking a grade that was impossible for the school attended. Surveys deemed to be dishonest were eliminated because of six predetermined dishonesty indicators – 1) the students indicated that they had used the non-existent drug metaclorazoles (3,689 surveys); 2) the students reported an impossibly high level of multiple drug use (2,713 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (1,651 surveys); 4) the students reported an age that was inconsistent with their grade or their school (1,188 surveys); 5) the survey did not have enough questions completed to assess honesty (1,499); or 6) the student marked inconsistent responses regarding lifetime gang involvement and age of first gang involvement (438). These surveys were not included in the final analyses.

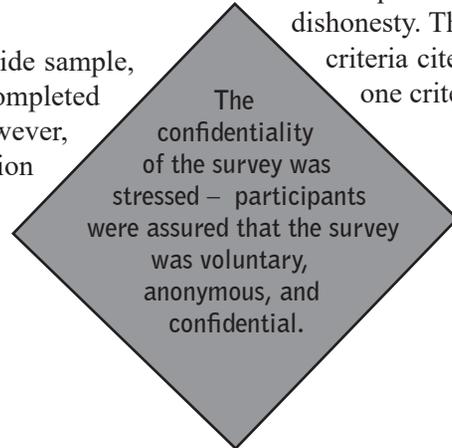
Because the results reported in this State report and in the profile reports focus on data from the 6th, 8th, 10th, and 12th grades, 5,133 additional students in the 7th, 9th, and 11th grades were also eliminated from these State level results. These 7th, 9th, and 11th graders took the survey because 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. Further, 220 surveys were eliminated due to students not reporting a grade level, and 13 surveys were eliminated due to students marking multiple grades.

A total of 12,185 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.

Validity of PAYS Data: Statewide Sample Only

In regard to only the students who belong to the statewide sample, there were a total of 27,760 survey questionnaires completed within school-grade combinations in the sample. However, not all of the questionnaires contained valid information for reporting in this State Report. Of these surveys,



429 (1.5%) 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 (308 surveys); 2) the students reported an impossibly high level of multiple drug use (220 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (151 surveys); 4) the students reported an age that was inconsistent with their grade or their school (64 surveys); or 5) the students reported inconsistent lifetime gang involvement and age of first gang involvement data (47). These surveys were not included in the final analyses. A total of 429 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.

Table 1-2

Demographics						
	State 2013		State 2015		State 2017	
	Number	Percent	Number	Percent	Number	Percent
Total Survey Respondents	200,622	100.0	216,916	100.0	253,566	100.0
Survey Respondents by Grade						
6	48,034	23.9	53,532	24.7	62,971	24.8
8	57,088	28.5	61,222	28.2	70,214	27.7
10	52,042	25.9	56,128	25.9	65,164	25.7
12	43,458	21.7	46,034	21.2	55,217	21.8
Survey Respondents by Gender						
Male	99,487	49.9	106,472	50.3	124,823	50.3
Female	100,045	50.1	105,341	49.7	123,271	49.7
Survey Respondents by Ethnicity						
Yes, of Hispanic, Latino, or Spanish Origin	19,325	9.6	25,504	11.8	33,940	13.4
No, not of Hispanic, Latino, or Spanish origin	181,332	90.4	191,412	88.2	219,626	86.6
Survey Respondents by Race						
Black, African American	14,761	7.4	18,070	8.3	22,272	8.8
American Indian	1,875	0.9	3,326	1.5	4,095	1.6
Asian/Pacific Islander	7,572	3.8	9,915	4.6	13,134	5.2
White, Caucasian	157,628	78.6	157,967	72.8	179,972	71.0
Multi-racial	10,192	5.1	11,087	5.1	14,065	5.5
Race Unmarked	8,594	4.3	16,551	7.6	20,028	7.9

Figure 1-1

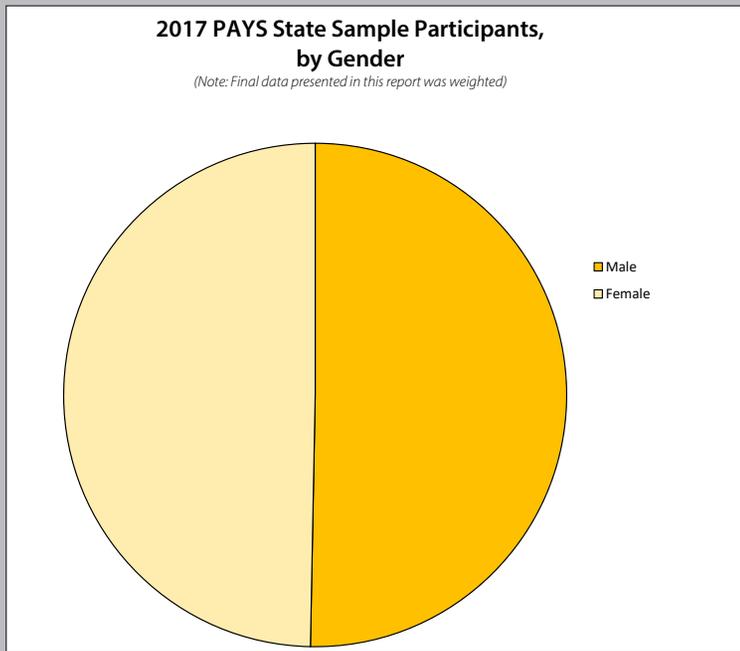


Figure 1-2

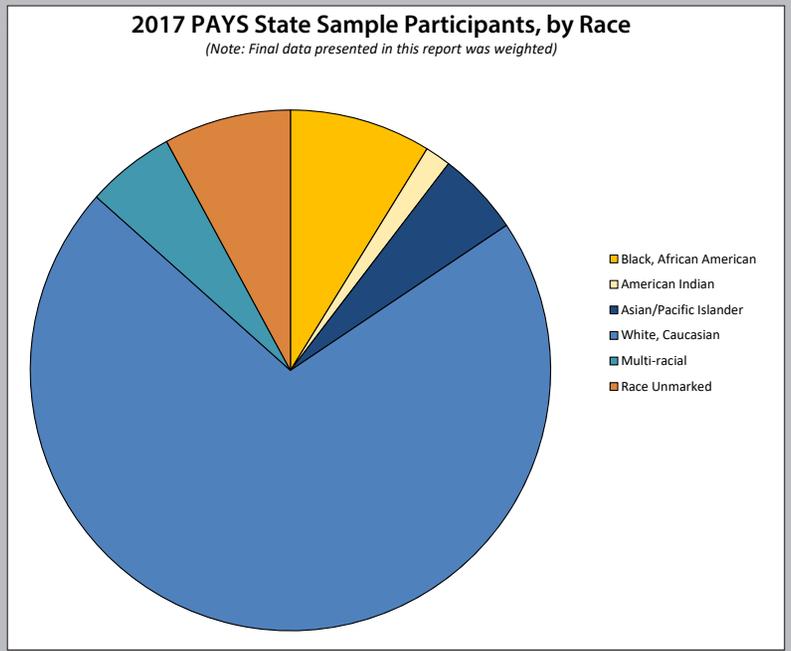
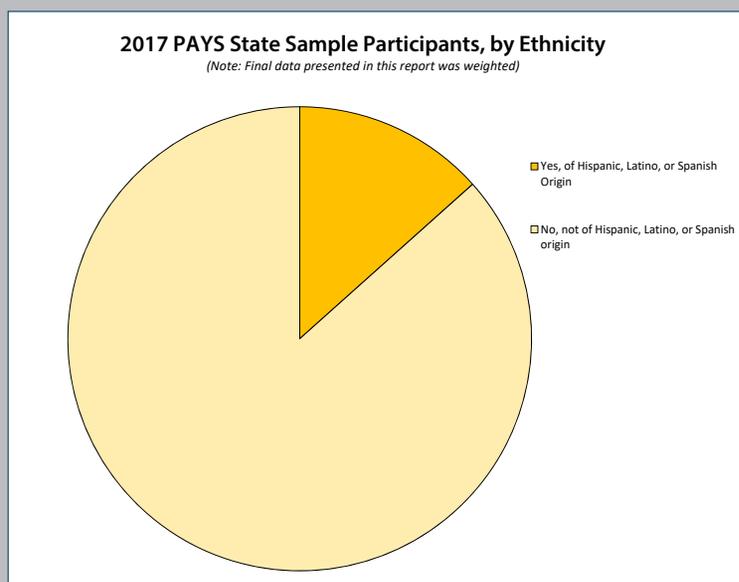


Figure 1-3



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

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 12 statewide surveys were combined into a database of approximately 970,070 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
Community Risk Factors						
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 2017 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 (43.6% at risk in the 6th grade) while the highest risk scale score for the 8th, 10th, and 12th grades was Low Neighborhood Attachment (35.1% at risk in the 8th grade, 42.8% at risk in the 10th grade, and 5.05% 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 12th grade (1.1 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 2017 PAYS collected data for one community domain protective factor scale — Community Rewards for Prosocial Involvement. Protective factor scale scores ranged from as low as 40.1% for the 12th grade up to 45.8% for the 6th grade.

Table 2-2

Community Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
Community Risk Factor Scales																				
Low Neighborhood Attachment	36.2	39.2	41.0	42.1	29.4	35.2	35.1	35.7	39.6	42.0	42.8	42.8	43.3	49.7	50.5	49.4	37.3	41.7	42.5	42.5
Perceived Availability of Drugs	31.7	32.9	32.8	35.8	29.1	26.0	25.9	34.9	33.3	30.1	28.5	34.5	32.6	34.4	30.8	32.7	31.7	30.8	29.4	34.4
Perceived Availability of Handguns	13.8	15.9	15.7	22.4	25.1	24.9	23.4	33.2	33.7	31.1	31.0	38.3	39.7	39.9	37.9	45.5	29.0	28.6	27.7	35.6
Laws & Norms Favorable Toward Drug Use	37.7	39.8	43.6	43.6	29.6	30.7	31.8	33.5	42.3	39.2	38.8	42.1	40.8	39.1	38.9	44.2	37.8	37.2	38.1	40.6
Community Protective Factor Scales																				
Rewards for Prosocial Involvement	51.5	49.4	45.8	41.4	51.8	49.9	45.9	45.1	43.9	43.5	40.6	39.7	42.9	43.3	40.1	38.9	47.2	46.4	42.9	41.3

Comparisons to 2015 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. For the Low Neighborhood Attachment scale, the 6th grade scale score increased by 1.8 percentage points from 2015 to 2017. For the Perceived Availability of Drugs scale, both 10th and 12th grade saw significant decreases (a decrease of 1.6 percentage points in the 10th grade and a decrease of 3.6 percentage points in the 12th grade) since 2015. For the Perceived Availability of Handguns scale, both the 8th and 12th grades saw significant decreases in risk (a decrease of 1.5 percentage points in the 8th grade and a decrease of 2.0 percentage points in the 12th grade). The Laws and Norms Favorable to Drug Use scale increased 3.8 percentage points for the 6th grade and 1.1 percentage points for the 8th grade. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data. Protection decreased significantly from 2015 to 2017 for all grades for the Rewards for Prosocial Involvement scale (a decrease of 3.6 percentage points for the 6th grade, a decrease of 4.0 percentage points for the 8th grade, a decrease of 2.9 percentage points for the 10th grade and a decrease of 3.2 percentage points for the 12th grade).

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

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
Family						
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 (50.1% at risk in the 6th grade, 40.9% at risk in the 8th grade, 47.2% at risk in the 10th grade, and 47.1% 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 (6.4 to 8.8 percentage points lower risk in each grade) and Poor Family Management (2.8 to 5.8 percentage points 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 2017 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 (65.6% with protection in the 6th grade, 63.7% with protection in the 10th grade, 61.0% with protection in the 12th grade), while the 8th grade showed the highest protection for the Family Rewards for Prosocial Involvement scale (69.0% with protection). In comparison to the BH Norm, protection scale scores were higher for all grades for all three scales.

Comparisons to 2015 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2015 survey, the scale scores for Poor Family Management decreased 0.7 to 1.6 percentage points in grades 6, 8, 10, and 12. Scale scores for Parental Attitudes Favorable toward Drug Use increased slightly for grades 6, 8, and 10. 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 or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 2-4
Family Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
Family Risk Factor Scales																				
Family History of Antisocial Behavior	37.6	37.8	37.3	44.0	34.6	33.3	34.0	40.4	37.0	30.3	30.3	39.1	35.8	30.9	30.3	37.4	36.2	32.9	32.8	39.9
Poor Family Management	40.1	39.7	39.0	44.8	36.6	36.7	35.7	41.4	39.2	39.2	37.6	41.6	34.6	33.7	32.2	35.0	37.6	37.3	36.0	40.2
Parental Attitudes Favorable Toward Drug Use	11.6	14.5	15.6	11.4	23.9	25.7	27.3	22.7	39.9	40.9	42.1	35.6	42.1	42.8	42.9	36.8	30.2	31.6	32.8	28.0
Parental Attitudes Favorable Toward Antisocial Behavior	39.2	48.3	50.1	36.9	33.9	40.1	40.9	30.0	43.0	47.3	47.2	33.6	43.6	47.0	47.1	34.1	40.0	45.7	46.2	33.3
Family Conflict	31.4	34.9	34.0	36.9	28.6	31.8	30.9	32.7	35.6	36.3	35.8	37.5	35.3	38.1	38.0	37.5	32.8	35.3	34.8	36.1
Family Protective Factor Scales																				
Family Attachment	69.5	66.1	65.6	63.5	67.1	62.9	61.8	59.9	66.5	63.8	63.7	61.6	64.4	60.3	61.0	59.1	66.8	63.2	62.9	60.7
Opportunities for Prosocial Involvement	65.3	58.6	58.3	57.2	69.7	67.0	68.4	65.9	60.6	63.0	61.4	60.6	57.3	58.9	59.5	58.3	63.0	61.9	61.9	60.7
Rewards for Prosocial Involvement	66.3	61.7	60.7	56.9	72.5	69.1	69.0	65.7	62.7	60.8	60.4	57.9	58.7	56.2	56.0	54.6	64.9	61.9	61.5	58.9

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 30.7% at risk in the 6th grade to 37.4% at risk in the 8th grade, while scale scores for Low Commitment to School ranged from 37.2% at risk in the 6th grade to 49.8% at risk in the 10th grade. In comparison to the BH Norm, fewer Pennsylvania youth in all grades are at risk for the Low Commitment Toward School scale.

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 43.7% with protection in the 10th grade to 60.8% with protection

in the 6th grade, and School Rewards for Prosocial Involvement ranged from 43.8% with protection in the 10th grade to 62.9% with protection in the 6th grade.

Comparisons to 2015 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2015 survey, the scale scores for Low Commitment to School increased 3.9 to 5.1 percentage points in grades 6, 8, and 10; while scale scores for Academic Failure increased 0.8 to 2.7 percentage points in each grade. 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 or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 2-6

School Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
School Risk Factor Scales																				
Academic Failure	28.1	29.9	30.7	32.6	32.5	35.3	36.3	32.5	35.9	34.7	37.4	35.1	33.4	34.6	35.9	33.4	32.8	33.8	35.3	33.5
Low Commitment Toward School	30.4	33.3	37.2	47.0	39.6	41.7	46.8	50.1	44.0	45.5	49.8	53.8	39.6	44.6	43.8	49.5	38.8	41.5	44.7	50.3
School Protective Factor Scales																				
Opportunities for Prosocial Involvement	62.8	61.6	60.8	58.8	56.9	52.3	51.9	54.4	50.2	47.0	43.7	51.3	52.2	46.5	45.5	52.1	55.1	51.4	49.9	53.6
Rewards for Prosocial Involvement	66.1	64.1	62.9	54.6	59.2	56.9	55.5	51.6	49.4	47.9	43.8	46.2	53.9	48.5	47.6	49.4	56.6	53.9	51.9	50.2

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
Individual/Peer Risk Factors						
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 2017 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 (47.2% at risk in the 6th grade, 43.8% at risk in the 8th grade, 46.3% at risk in the 10th grade, and 58.6% at risk in the 12th grade). In comparison to the BH Norm, for a majority of scales and grades, Pennsylvania youth indicated lower risk levels in comparison to the BH Norm. However, Pennsylvania high school youth in grades 6, 8, 10, and 12 indicated higher risk for the following two scales: Gang Involvement (3.6 percentage points higher than the BH Norm for the 6th grade, 4.9 percentage points higher than the BH Norm for the 8th grade, 5.0 percentage points higher than the BH Norm for the 10th grade, and 7.8 percentage points higher for the 12th grade) and the Attitudes Favorable Toward Drug Use risk scale (4.2 percentage points higher than the BH Norm for the 6th grade, 2.8 percentage points higher than the BH Norm for the 8th grade, 4.5 percentage points higher than the BH Norm for the 10th grade, and 5.2 percentage points 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 52.1% with protection in the 6th grade up to 61.9% with protection in the 10th grade. Protective factor scale scores for Religiosity ranged from 34.5% with protection in the 12th grade up to 44.4% 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 (0.5 to 1.6 percentage points higher in each grade), while a lower percentage of PA youth in most grades indicated protection within the Religiosity scale (1.4 to 6.1 percentage points lower protection in grades 6, 8, and 10).

Comparisons to 2015 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2015 survey, the scale scores for Sensation Seeking decreased 0.6 to 2.4 percentage points in each grade. Only one scale (Perceived Risk of Drug Use) showed significant (1.0% or greater) increases in each grade since 2015. 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 or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 2-8

Peer Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2013	State 2015	State 2017	BH Norm																
Peer And Individual Risk Factor Scales																				
Rebelliousness	25.4	25.7	25.8	33.8	21.3	21.7	20.8	26.0	29.7	25.7	26.1	30.4	33.4	31.1	28.4	31.7	27.6	26.1	25.3	30.1
Gang Involvement	8.2	10.4	11.3	7.7	7.4	10.3	11.3	6.4	9.1	11.5	11.2	6.2	12.8	15.6	14.6	6.8	---	12.0	12.1	6.6
Perceived Risk of Drug Use	42.2	43.0	47.2	50.9	30.0	39.3	43.8	47.7	42.1	43.9	46.3	48.8	52.3	55.7	58.6	58.6	41.7	45.6	49.1	51.4
Attitudes Favorable Toward Drug Use	14.7	19.1	21.5	17.3	36.6	38.0	40.2	37.4	44.5	43.1	44.2	39.7	48.8	47.4	46.6	41.4	37.1	37.4	38.7	35.7
Attitudes Favorable Toward Antisocial Behavior	28.9	32.4	36.8	38.8	26.7	28.3	29.2	29.4	38.5	35.6	37.7	35.1	38.6	39.4	38.3	35.3	33.5	34.0	35.6	34.2
Sensation Seeking	32.1	39.1	36.7	36.8	30.6	33.0	31.5	34.8	34.5	34.3	33.7	34.9	31.8	32.2	30.3	31.5	32.3	34.5	32.9	34.4
Rewards for Antisocial Behavior	16.4	15.2	16.4	21.6	35.1	31.2	33.0	41.4	43.5	35.2	36.9	39.5	45.4	41.7	40.1	44.1	36.1	31.4	32.3	38.2
Friend's Use of Drugs	8.9	10.2	10.5	14.6	29.4	28.4	30.2	35.3	35.4	31.0	31.7	35.1	37.8	32.8	32.8	34.4	28.9	26.1	27.0	31.7
Interaction With Antisocial Peers	18.1	18.3	20.7	31.7	22.8	25.4	27.0	38.0	28.2	26.3	26.4	36.6	32.3	29.2	28.6	36.1	25.8	25.0	25.9	36.0
Depressive Symptoms	23.3	28.9	27.9	31.1	32.4	35.9	36.8	37.4	39.1	39.9	41.5	43.2	36.6	41.5	43.2	41.8	33.3	36.7	37.7	38.7
Peer And Individual Protective Factor Scales																				
Belief In The Moral Order	56.6	53.3	52.1	50.5	62.9	61.7	58.5	58.0	61.9	63.2	61.9	60.6	61.4	60.1	59.7	58.8	60.9	59.8	58.3	57.9
Religiosity	51.4	47.9	44.4	50.5	49.0	46.2	43.7	45.9	42.0	40.0	38.8	40.2	37.4	35.4	34.5	34.0	44.5	42.2	40.1	42.1

Risk and Protective Factor Scales: 6th Grade

Chart 2-1
Risk factor scales, 6th grade, Statewide Sample 2017 PAYS

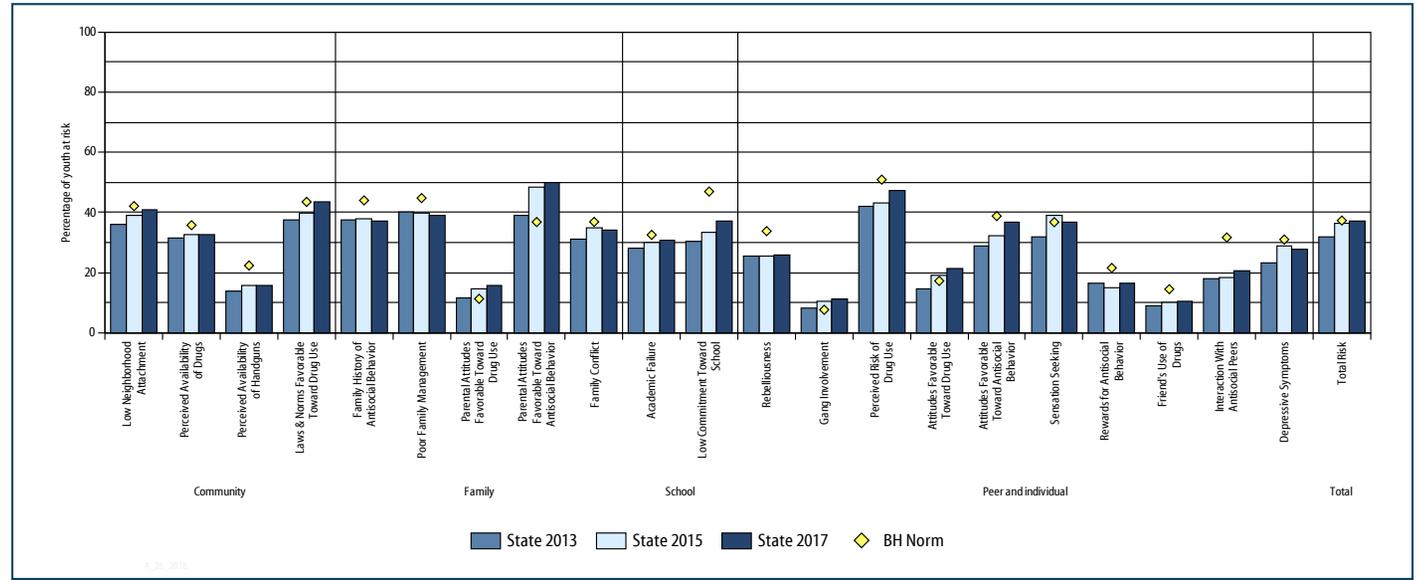
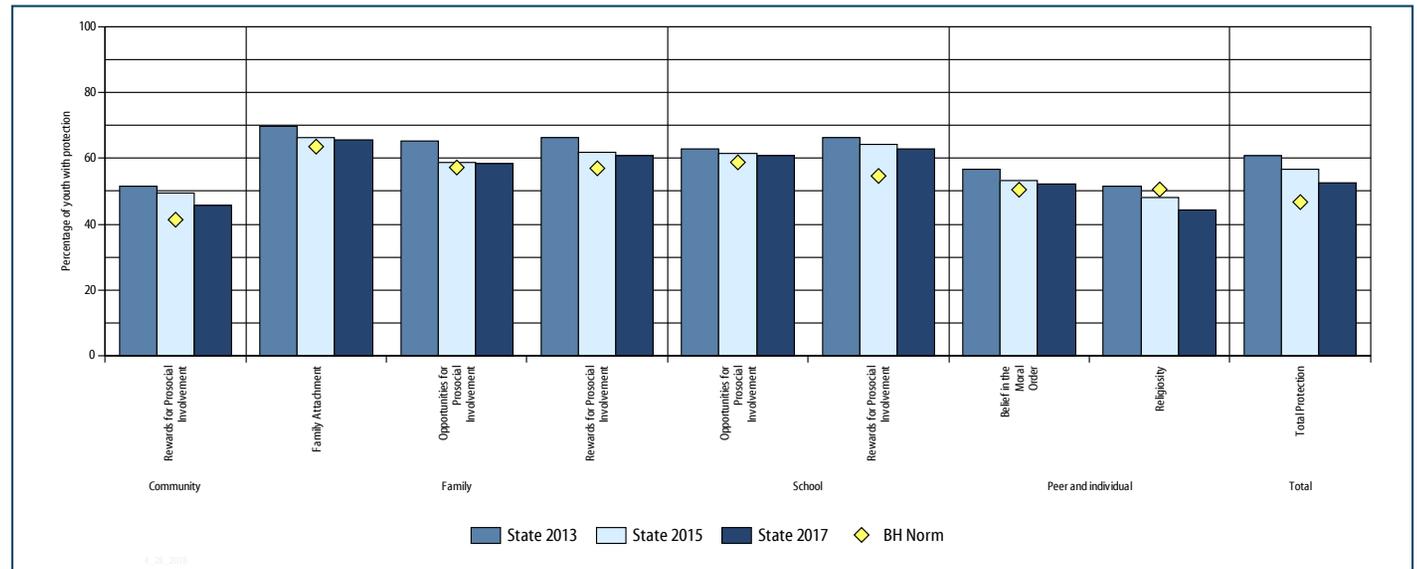


Chart 2-2
Protective factor scales, 6th grade, Statewide Sample 2017 PAYS



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 2017 PAYS

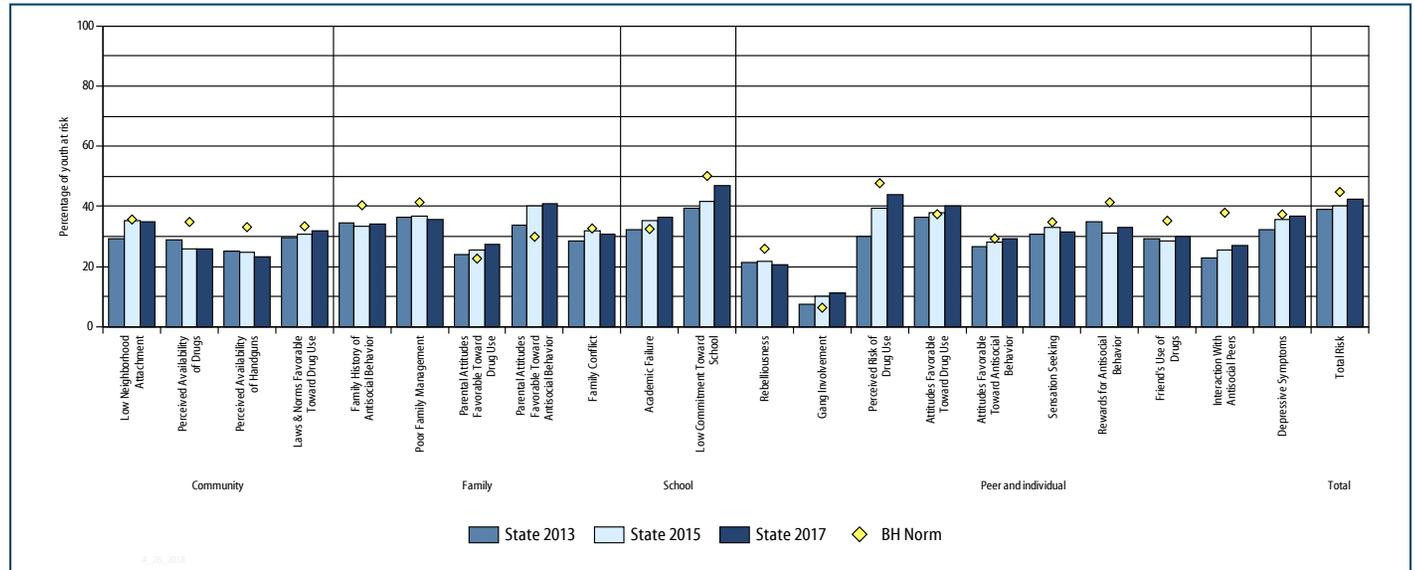
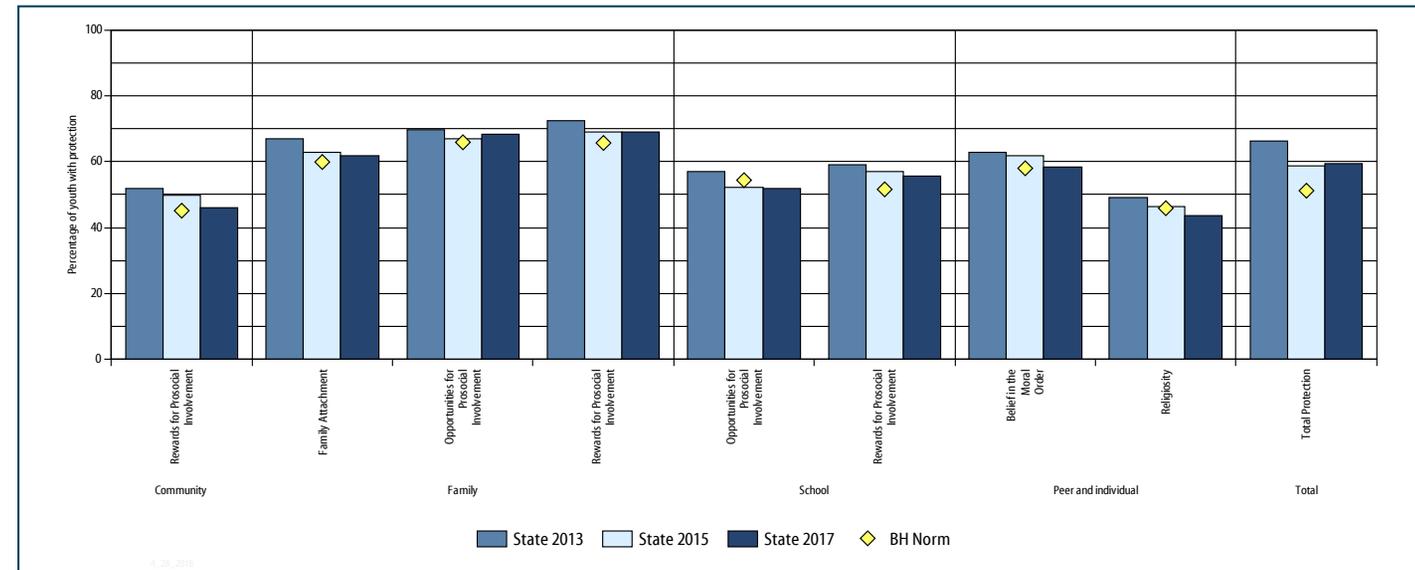


Chart 2-4

Protective factor scales, 8th grade, Statewide Sample 2017 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 2017 PAYS

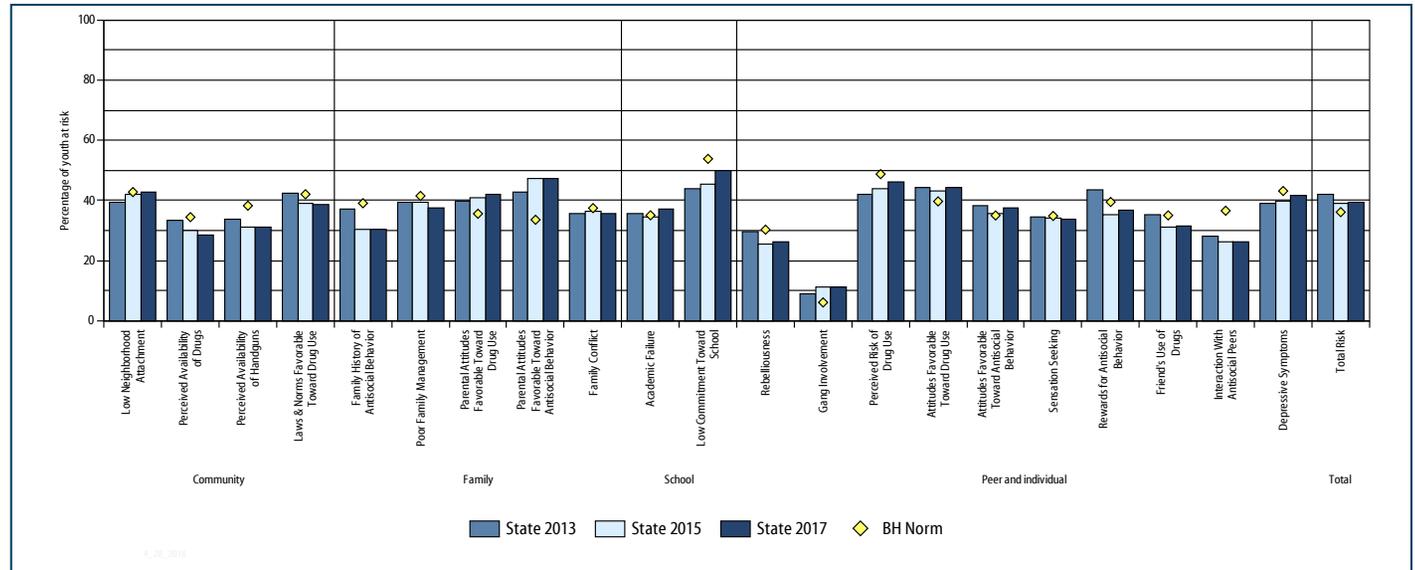
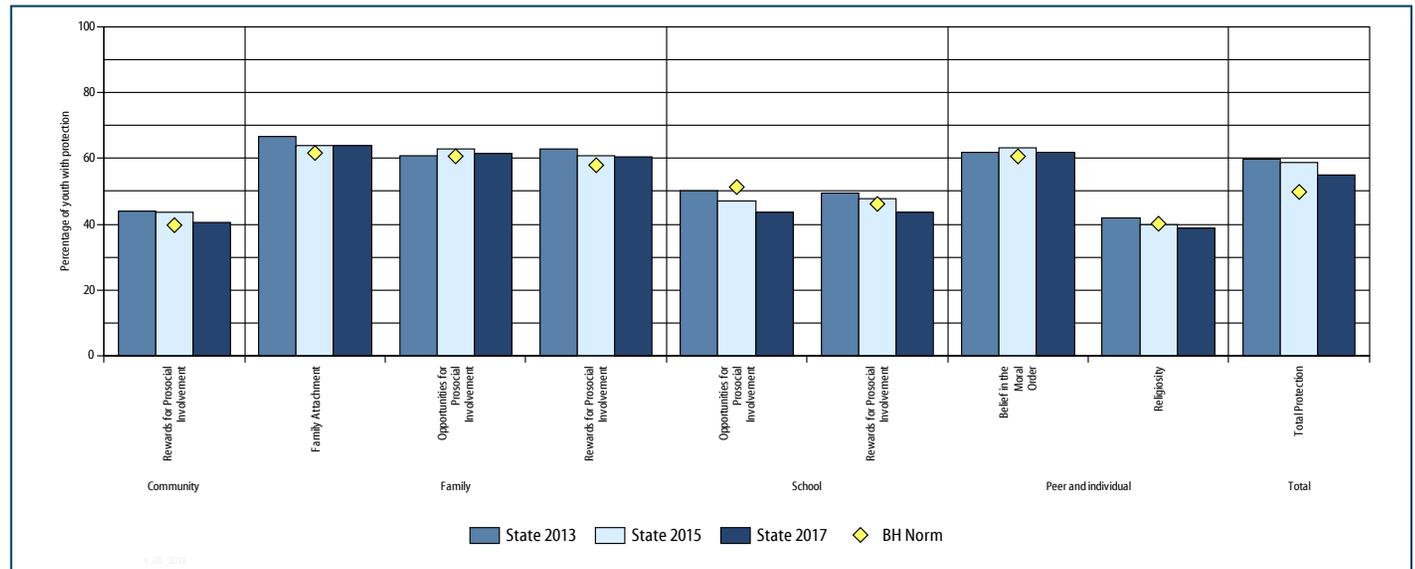


Chart 2-6

Protective factor scales, 10th grade, Statewide Sample 2017 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 2017 PAYS

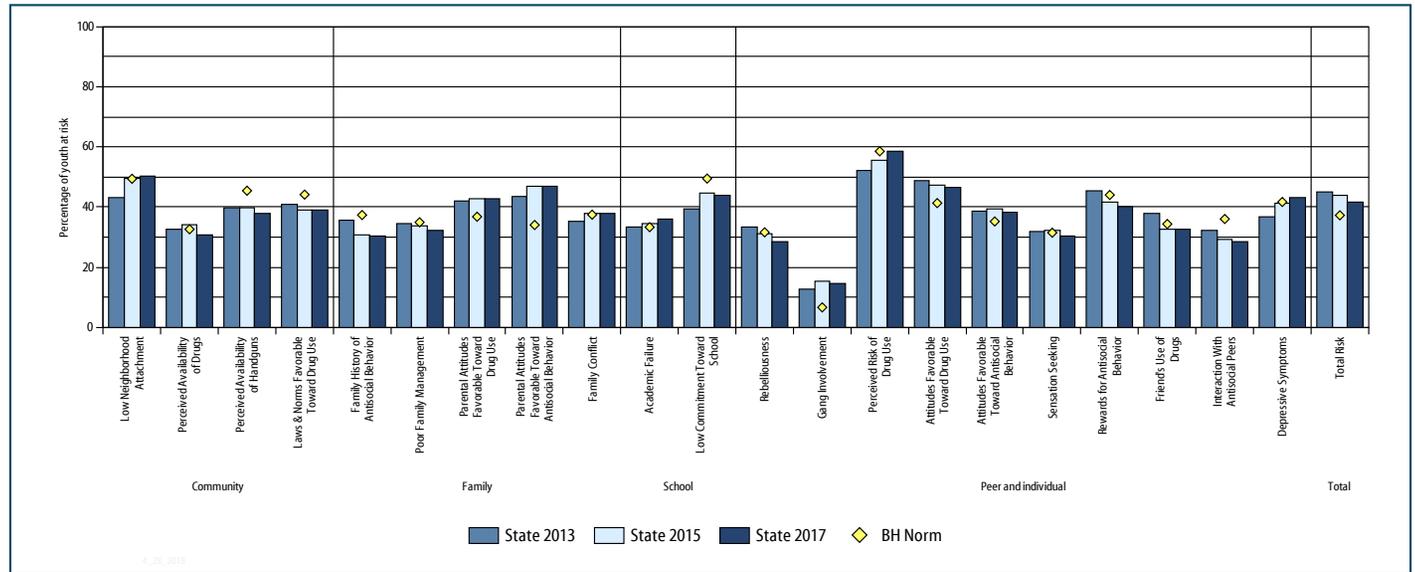
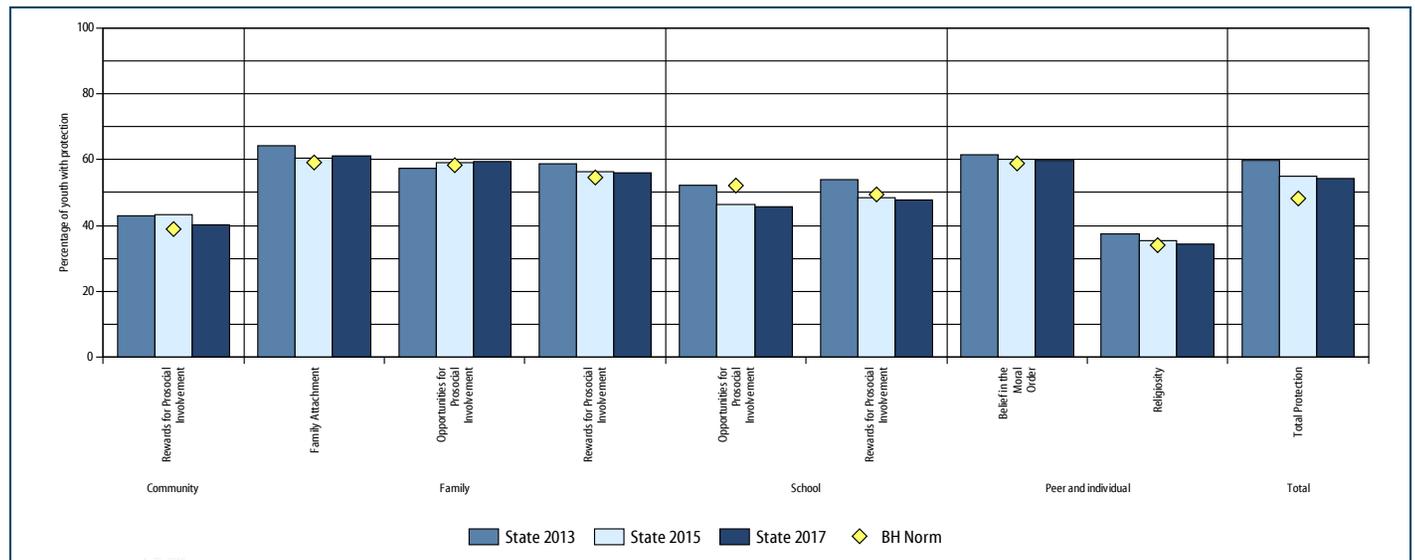


Chart 2-8
Protective factor scales, 12th grade, Statewide Sample 2017 PAYS



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 2017 PAYS

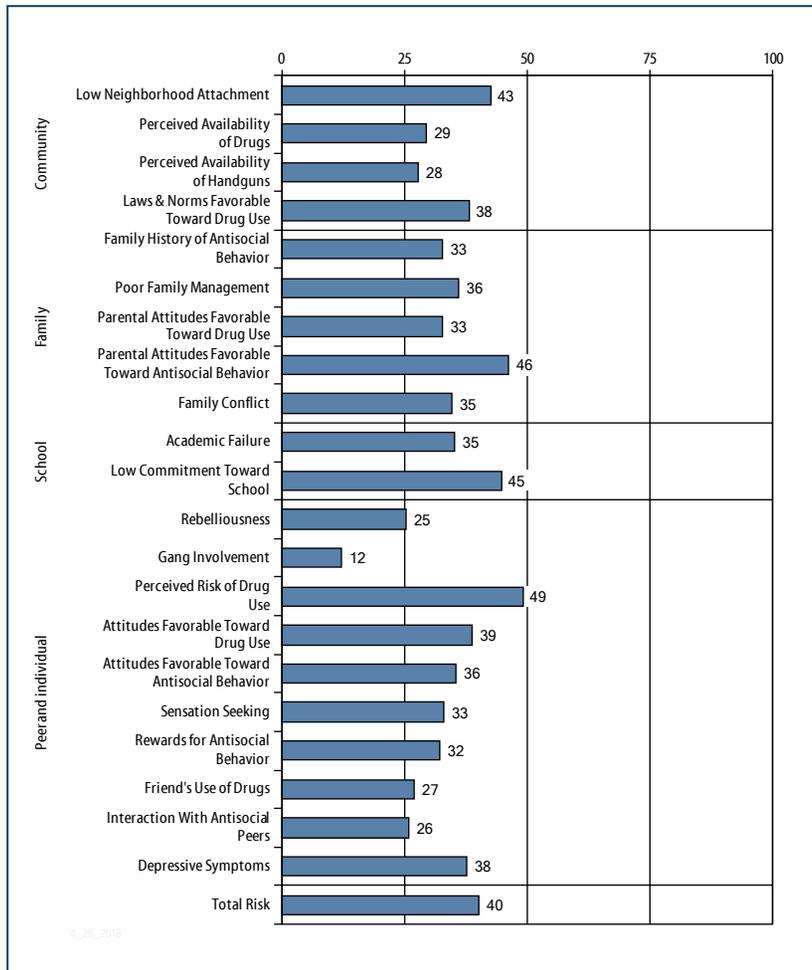
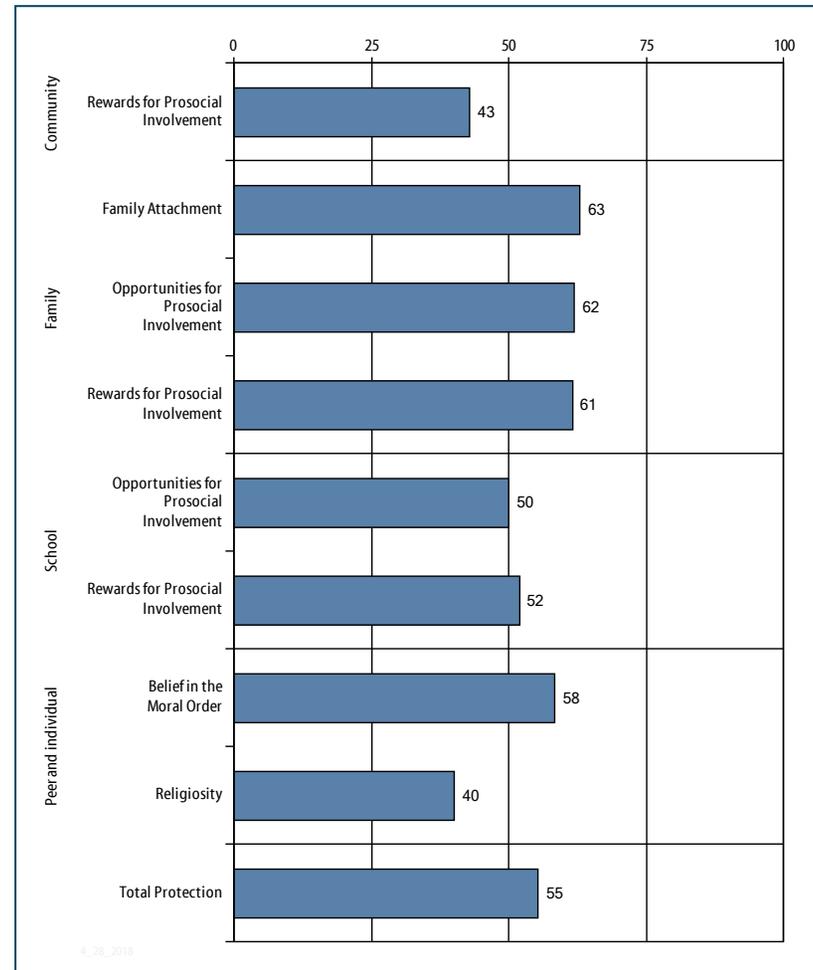


Chart 2-10

Protective factor scales, All Grades Combined, Statewide Sample 2017 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 2017 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 2017 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 2017 PAYS results presented in Table 3.1-1 show that 43.3% of students in grades 6, 8, 10, and 12 have used alcohol at least once in their lifetime. By grade, 16.8% of 6th graders, 33.0% of 8th graders, 53.0% of 10th graders, and 69.2% 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 9.9 percentage points higher than national rates in the 8th grade (33.0% in Pennsylvania, compared to 23.1% in the national sample), 10.8 percentage points higher than national rates in the 10th grade (53.0% in Pennsylvania, compared to 42.2% in the national sample), and 7.7 percentage points higher than national rates in the 12th grade (69.2% in Pennsylvania and 61.5% in the national sample).

Since the 2015 survey, lifetime alcohol use increased 1 percentage point for the 6th grade, and decreased 0.9 percentage points for the 8th grade, 1.2 percentage points for the 10th grade, and 1.8 percentage points for the 12th grade. For all students combined, lifetime alcohol use decreased from 43.9% in 2015 to 43.3% in 2017.

Past Month Alcohol Use

The 2017 PAYS results presented in Table 3.1-1 and Figure 3.1-1 show that 17.9% 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, 9.3% of 8th graders, 22.3% of 10th graders, and 35.9% 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 higher than those of youth in same grades in the national sample (1.3 percentage points higher in the 8th grade, 2.6 percentage points higher in the 10th grade, and 2.7 percentage points higher in the 12th grade).

Since the 2015 survey, past month alcohol use decreased significantly in the 12th grade (from 37.6% in 2015 to 35.9% in 2017).

Binge Drinking

The 2017 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 2017 PAYS found that 7.5% 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, 3.3% of 8th graders, 8.7% of 10th graders, and 16.5% of 12th graders reported binge drinking.

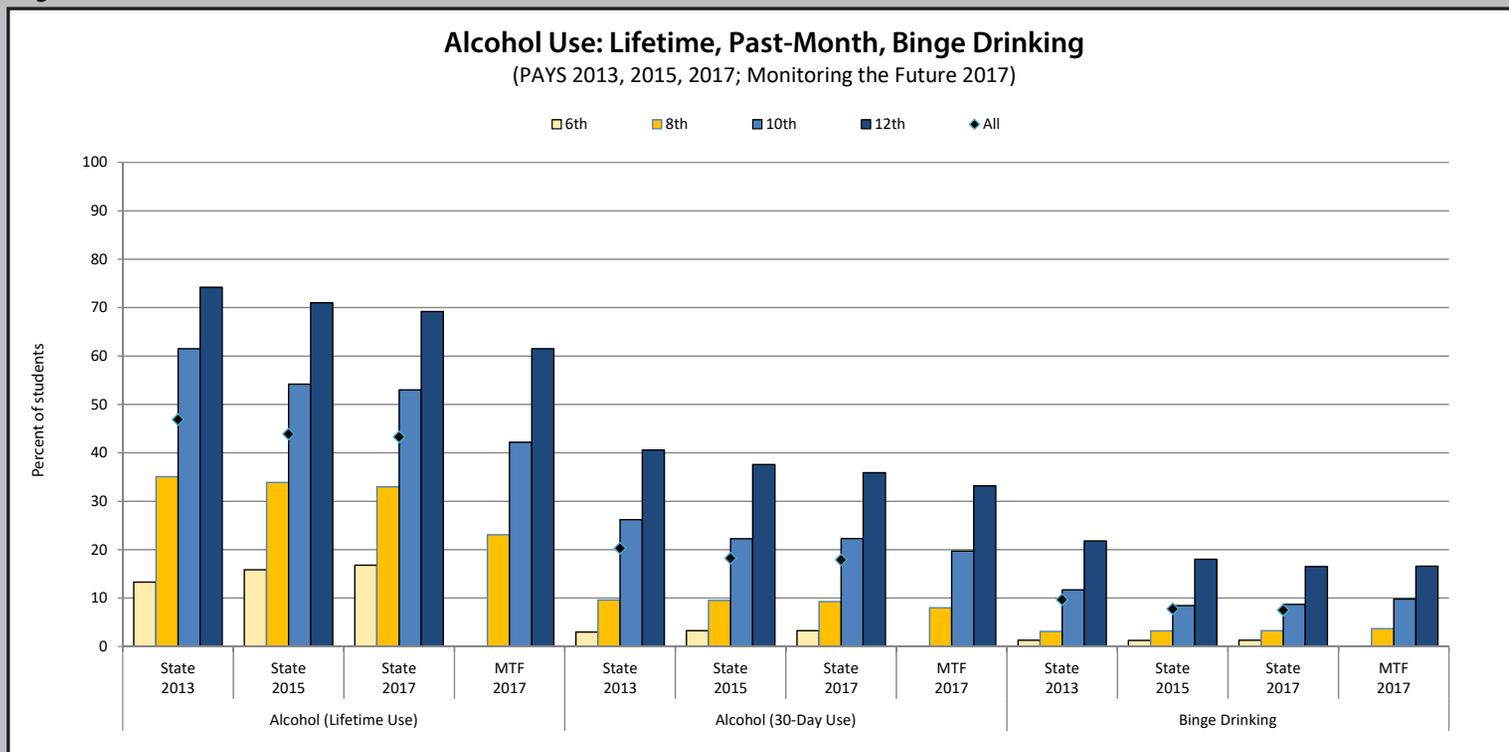
Binge drinking rates have been gradually decreasing since 2011. For all grades combined, binge drinking has decreased 2.2 percentage points since 2013 (9.7% in 2013, 7.8% in 2015, 7.5% in 2017). In the past four years, 12th grade binge drinking decreased 5.3 percentage points (from 21.8% in 2013, to 18.0% in 2015, to 16.5% in 2017).

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 or the PAYS Web Tool at 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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	13.3	15.8	16.8	n/a	3.0	3.3	3.3	n/a	1.3	1.3	1.3	n/a
8th	35.1	33.9	33.0	23.1	9.6	9.5	9.3	8.0	3.1	3.2	3.3	3.7
10th	61.5	54.2	53.0	42.2	26.2	22.3	22.3	19.7	11.7	8.4	8.7	9.8
12th	74.2	71.0	69.2	61.5	40.6	37.6	35.9	33.2	21.8	18.0	16.5	16.6
All	46.9	43.9	43.3	n/a	20.3	18.2	17.9	n/a	9.7	7.8	7.5	n/a

Figure 3.1-1



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

In the 2017 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 2017 PAYS results presented in Table 3.2-1 show that 14.5% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in their lifetime, and 7.6% 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 similar or higher lifetime cigarette use rates than youth in same grades in the national sample. For lifetime cigarette use, Pennsylvania rates were similar for the 8th and 10th grades, but 2.4 percentage points higher for the 12th grade in comparison to national rates. For lifetime smokeless tobacco use, Pennsylvania rates were 1.8 percentage points lower in the 8th grade, but 4.9 percentage points higher in the 12th grade in comparison to national rates.

Since the 2015 survey, lifetime cigarette use decreased significantly in the 8th, 10th, and 12th grades, with a decrease of 1.6 percentage points in the 8th grade, 2.1 percentage points in the 10th grade, 3.7 percentage points in the 12th grade, and 1.8 percentage points overall. Since the 2015 survey, smokeless tobacco lifetime use rates decreased 0.8 percentage point for all grades combined.

Past Month Tobacco Use

The 2017 PAYS results presented in Table 3.2-1 and Figure 3.2-1 show that 5.6% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in the past 30 days, and 3.5% of students in the same grades have used smokeless tobacco. In looking at past month cigarette use rates by grade level, 0.6% of 6th graders, 2.5% of 8th graders, 6.0% of 10th graders, and 13.2% of 12th graders in Pennsylvania have used cigarettes in the past 30 days; while 0.3% of 6th graders, 1.8% of 8th graders, 4.2% of 10th graders, and 7.5% of 12th graders

have used smokeless tobacco in the past month. The 2017 PAYS was the second administration to collect data on past-month e-cigarette/vape device use. The 2017 survey showed that 16.3% of students had used an e-cigarette or vape device in the past month. By grade, 2.3% of 6th graders indicated past-month use, 10.9% of 8th graders indicated past-month use, 21.9% of 10th graders indicated past-month use, and 29.3% of 12th graders indicated past-month use.

In comparison to data gathered through the national MTF Survey (see Figure 3.2-1), Pennsylvania 10th and 12th graders indicated higher past-month cigarette use (6.0% for Pennsylvania 10th graders compared to 5.0% for MTF, and 13.2% for Pennsylvania 12th graders compared to 9.7% for MTF), and Pennsylvania 12th graders indicated higher past-month smokeless tobacco use (7.5% for Pennsylvania 12th graders compared to 11.0% for MTF). 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 percentage points higher than 12th graders nationally. For smokeless tobacco, while Pennsylvania youth in grades 8 and 10 indicated significantly lower use rates than MTF students, Pennsylvania 12th grade past-month use was 4.9 percentage points higher. As for e-cigarettes/vape devices, the past-month use rate was 2.2 percentage points higher in Pennsylvania for the 8th grade, 6.4 percentage points higher in Pennsylvania for the 10th grade, and 10.8 percentage points higher in Pennsylvania for the 12th grade in comparison to the same grades for the MTF.

Since the 2015 survey, past month cigarette use decreased 1.0 percentage point in the 8th grade and 1.4 percentage points in the 12th grade. Past-month smokeless tobacco use decreased 1.7 percentage points for the 12th grade since the 2015 survey.

Past Year Vape Device Use

The 2017 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 (67.3%) are only using flavoring in their devices, while 29.4% of past-year users had used nicotine, 12.6% have used marijuana or hash oil, and 1.3% had used another substance in their vape device. Sixteen percent of past-year users were unsure of what they had inhaled.

Table 3.2-1 **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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	2.4	2.9	2.7	n/a	0.5	0.8	0.6	n/a	1.0	1.2	1.1	n/a	0.3	0.4	0.3	n/a	n/a	2.6	2.3	n/a
8th	10.2	11.0	9.4	9.4	3.9	3.5	2.5	1.9	4.6	4.5	4.4	6.2	1.9	1.8	1.8	1.7	n/a	11.7	10.9	6.6
10th	21.2	18.3	16.2	15.9	9.9	6.8	6.0	5.0	10.9	9.8	8.9	9.1	5.8	4.9	4.2	3.8	n/a	20.4	21.9	13.1
12th	35.2	32.7	29.0	26.6	17.0	14.6	13.2	9.7	18.9	18.1	15.9	11.0	10.3	9.2	7.5	4.9	n/a	27.0	29.3	16.6
All	17.6	16.3	14.5	n/a	8.0	6.4	5.6	n/a	9.0	8.4	7.6	n/a	4.7	4.1	3.5	n/a	n/a	15.5	16.3	n/a

Figure 3.2-1

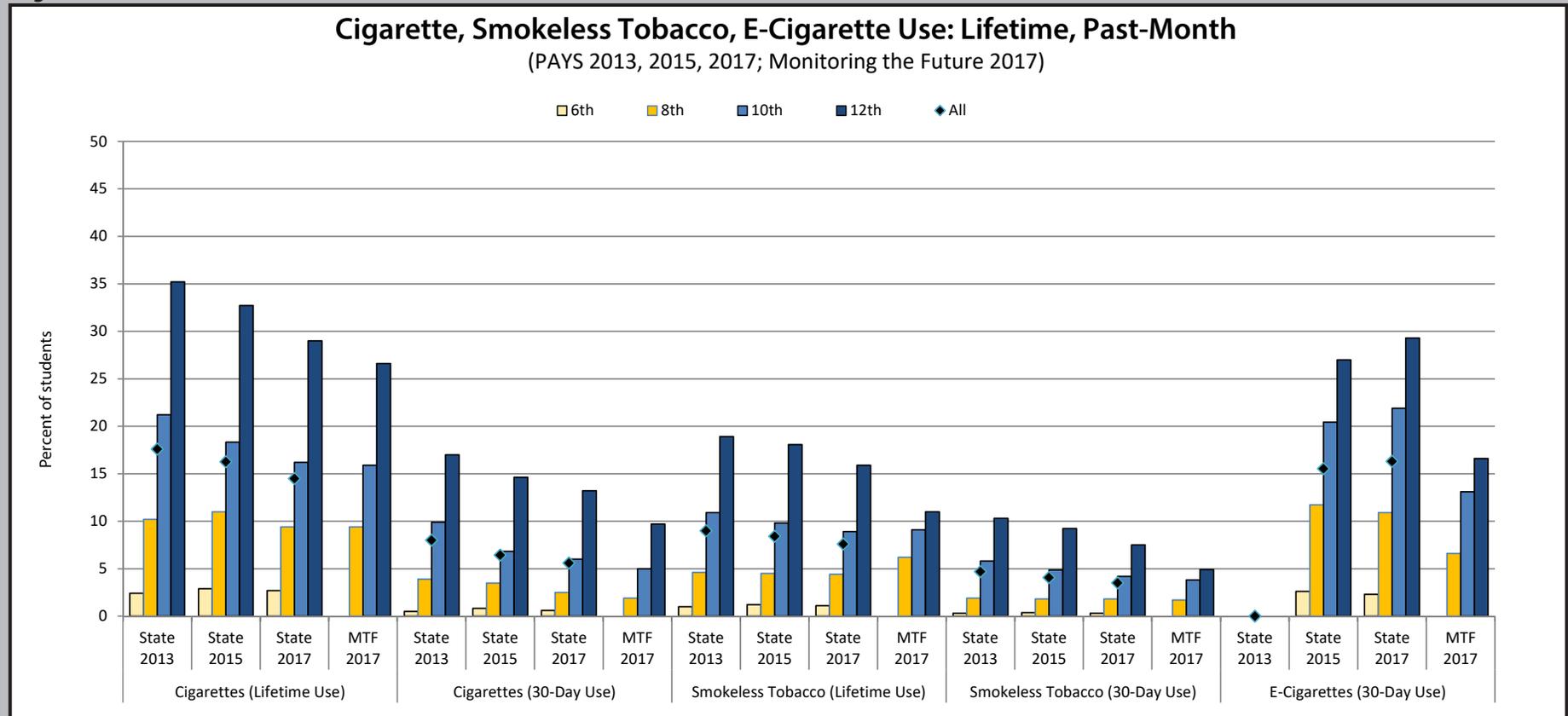
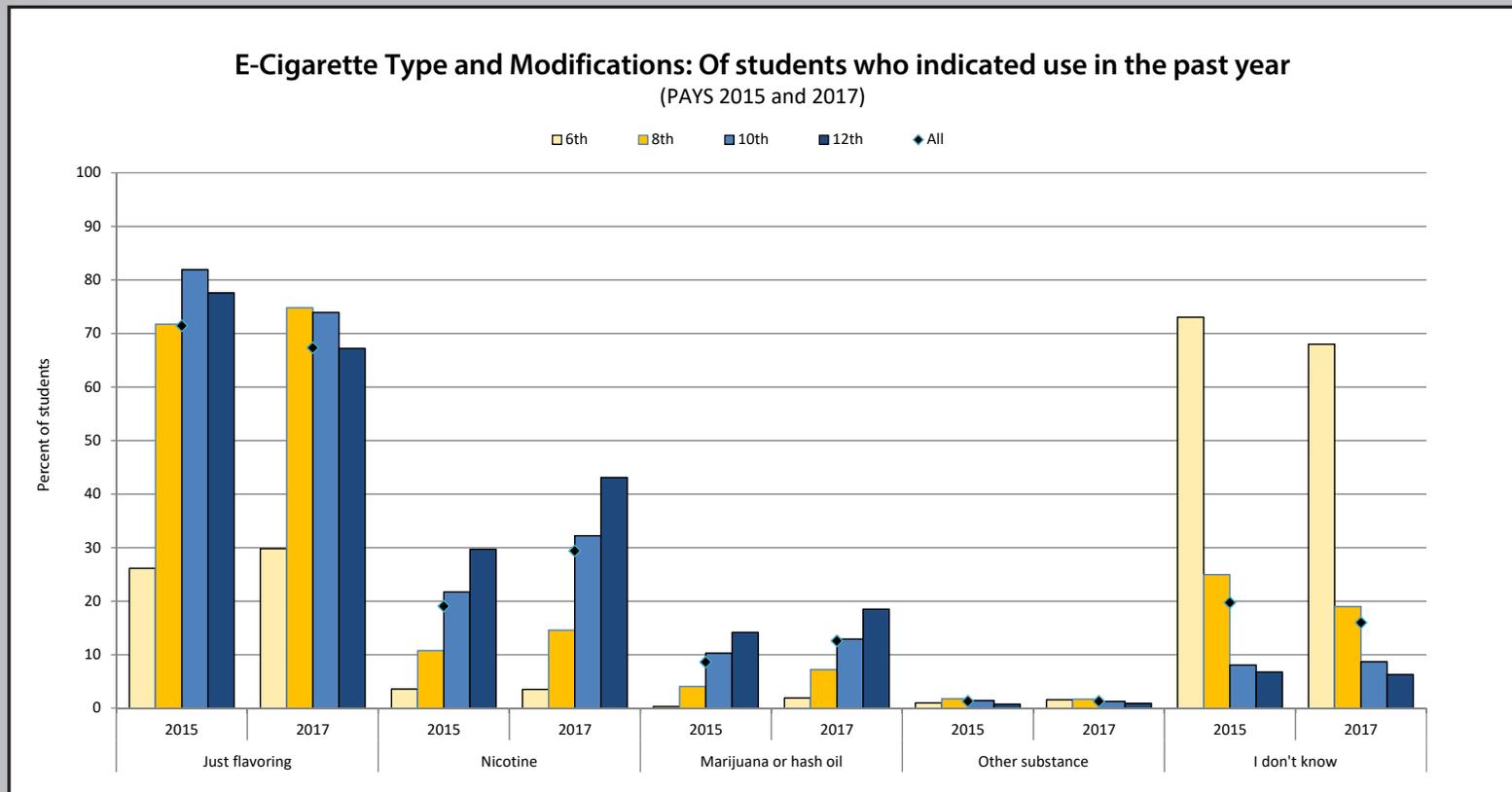


Table 3.2-2 **E-Cigarette Modifications: Of students indicating any use in the past year**

Grade	Sample Size	Just flavoring		Nicotine		Marijuana or hash oil		Other substance		I don't know	
		2015	2017	2015	2017	2015	2017	2015	2017	2015	2017
6th	612	26.1	29.8	3.6	3.5	0.3	1.9	1.0	1.6	73.0	68.0
8th	1524	71.7	74.8	10.8	14.6	4.1	7.2	1.8	1.7	24.9	19.0
10th	1614	81.9	73.9	21.7	32.2	10.3	12.9	1.4	1.3	8.1	8.7
12th	1681	77.6	67.2	29.7	43.1	14.2	18.5	0.8	0.9	6.8	6.3
All	5431	71.4	67.3	19.1	29.4	8.6	12.6	1.3	1.3	19.7	16.0

Figure 3.2-2



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

In the 2017 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 2017 PAYS results presented in Table 3.3-1 show that 17.7% of students in grades 6, 8, 10, and 12 have used marijuana at least once in their lifetime. By grade, 0.9% of 6th graders, 8.4% of 8th graders, 22.4% of 10th graders, and 38.1% 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 5.1 percentage points lower than national rates in the 8th grade (8.4% in Pennsylvania, compared to 13.5% in the national sample), 8.3 percentage points lower than national rates in the 10th grade (22.4% in Pennsylvania, compared to 30.7% in the national sample), and 2.2 percentage points lower than national rates in the 12th grade (38.1% in Pennsylvania compared to 45.0% in the national sample). Since the 2015 survey, lifetime use increased 1.1 percentage points in the 8th grade.

Past Month Marijuana Use

The 2017 PAYS results presented in Table 3.3-1 and Figure 3.3-1 show that 9.7% 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, 0.5% of 6th graders, 4.6% of 8th graders, 12.0% of 10th graders, and 20.8% of 12th graders in Pennsylvania have used marijuana in the past 30 days.

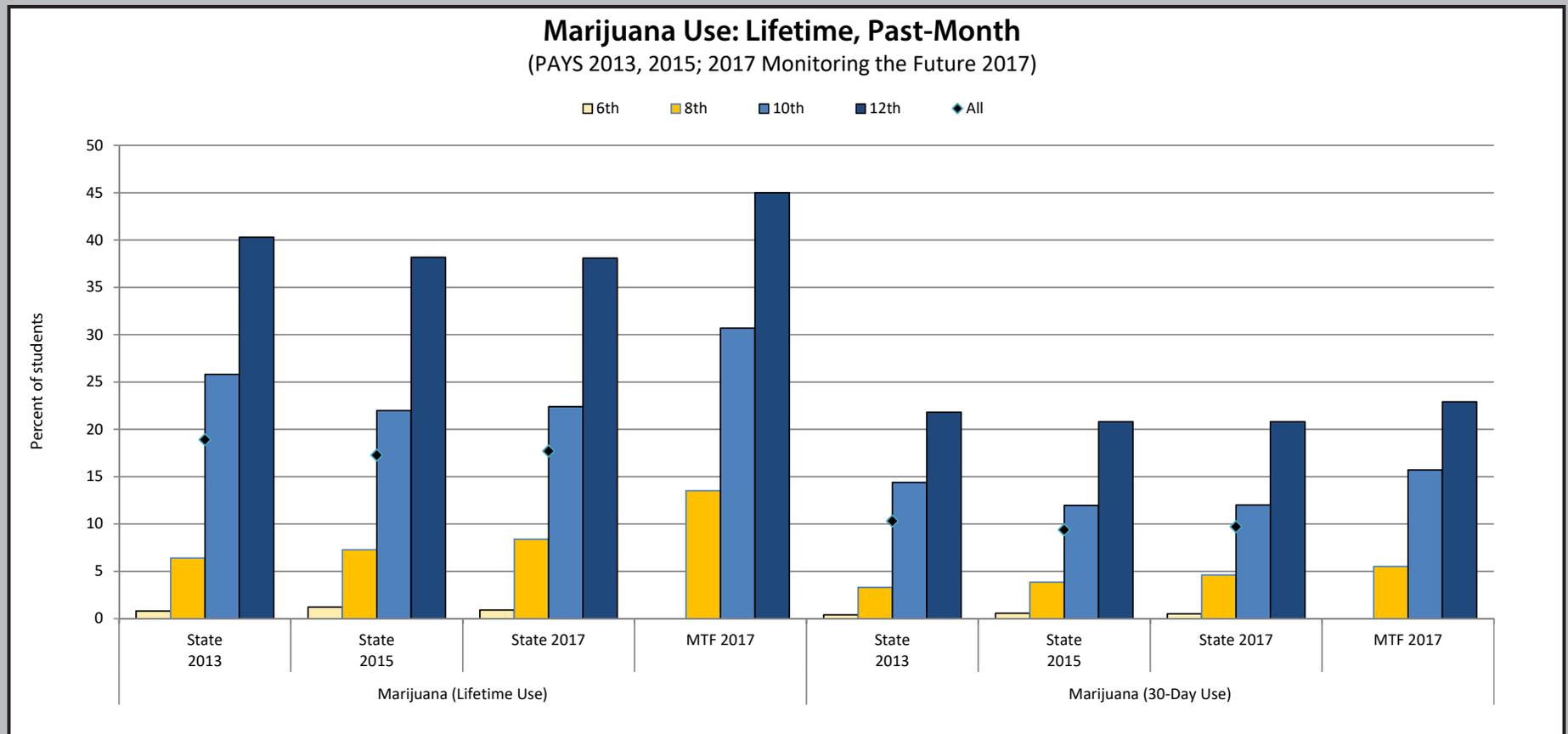
As with lifetime marijuana use, in comparison to data gathered through the national MTF Survey (see Figure 3.3-1), Pennsylvania youth in the 10th and 12th grades indicated lower past month marijuana use rates than youth in same grades in the national sample. Pennsylvania rates were 0.9 percentage points lower than national rates in the 8th grade (4.6% in Pennsylvania, compared to 5.5% in the national sample), 2.4 percentage points lower than national rates in the 10th grade (12.0% in Pennsylvania, compared to 15.7% in the national sample), and 1.0 percentage point lower than national rates in the 12th grade (20.8% in Pennsylvania compared to 22.9% 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 or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

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

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.8	1.2	0.9	n/a	0.4	0.6	0.5	n/a
8th	6.4	7.3	8.4	13.5	3.3	3.8	4.6	5.5
10th	25.8	22.0	22.4	30.7	14.4	12.0	12.0	15.7
12th	40.3	38.2	38.1	45.0	21.8	20.8	20.8	22.9
All	18.9	17.3	17.7	n/a	10.3	9.4	9.7	n/a

Figure 3.3-1



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

In the 2017 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 2017 PAYS results presented in Table 3.4-1 show that 4.3% of students in grades 6, 8, 10, and 12 have used inhalants at least once in their lifetime. By grade, 3.6% of 6th graders, 5.2% of 8th graders, 4.2% of 10th graders, and 4.2% 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 3.7 percentage points lower than national rates in the 8th grade (5.2% in Pennsylvania, compared to 8.9% in the national sample), 1.9 percentage points lower than national rates in the 10th grade (4.2% in Pennsylvania, compared to 6.1% in the national sample), and 0.7 percentage points lower than national rates in the 12th grade (4.2% in Pennsylvania compared to 4.9% in the national sample).

Past Month Inhalant Use

The 2017 PAYS results presented in Table 3.4-1 and Figure 3.4-1 show that 1.1% 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 and 8th grades, rather than in the 12th grade, with 1.6% of 6th and 8th graders, 0.9% of 10th graders, and 0.6% of 12th graders in Pennsylvania have used inhalants in the past 30 days.

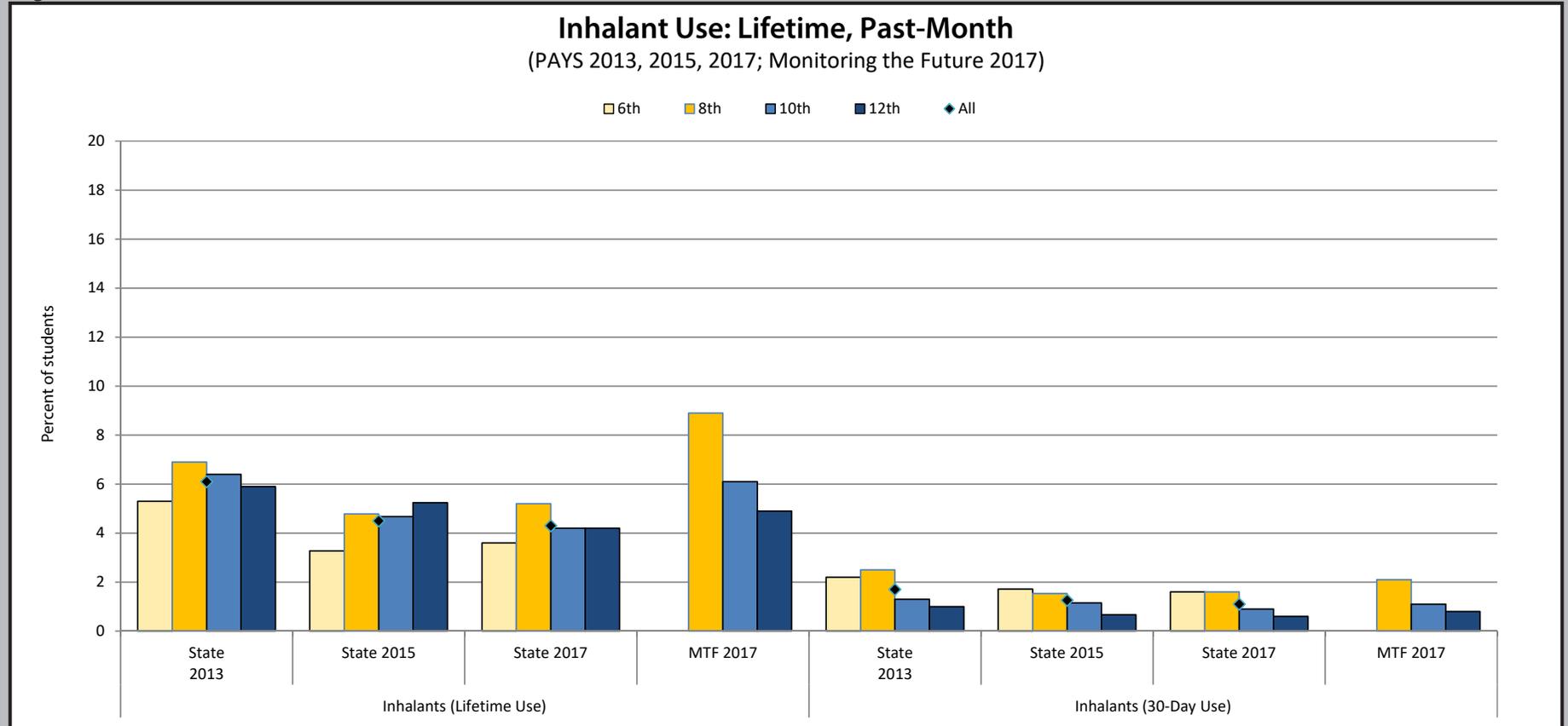
While lifetime inhalant use in Pennsylvania was significantly less than lifetime inhalant use in the national MTF sample, 30-day inhalant use rates are nearly identical for Pennsylvania and national youth with little to no significant differences in use to report for any grade.

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

Table 3.4-1 **Inhalant Use: Lifetime and Past-Month**

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	5.3	3.3	3.6	n/a	2.2	1.7	1.6	n/a
8th	6.9	4.8	5.2	8.9	2.5	1.5	1.6	2.1
10th	6.4	4.7	4.2	6.1	1.3	1.1	0.9	1.1
12th	5.9	5.2	4.2	4.9	1.0	0.7	0.6	0.8
All	6.1	4.5	4.3	n/a	1.7	1.3	1.1	n/a

Figure 3.4-1



3.5 Lifetime and 30-Day Prescription Drug Use

In the 2017 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 2017 PAYS results presented in Table 3.5-1 show that 0.8% of students in grades 6, 8, 10, and 12 have used PEDs or steroids at least once in their lifetime, 5.1% have used prescription narcotics in their lifetime, 2.2% have used prescription tranquilizers in their lifetime, 3.0% have used prescription stimulants, and 3.8% 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 the 12th grade indicated higher lifetime use of prescription narcotics (2.0 percentage points higher). (Note: Comparable MTF data are not available for over-the-counter drugs.)

Since the 2015 survey, lifetime prescription drug use rates were relatively unchanged, though prescription narcotics use among 12th graders decreased 3.3 percentage points (from 12.1% in 2015 to 8.8% in 2017), prescription stimulant use among 12th graders decreased 2.9 percentage points (from 9.7% in 2015 to 6.8% in 2017), and over the counter drug use among 12th graders decreased (from 6.5% in 2015 to 5.1% in 2017). Other lifetime use increases or decreases since 2015 were small.

Past Month (non-prescribed) Prescription Drug Use

The 2017 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, 1.3% have used prescription narcotics, 0.7% used prescription tranquilizers, 0.8% used prescription stimulants, and 1.3% 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 stimulant use, 0.3% of 6th graders indicated use, 0.4% of 8th graders indicated use, 0.9% of 10th graders indicated use, and 1.7% 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 as much as 0.8% in each grade. However, prescription stimulant use was significantly lower in grades 8 (1.3 percentage points lower in PA) and 10 (1.6 percentage points 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 or the PAYS Web Tool at 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 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2011	State 2015	State 2017	MTF 2017
6th	0.4	0.7	0.5	n/a	2.1	1.9	1.8	n/a	0.2	0.3	0.4	n/a	0.2	0.6	0.6	n/a	n/a	2.6	2.3	n/a
8th	0.7	0.6	0.6	1.1	4.1	4.3	3.9	n/a	0.8	0.8	1.1	3.4	1.1	1.0	1.1	5.7	n/a	2.5	2.9	n/a
10th	1.2	1.2	1.0	1.1	8.3	6.7	5.9	n/a	2.7	2.6	2.6	6.0	3.9	3.3	3.3	8.2	n/a	4.2	4.6	n/a
12th	2	1.6	1.2	1.6	12.1	12.1	8.8	6.8	5.9	5.3	4.5	7.5	9.1	9.7	6.8	9.2	n/a	6.5	5.1	n/a
All	1.1	1.0	0.8	n/a	6.8	6.3	5.1	n/a	2.5	2.3	2.2	n/a	3.7	3.7	3.0	n/a	n/a	4.0	3.8	n/a

Figure 3.5-1

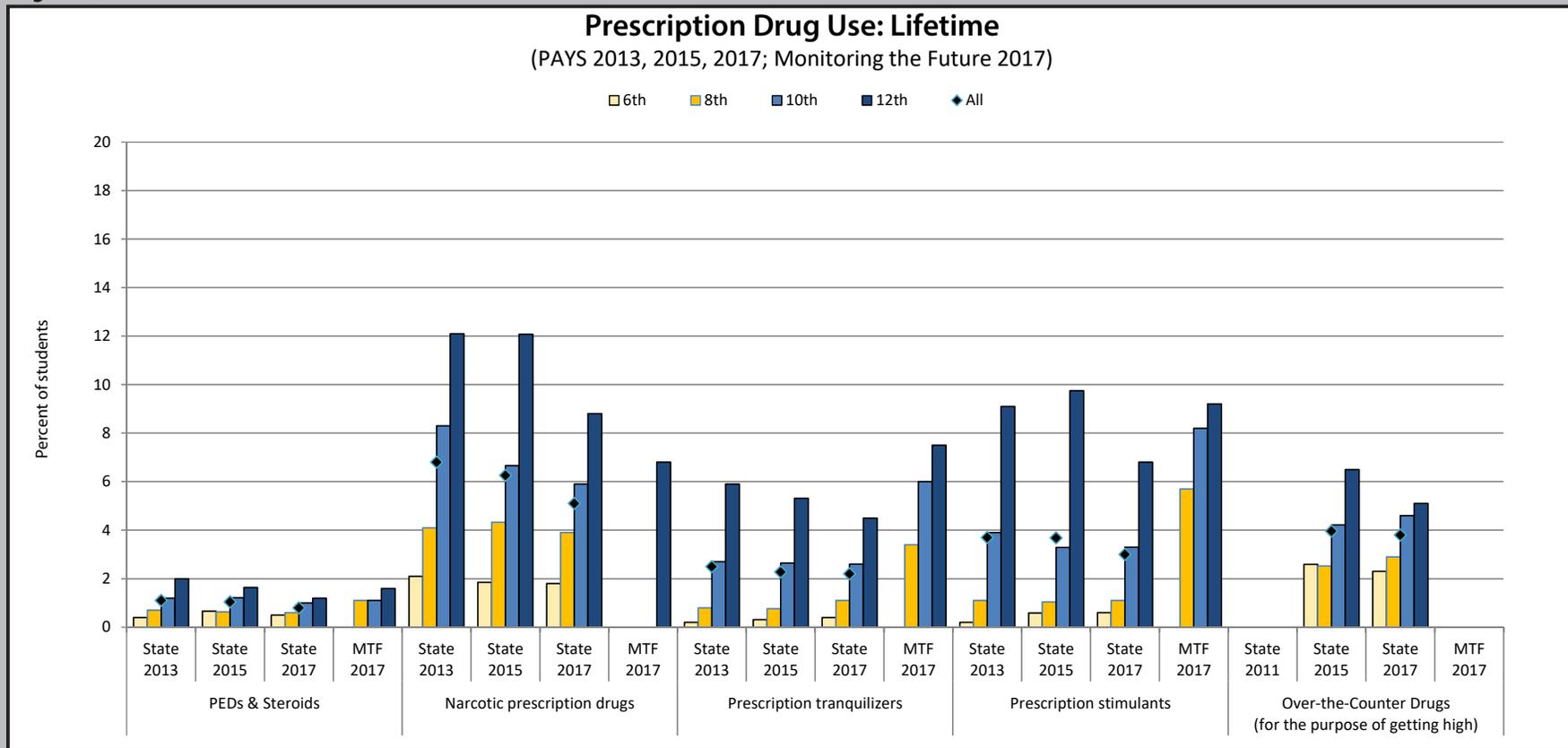
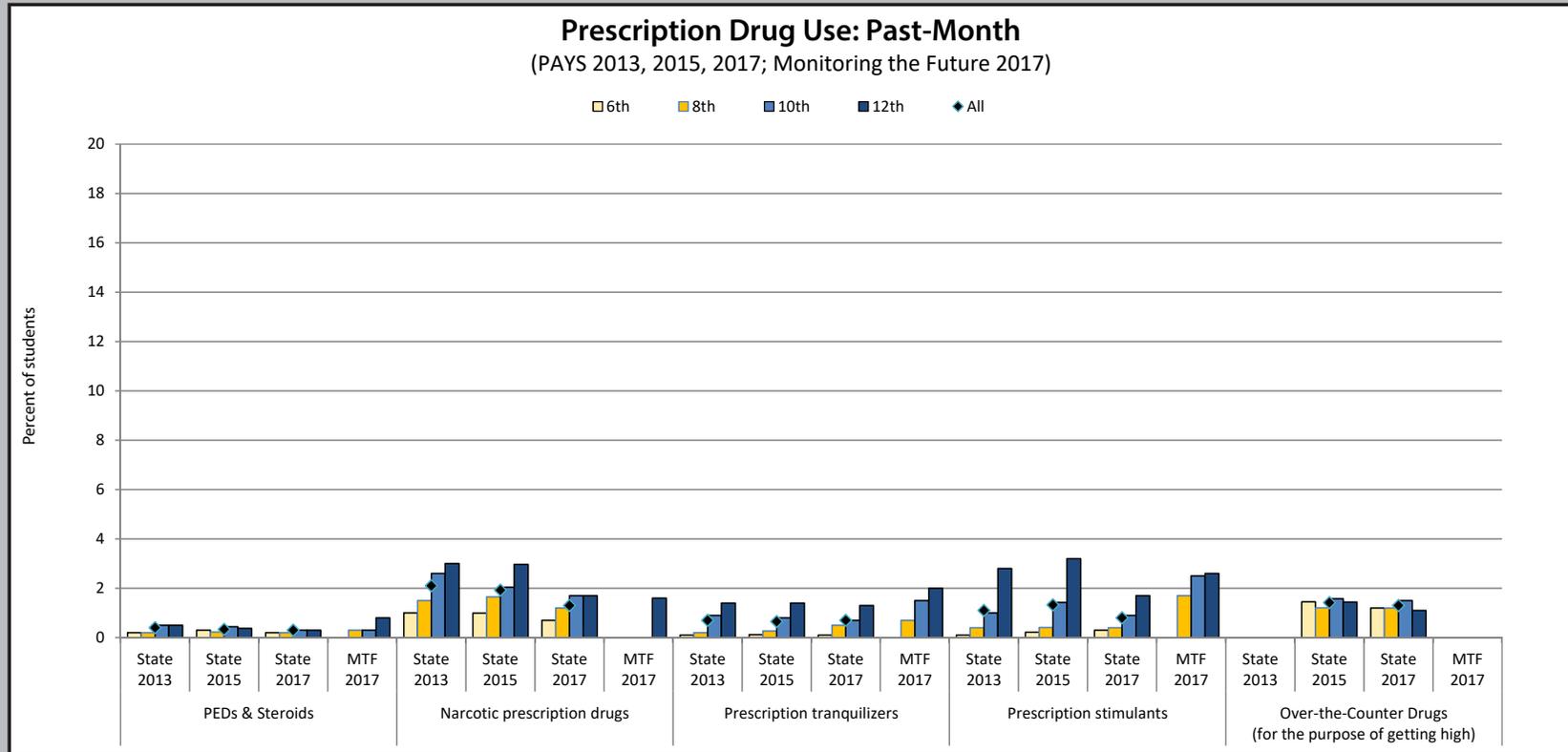


Table 3.5-2 Prescription Drugs: Past-Month Use

Grade	PEDs & Steroids				Narcotic prescription drugs				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.2	0.3	0.2	n/a	1.0	1.0	0.7	n/a	0.1	0.1	0.1	n/a	0.1	0.2	0.3	n/a	n/a	1.4	1.2	n/a
8th	0.2	0.2	0.2	0.3	1.5	1.6	1.2	n/a	0.2	0.3	0.5	0.7	0.4	0.4	0.4	1.7	n/a	1.2	1.2	n/a
10th	0.5	0.4	0.3	0.3	2.6	2.0	1.7	n/a	0.9	0.8	0.7	1.5	1.0	1.4	0.9	2.5	n/a	1.6	1.5	n/a
12th	0.5	0.4	0.3	0.8	3.0	3.0	1.7	1.6	1.4	1.4	1.3	2.0	2.8	3.2	1.7	2.6	n/a	1.4	1.1	n/a
All	0.4	0.3	0.3	n/a	2.1	1.9	1.3	n/a	0.7	0.7	0.7	n/a	1.1	1.3	0.8	n/a	n/a	1.4	1.3	n/a

Figure 3.5-2



3.6 Lifetime and 30-Day Other Illicit Drug Use

In the 2017 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 2017 PAYS results presented in Table 3.6-1 show that 0.3% of students in grades 6, 8, 10, and 12 have used heroin at least once in their lifetime, 2.6% have used hallucinogens in their lifetime, 1.7% have used synthetic drugs, 1.4% have used ecstasy in their lifetime, 1.1% have used cocaine in their lifetime, 0.4% have used crack, and 0.3% 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 1.0 to 1.4 percentage points lower for the 8th and 10th grades, and lifetime cocaine use rates were 1.3 to 4.2 percentage points lower for the 8th and 10th grades.

Since the 2015 survey, lifetime illicit drug use rates were relatively unchanged, though lifetime synthetic drug use decreased 1.0 percentage point for 10th graders (from 2.6% in 2015 to 1.6% in 2017) and 2.8 percentage points for 12th graders (from 4.8% in 2015 to 2.0% in 2017); lifetime ecstasy use decreased 2.3 percentage points for 12th graders (from 5.4% in 2015 to 3.1% in 2017); and lifetime cocaine use decreased 1.1 percentage points for 12th graders (from 3.8% in 2015 to 2.7% in 2017).

Past Month Other Illicit Drug Use

The 2017 PAYS results presented in Table 3.6-2 and Figure 3.6-2 show that 0.1% 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 - 0.7%, ecstasy - 0.3%, synthetic drugs, 0.5%, 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 percentage points or less difference) in comparison to youth represented by the MTF Survey.

Since the 2015 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 or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 3.6-1 **Other Illegal Drugs: Lifetime Use**

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.1	0.2	0.1	n/a	0.2	0.3	0.2	n/a	0.1	0.2	0.2	n/a	1.1	1.5	1.8	n/a	0.2	0.3	0.1	n/a	0.2	0.2	0.2	n/a	0.1	0.3	0.1	n/a
8th	0.3	0.3	0.2	0.7	0.9	0.7	0.9	1.9	0.6	0.7	0.8	1.5	1.5	1.8	1.5	n/a	0.6	0.5	0.5	1.3	0.4	0.4	0.4	0.8	0.4	0.4	0.3	0.7
10th	0.9	0.6	0.4	0.4	3.8	3.4	2.8	4.2	2.6	2.0	1.6	2.8	4.0	2.6	1.6	n/a	1.5	1.3	1.1	2.1	0.9	0.6	0.6	0.8	0.8	0.6	0.4	0.9
12th	1.4	1.4	0.5	0.7	7.6	6.9	6.3	6.7	5.7	5.4	3.1	4.9	6.9	4.8	2.0	n/a	3.1	3.8	2.7	4.2	1.3	0.9	0.6	1.7	1.2	1.0	0.6	1.1
All	0.7	0.6	0.3	n/a	3.2	2.8	2.6	n/a	2.3	2.1	1.4	n/a	3.4	2.7	1.7	n/a	1.4	1.5	1.1	n/a	0.7	0.5	0.4	n/a	0.7	0.5	0.3	n/a

Figure 3.6-1

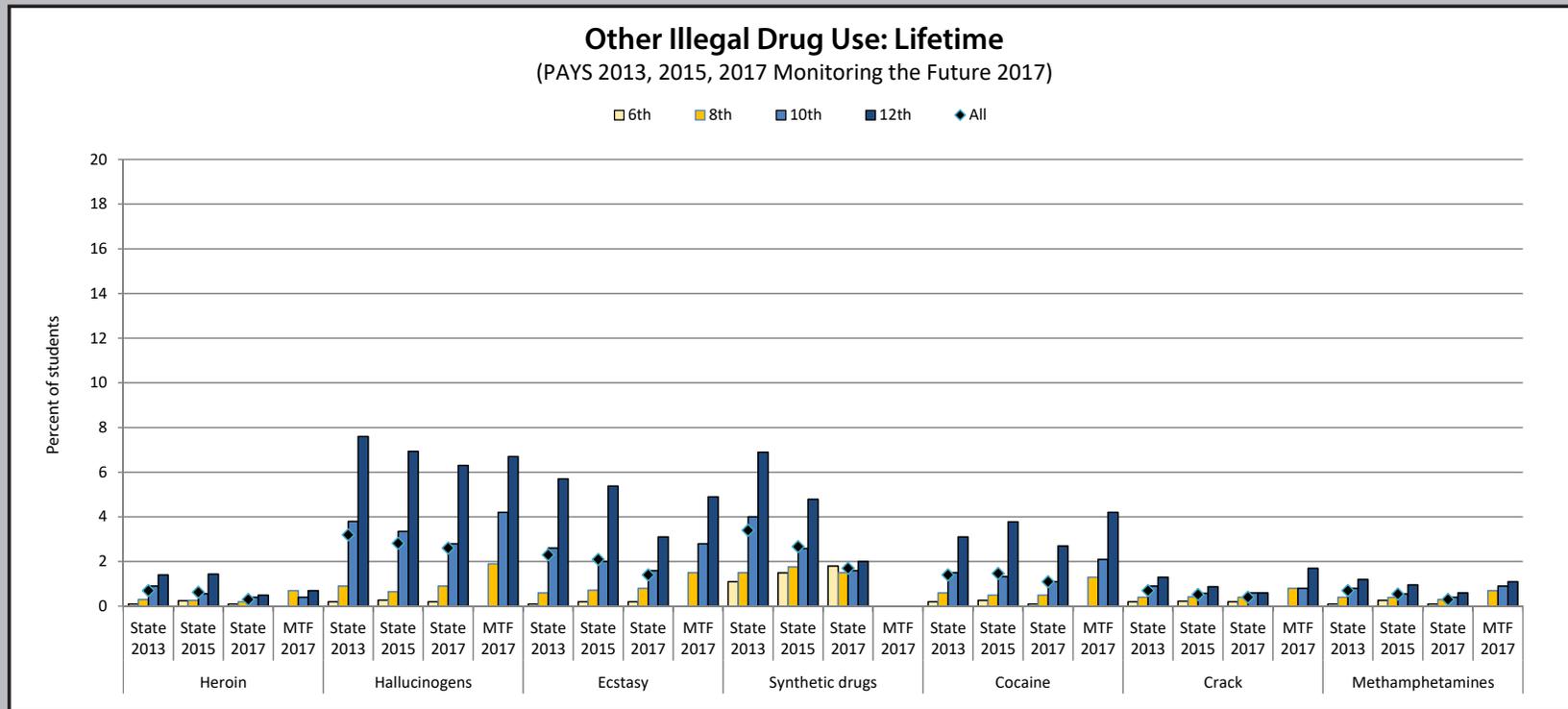
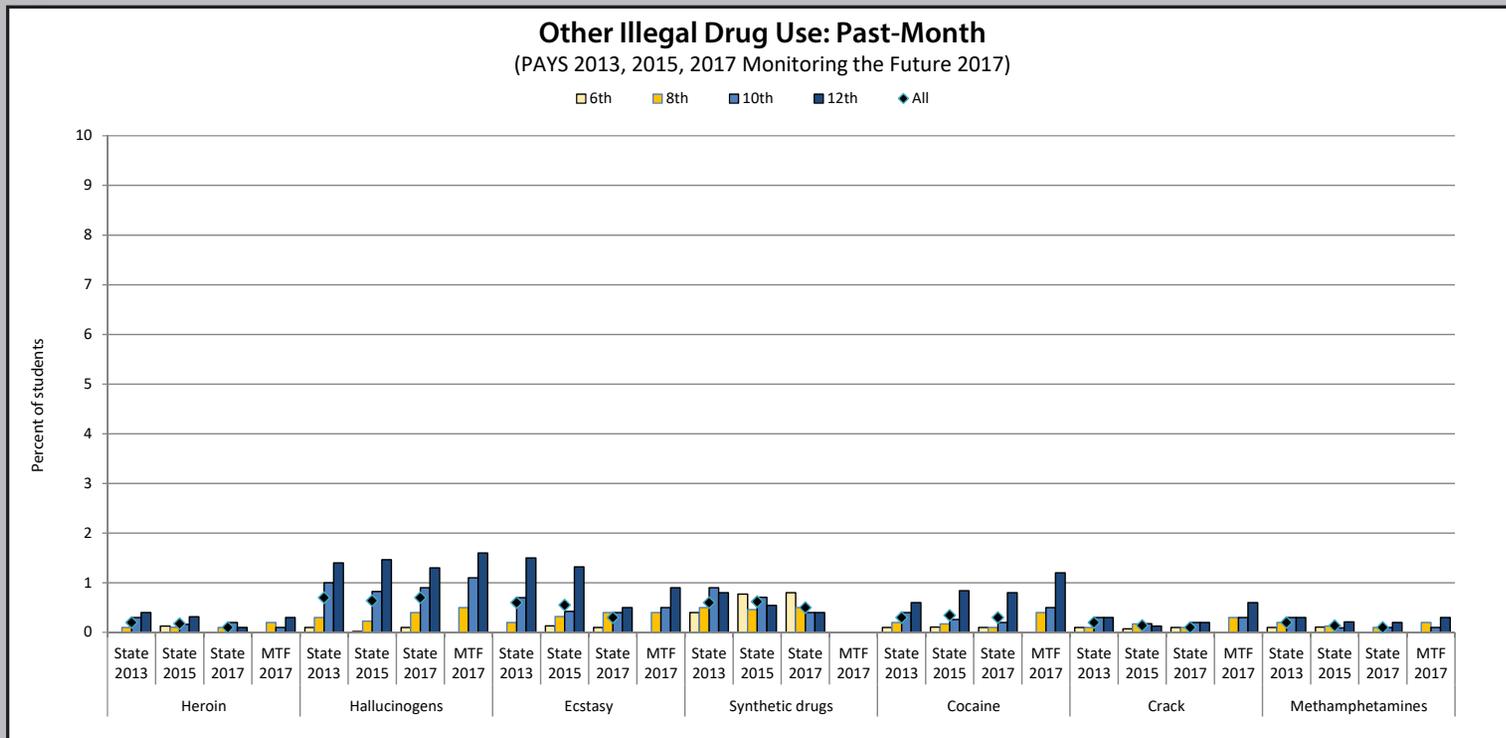


Table 3.6-2 Other Illegal Drugs: Past-Month Use

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017	State 2013	State 2015	State 2017	MTF 2017
6th	0.0	0.1	0.0	n/a	0.1	0.0	0.1	n/a	0.0	0.1	0.1	n/a	0.4	0.8	0.8	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.0	n/a
8th	0.1	0.1	0.1	0.2	0.3	0.2	0.4	0.5	0.2	0.3	0.4	0.4	0.5	0.5	0.5	n/a	0.2	0.2	0.1	0.4	0.1	0.2	0.1	0.3	0.2	0.1	0.1	0.2
10th	0.3	0.2	0.2	0.1	1.0	0.8	0.9	1.1	0.7	0.4	0.4	0.5	0.9	0.7	0.4	n/a	0.4	0.3	0.2	0.5	0.3	0.2	0.2	0.3	0.3	0.1	0.1	0.1
12th	0.4	0.3	0.1	0.3	1.4	1.5	1.3	1.6	1.5	1.3	0.5	0.9	0.8	0.5	0.4	n/a	0.6	0.8	0.8	1.2	0.3	0.1	0.2	0.6	0.3	0.2	0.2	0.3
All	0.2	0.2	0.1	n/a	0.7	0.6	0.7	n/a	0.6	0.6	0.3	n/a	0.6	0.6	0.5	n/a	0.3	0.3	0.3	n/a	0.2	0.1	0.1	n/a	0.2	0.1	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 — over three times higher for all grades combined (10.3% lifetime use by males, 3.0% 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		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	15.3	19.0	19.8	2.5	3.5	3.2	1.8	1.9	1.7	1.0	1.7	1.5	6.0	3.6	3.9	0.2	0.4	0.2	0.4	0.4	0.2	0.2	0.4	0.1
8th	34.7	33.7	34.2	10.2	9.7	8.3	7.1	6.1	5.6	7.2	7.0	7.5	5.7	3.9	4.8	0.6	0.5	0.5	0.4	0.5	0.4	0.3	0.2	0.3
10th	60.8	52.2	50.5	21.6	17.9	15.8	18.3	15.6	13.1	28.1	23.4	22.1	5.9	4.9	4.6	2.5	1.6	1.4	1.3	0.7	0.6	1.3	0.6	0.5
12th	74.8	68.6	65.9	36.9	33.2	27.7	30.3	29.8	23.0	43.1	37.8	38.9	6.4	5.5	4.7	4.2	4.9	3.6	1.8	1.0	0.9	1.6	1.9	0.7
All Grades	47.1	43.3	41.7	18.1	16.0	13.2	14.6	13.2	10.3	20.3	17.5	16.7	6.0	4.5	4.5	1.9	1.8	1.3	1.0	0.7	0.5	0.9	0.8	0.4

Lifetime Substance Use by Gender: Males

	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High	
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017
6th	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.2	0.4	0.9	0.7	2.0	1.9	2.1	0.2	0.3	0.4	0.3	0.8	0.7	0.8	1.3	1.5	2.9	2.7
8th	1.1	0.7	0.9	0.5	0.3	0.4	0.7	0.7	0.8	0.8	0.6	0.7	3.1	3.4	3.4	0.6	0.6	1.2	1.0	0.9	1.3	1.4	1.6	1.2	2.2	3.2
10th	4.9	4.5	3.6	1.4	0.6	0.5	3.2	2.1	1.8	2.1	1.8	1.2	7.6	5.9	5.3	2.3	2.1	2.8	3.9	3.4	3.3	4.7	2.6	1.3	4.4	4.7
12th	10.3	8.9	8.0	1.5	1.2	0.8	6.3	6.5	3.6	3.5	2.6	1.8	12.8	12.7	8.8	5.9	5.8	5.1	9.9	10.3	7.8	8.2	5.8	2.2	7.1	6.3
All Grades	4.2	3.6	3.0	0.9	0.6	0.5	2.6	2.4	1.5	1.7	1.5	1.1	6.5	6.0	4.7	2.3	2.2	2.3	3.8	3.8	3.1	3.8	2.8	1.5	4.2	4.1

Table 3.7-2

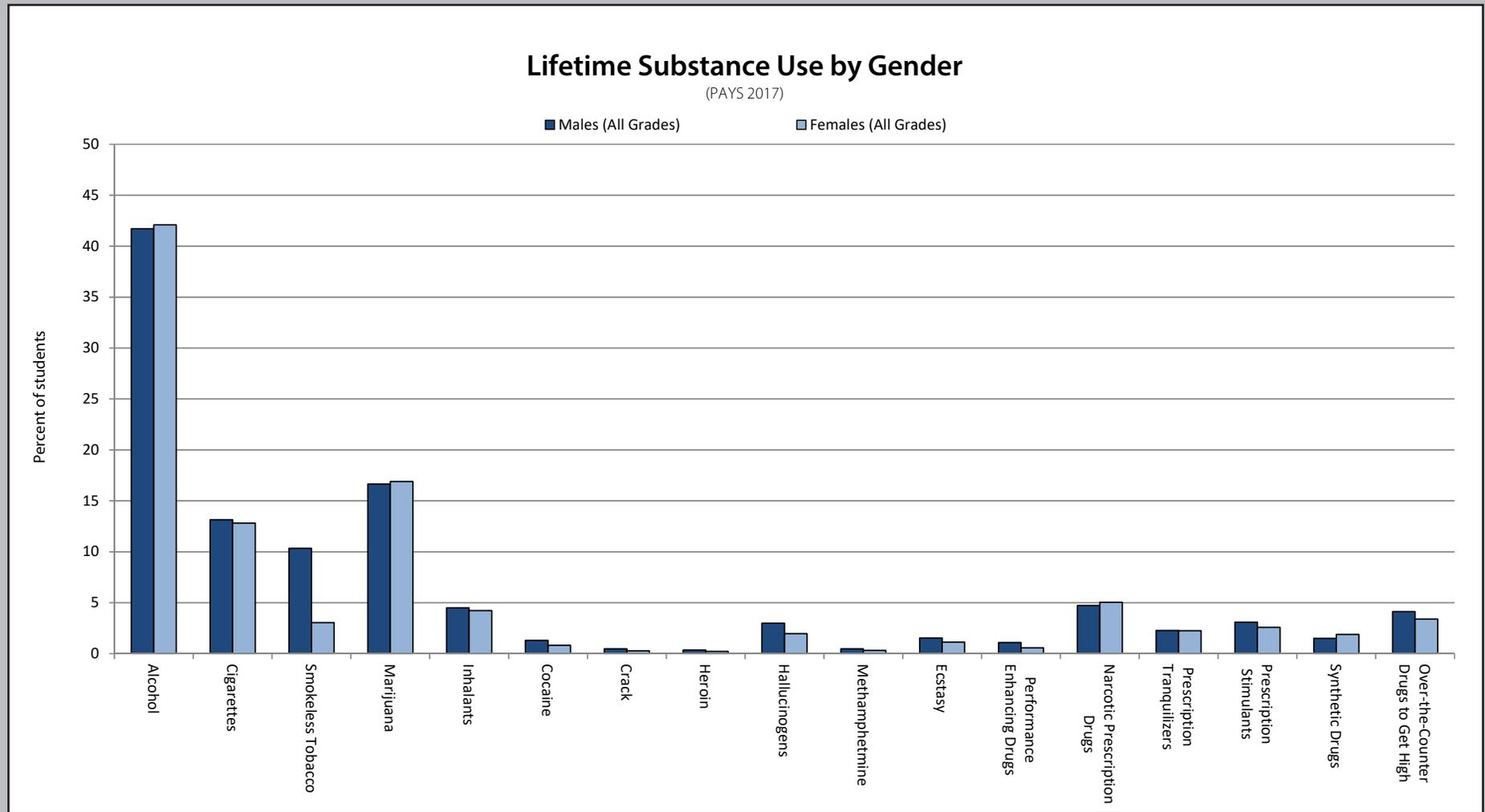
Lifetime Substance Use by Gender: Females

	Alcohol			Cigarettes			Smokeless Tobacco			Marijuana			Inhalants			Cocaine			Crack			Heroin		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	11.1	12.7	13.3	2.3	2.3	2.1	0.2	0.6	0.5	0.6	0.7	0.9	4.7	2.9	3.6	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
8th	35.5	34.2	33.3	10.0	12.3	8.8	2.0	2.9	2.1	5.5	7.5	7.5	8.0	5.5	5.2	0.5	0.4	0.3	0.5	0.3	0.3	0.3	0.3	0.2
10th	62.3	56.2	55.1	20.8	18.5	16.6	3.6	4.2	4.1	23.6	20.3	22.9	7.0	4.4	4.4	0.6	1.0	0.8	0.5	0.4	0.3	0.5	0.5	0.3
12th	73.7	73.1	69.8	33.4	32.3	25.4	7.3	6.6	5.7	37.5	38.2	38.9	5.3	4.9	3.6	1.9	2.6	2.2	0.9	0.7	0.4	1.1	0.9	0.3
All Grades	46.9	44.5	42.1	17.1	16.5	12.8	3.3	3.6	3.0	17.4	16.9	16.9	6.3	4.5	4.2	0.8	1.0	0.8	0.5	0.4	0.3	0.5	0.4	0.2

Lifetime Substance Use by Gender: Females

	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High	
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017
6th	0.1	0.3	0.1	0.0	0.3	0.2	0.0	0.2	0.2	0.3	0.3	0.5	2.3	1.8	2.4	0.2	0.3	0.3	0.2	0.3	0.5	1.5	1.7	2.3	2.3	2.4
8th	0.6	0.6	0.7	0.3	0.4	0.3	0.5	0.8	0.5	0.5	0.7	0.7	5.1	5.3	4.3	1.0	1.0	1.2	1.2	1.2	1.2	1.5	1.8	2.0	2.7	2.8
10th	2.7	2.3	2.6	0.3	0.5	0.4	1.9	1.8	1.4	0.4	0.6	0.6	8.9	7.3	6.0	3.2	3.2	3.1	4.0	3.1	3.1	3.3	2.5	1.5	3.9	4.1
12th	4.8	4.9	4.8	0.9	0.7	0.5	4.9	4.2	2.5	0.6	0.7	0.5	11.2	11.7	7.8	5.9	4.9	4.7	8.2	9.1	5.9	5.6	3.8	1.8	5.9	4.5
All Grades	2.1	2.0	2.0	0.4	0.5	0.3	1.9	1.8	1.1	0.4	0.6	0.6	7.1	6.6	5.0	2.6	2.4	2.2	3.5	3.5	2.6	3.0	2.5	1.9	3.7	3.4

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 (4.8% for males, 1.1% for females). 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 16 of the 18 substances. In the 8th, however, females show

slightly more use; 8th grade females indicate slightly higher use over males in 5 of the 18 substance categories. In the 10th grade, females indicate slightly higher use for 4 categories; and in the 12th grade, only 2 categories.

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) 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		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	3.7	3.8	4.1	0.5	0.9	0.7	0.5	0.5	0.5	3.2	2.8	0.5	0.8	0.8	2.4	2.2	1.8	0.2	0.2	0.1	0.3	0.1	0.1	0.0	0.2	0.0
8th	8.5	8.6	9.0	3.7	2.9	2.2	3.1	2.3	2.2	11.2	11.3	3.5	3.8	4.1	1.9	1.2	1.5	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
10th	25.2	20.1	20.1	9.9	6.2	5.9	10.3	8.1	6.4	22.1	22.1	16.5	12.3	12.8	1.3	1.3	0.9	0.7	0.3	0.4	0.5	0.3	0.2	0.4	0.2	0.1
12th	40.5	37.7	35.1	18.9	15.8	12.4	17.8	16.9	11.2	29.0	31.1	24.3	21.5	22.5	1.2	0.7	0.7	0.8	1.1	0.9	0.5	0.2	0.2	0.4	0.5	0.2
All Grades	19.8	17.5	16.3	8.4	6.4	5.0	8.0	6.9	4.8	16.4	16.2	11.5	9.6	9.5	1.7	1.4	1.3	0.5	0.4	0.4	0.3	0.2	0.1	0.2	0.2	0.1

Past Month Substance Use by Gender: Males

	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the- Counter Drugs to Get High	
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017
6th	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.3	0.4	0.3	1.0	1.0	0.9	0.0	0.2	0.2	0.1	0.3	0.3	0.2	0.8	0.6	1.7	1.4
8th	0.3	0.2	0.3	0.2	0.1	0.1	0.3	0.3	0.3	0.3	0.1	0.3	1.0	1.3	1.1	0.0	0.2	0.5	0.3	0.4	0.5	0.4	0.3	0.4	1.1	1.4
10th	1.3	1.0	0.9	0.7	0.1	0.2	0.8	0.5	0.5	0.8	0.7	0.3	2.1	1.6	1.5	0.8	0.7	0.9	1.1	1.5	1.0	1.0	0.9	0.3	1.6	1.5
12th	2.3	2.1	1.8	0.2	0.3	0.2	1.6	1.5	0.6	1.1	0.6	0.4	3.2	2.8	1.8	1.4	1.6	1.3	3.4	3.5	1.9	1.0	0.6	0.2	1.4	1.3
All Grades	1.0	0.8	0.7	0.3	0.2	0.1	0.7	0.6	0.4	0.6	0.5	0.3	1.9	1.7	1.3	0.6	0.7	0.7	1.3	1.4	0.9	0.7	0.7	0.4	1.4	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		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	2.4	2.7	2.6	0.4	0.6	0.4	0.0	0.3	0.2	2.0	1.8	0.3	0.3	0.5	2.0	1.2	1.8	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0
8th	10.6	10.5	10.0	4.0	4.1	2.9	0.7	1.3	0.8	12.3	10.3	3.1	3.9	4.1	3.1	1.8	1.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10th	27.3	24.0	23.7	9.9	7.2	6.3	1.5	1.7	1.4	18.5	21.7	12.5	11.4	12.6	1.3	0.9	1.0	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1
12th	40.7	37.6	37.3	15.0	13.5	10.8	2.8	1.8	1.9	25.1	27.8	19.2	19.9	20.7	0.8	0.6	0.5	0.4	0.6	0.5	0.1	0.0	0.1	0.4	0.2	0.1
All Grades	20.9	19.0	17.7	7.5	6.4	4.9	1.3	1.3	1.1	14.7	15.0	9.1	9.0	9.1	1.8	1.1	1.3	0.2	0.2	0.2	0.1	0.0	0.1	0.2	0.1	0.1

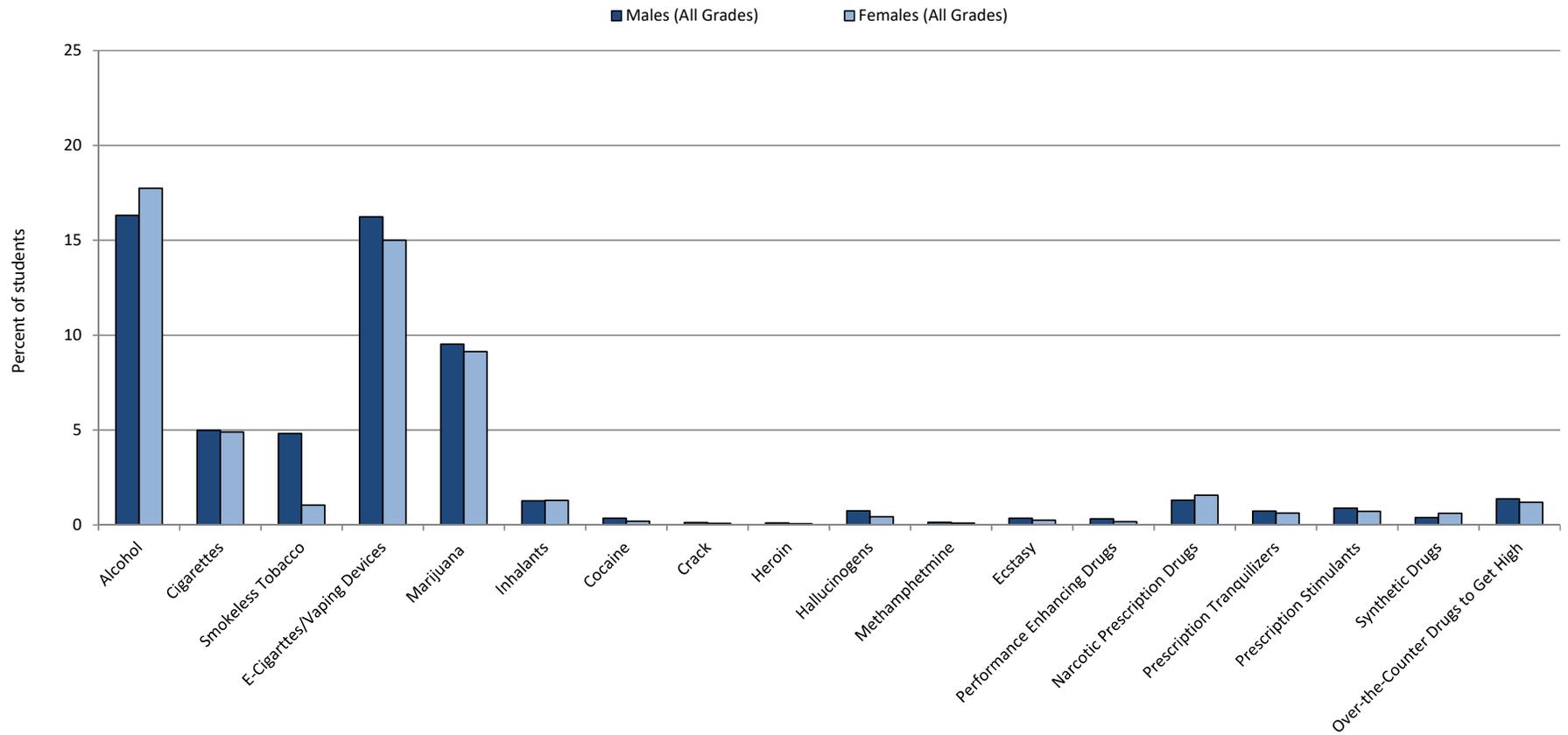
Past Month Substance Use by Gender: Females

	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the- Counter Drugs to Get High	
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2015	State 2017
6th	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.1	0.1	0.2	1.0	0.9	1.2	0.1	0.1	0.1	0.1	0.0	0.3	0.5	0.8	1.1	1.2	1.3
8th	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.4	0.2	0.1	0.3	0.2	1.9	2.0	1.6	0.4	0.3	0.4	0.4	0.5	0.4	0.6	0.5	0.7	1.3	1.2
10th	0.6	0.6	0.6	0.0	0.0	0.1	0.5	0.3	0.3	0.2	0.2	0.1	3.2	2.3	1.8	1.0	0.9	0.9	0.9	1.3	0.9	0.7	0.5	0.3	1.4	1.2
12th	0.5	0.8	1.0	0.3	0.1	0.1	1.4	1.1	0.4	0.0	0.1	0.1	2.8	3.2	1.7	1.5	1.2	1.1	2.2	3.0	1.4	0.6	0.5	0.3	1.4	1.0
All Grades	0.3	0.5	0.4	0.1	0.1	0.1	0.5	0.5	0.3	0.1	0.2	0.2	2.3	2.2	1.6	0.8	0.6	0.6	0.9	1.2	0.7	0.6	0.6	0.6	1.3	1.2

Figure 3.8-1

Past-Month Substance Use by Gender

(PAYS 2017)



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 using prescription drugs not prescribed to them (82.4% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (80.4% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (42.6% of students perceived moderate or great risk) and smoking marijuana once or twice a week (57.5% 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, smoking marijuana once or twice a week, and smoking marijuana regularly. Eighth graders indicated the highest perceived risk of binge drinking; while 10th graders indicated the highest perceived risk of regular/heavy tobacco use, regular alcohol use, and using prescription drugs. In general, all questions regarding perceived risks associated with marijuana use decreased as students advanced in grade level. For example, 73.1% of 6th graders perceived moderate or great risk in smoking marijuana once or twice a week. By the 12th grade, only 38.9% of students perceived a risk in this regular weekly use.

In comparing the 2015 and 2017 survey data, perceived harmfulness of trying marijuana once or twice decreased 2.8 percentage points to 4.5 percentage points in each grade, perceived harmfulness of smoking marijuana once or twice a week decreased 1.8 percentage points to 5.0 percentage points in each grade, and the perceived risk of smoking marijuana regularly decreased 1.5 percentage points to 4.2 percentage points in each grade.

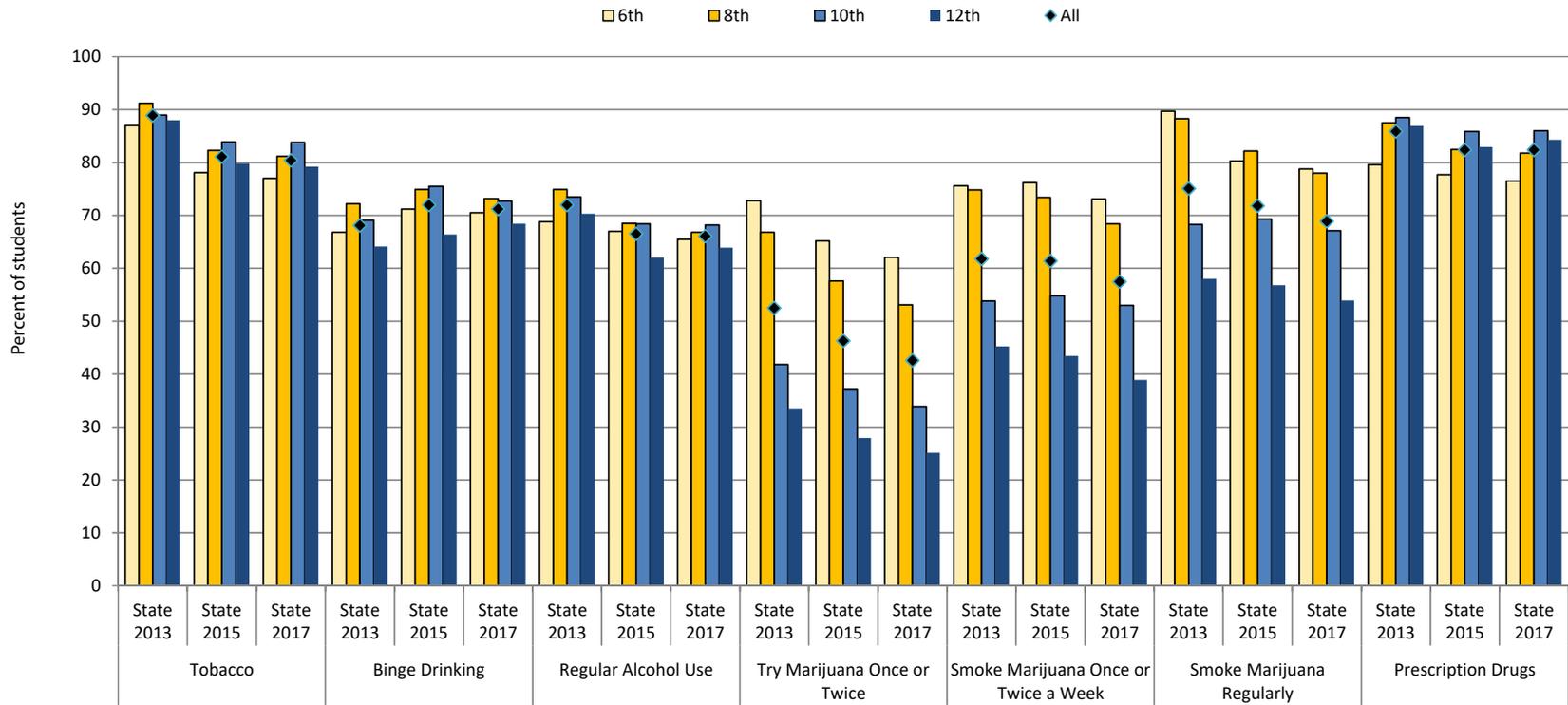
Table 3.9-1
Perception of Risk (% Marking "moderate risk" or "great risk")

Grade	Tobacco			Binge Drinking			Regular Alcohol Use			Try Marijuana Once or Twice			Smoke Marijuana Once or Twice a Week			Smoke Marijuana Regularly			Prescription Drugs		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	87.0	78.1	77.0	66.8	71.2	70.5	68.8	67.0	65.5	72.8	65.2	62.1	75.6	76.2	73.1	89.7	80.3	78.8	79.6	77.7	76.5
8th	91.2	82.3	81.2	72.2	74.9	73.2	74.9	68.5	66.8	66.8	57.6	53.1	74.8	73.4	68.4	88.3	82.2	78.0	87.5	82.5	81.8
10th	89.0	83.9	83.8	69.1	75.5	72.7	73.5	68.4	68.2	41.8	37.2	33.9	53.8	54.8	53.0	68.3	69.3	67.1	88.5	85.9	86.0
12th	88.0	79.8	79.2	64.1	66.4	68.4	70.3	62.0	63.9	33.5	27.9	25.1	45.2	43.4	38.9	58.0	56.8	53.9	86.9	82.9	84.3
All	88.9	81.1	80.4	68.1	72.0	71.2	72.0	66.5	66.1	52.5	46.3	42.6	61.8	61.4	57.5	75.1	71.8	68.9	85.9	82.4	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 2013, 2015, 2017)



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. The 2017 question options changed slightly, making some response options not comparable to previous administrations; in these cases only 2017 data are displayed. It must also 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.

For all grades combined, 33.3% of alcohol-using youth took the alcohol without permission, stole it, or found it; 29.6% gave someone money to buy it for them; 25.4% indicated that friends or siblings over 21 bought it for them; 23.1% indicated their parents provided it; 18.2% indicated their friends’ parents provided it; 17.6% indicated friends or siblings under the age of 21 provided it; 14.1% indicated other relatives provided it; 4.7% bought it at a store; 3.1% bought it at a restaurant, bar, or club; 3.4% bought it at a public event such as a concert or sporting event; and 24.6% obtained it from another source not listed.

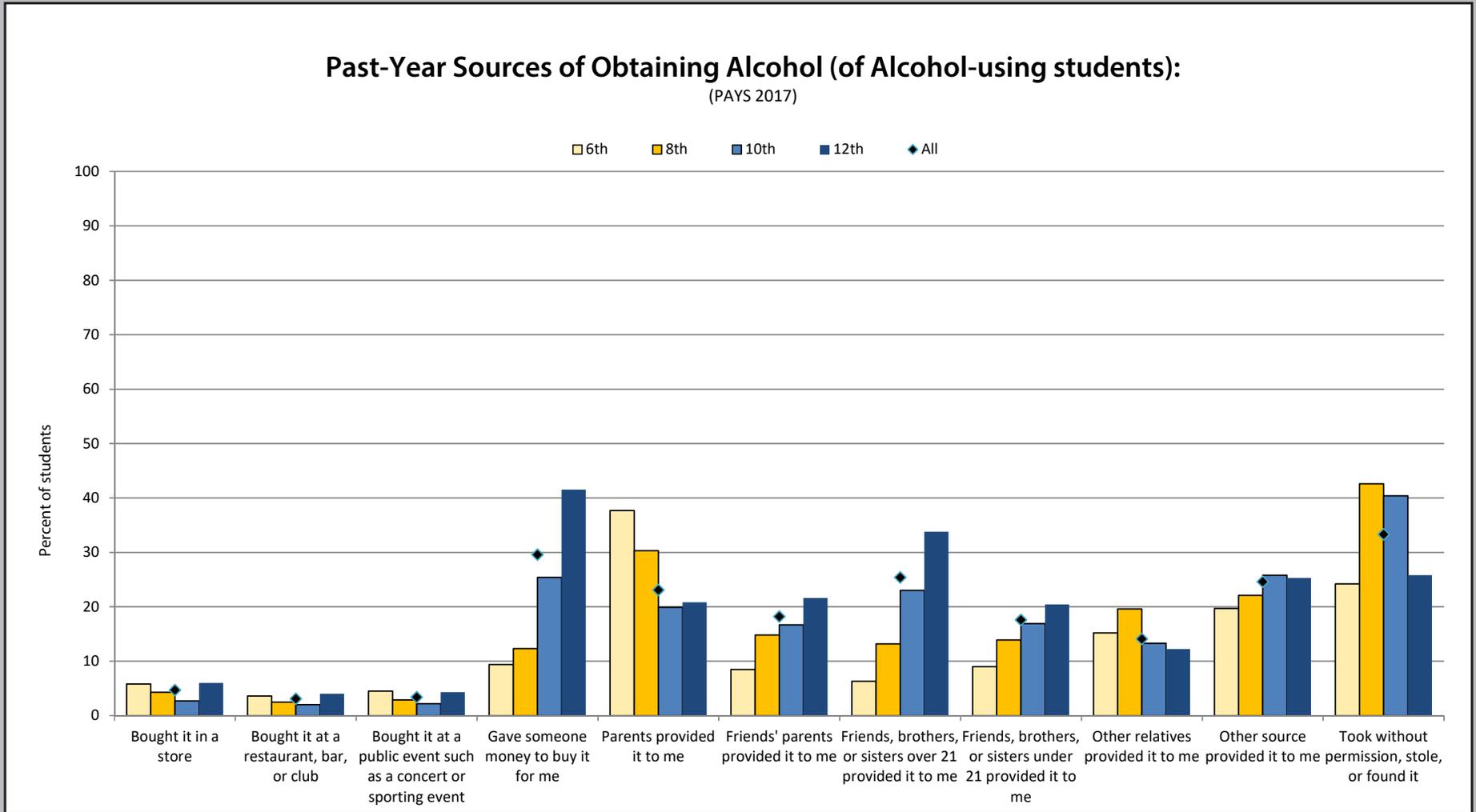
Table 3.10-1

Sources of Alcohol in the past year:

Percentage indicates the percent of past-year alcohol-using students who marked each item

Grade	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 provided it to me		Friends' parents provided it to me		Friends, brothers, or sisters over 21 provided it to me		Friends, brothers, or sisters under 21 provided it to me		Other relatives provided it to me		Other source provided it to me		Took without permission, stole, or found it	
	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017
6th	4.9	5.8	4.6	3.6	3.3	4.5	4.9	9.4	n/a	37.7	n/a	8.5	n/a	6.3	n/a	9.0	9.5	15.2	10.9	19.7	15.1	24.2
8th	3.0	4.3	2.1	2.5	2.8	2.9	7.4	12.3	n/a	30.3	n/a	14.8	n/a	13.2	n/a	13.9	15.5	19.6	12.9	22.1	24.8	42.6
10th	3.6	2.7	1.9	2.0	2.0	2.2	19.3	25.4	n/a	19.9	n/a	16.7	n/a	23.0	n/a	16.9	12.0	13.3	18.3	25.8	31.0	40.4
12th	6.9	6.0	6.1	4.0	5.2	4.3	37.9	41.5	n/a	20.8	n/a	21.6	n/a	33.8	n/a	20.4	13.4	12.2	22.4	25.3	20.5	25.8
All	4.9	4.7	3.8	3.1	3.5	3.4	23.1	29.6	n/a	23.1	n/a	18.2	n/a	25.4	n/a	17.6	13.2	14.1	18.2	24.6	24.4	33.3

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, 39.1% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 40.6% indicated that a friend or family member gave them to the student, 27.3% indicated that they bought them from someone, 10.6% indicated they took them from someone not related to them, 10.0% indicated they took them from relatives who were not living in their home, and 8.4% indicated they ordered them over the Internet.

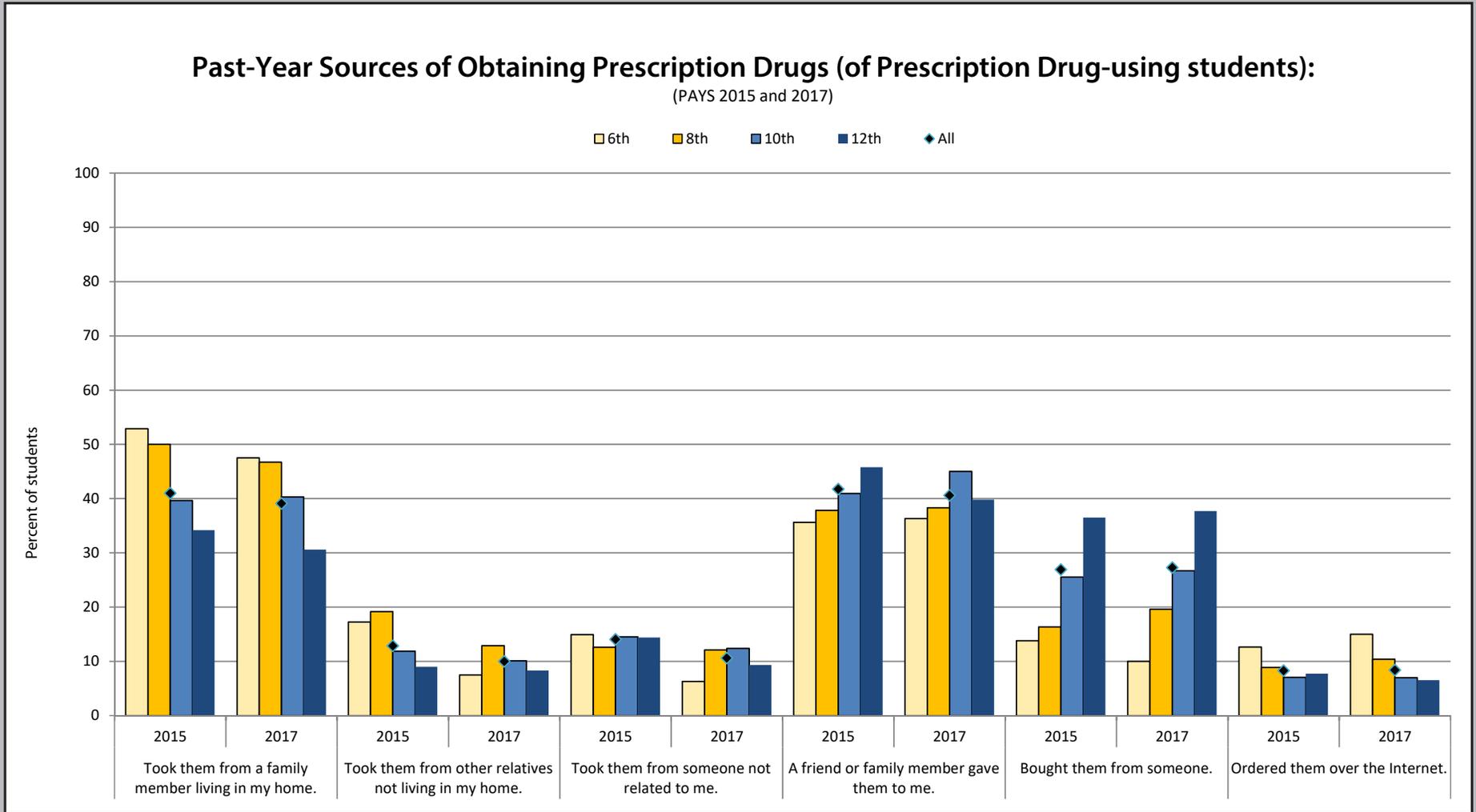
In general, as students got older, they were less likely to take prescriptions from a family member living in the home, but more likely to buy them from someone or have a friend or family member give the drugs to them.

Table 3.11-1

Sources of Prescription Drugs in the past year: 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.	
	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017	2015	2017
6th	52.9	47.5	17.2	7.5	14.9	6.3	35.6	36.3	13.8	10.0	12.6	15.0
8th	50.0	46.7	19.2	12.9	12.6	12.1	37.9	38.3	16.4	19.6	8.9	10.4
10th	39.6	40.3	11.9	10.1	14.5	12.4	41.0	45.0	25.6	26.7	7.0	7.0
12th	34.2	30.6	9.0	8.3	14.4	9.3	45.8	39.8	36.5	37.7	7.7	6.5
All	41.0	39.1	12.9	10.0	14.1	10.6	41.8	40.6	26.9	27.3	8.3	8.4

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. Of 8th graders, 9.2% reported being suspended from school in the past year; while 5.9% of 8th and 10th grade students reported attacking someone with the intent of seriously harming them in the past year. One in ten (10.6%) of high school seniors reported being drunk or high at school in the past year.

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 this national average. Rates of attacking someone to seriously harm them are 1.3 percentage points to 3.5 percentage points lower in Pennsylvania vs. the BH Norm in each grade. Fewer students in Pennsylvania report being at school while drunk or high, in comparison to the BH national norm (5.6% for Pennsylvania, all grades combined; 8.8% for the BH Norm).

Positive decreased since 2015 were found in the 12th grade, with antisocial behavior rates declining 1.0 percentage point to 2.0 percentage points for each of the measures in Table 4.1-1. There were no significant increases for the five antisocial behaviors featured in this section.

For data regarding antisocial behaviors by county and grade, please refer to the reports provided on the PAYS Portal at www.pays.pa.gov.

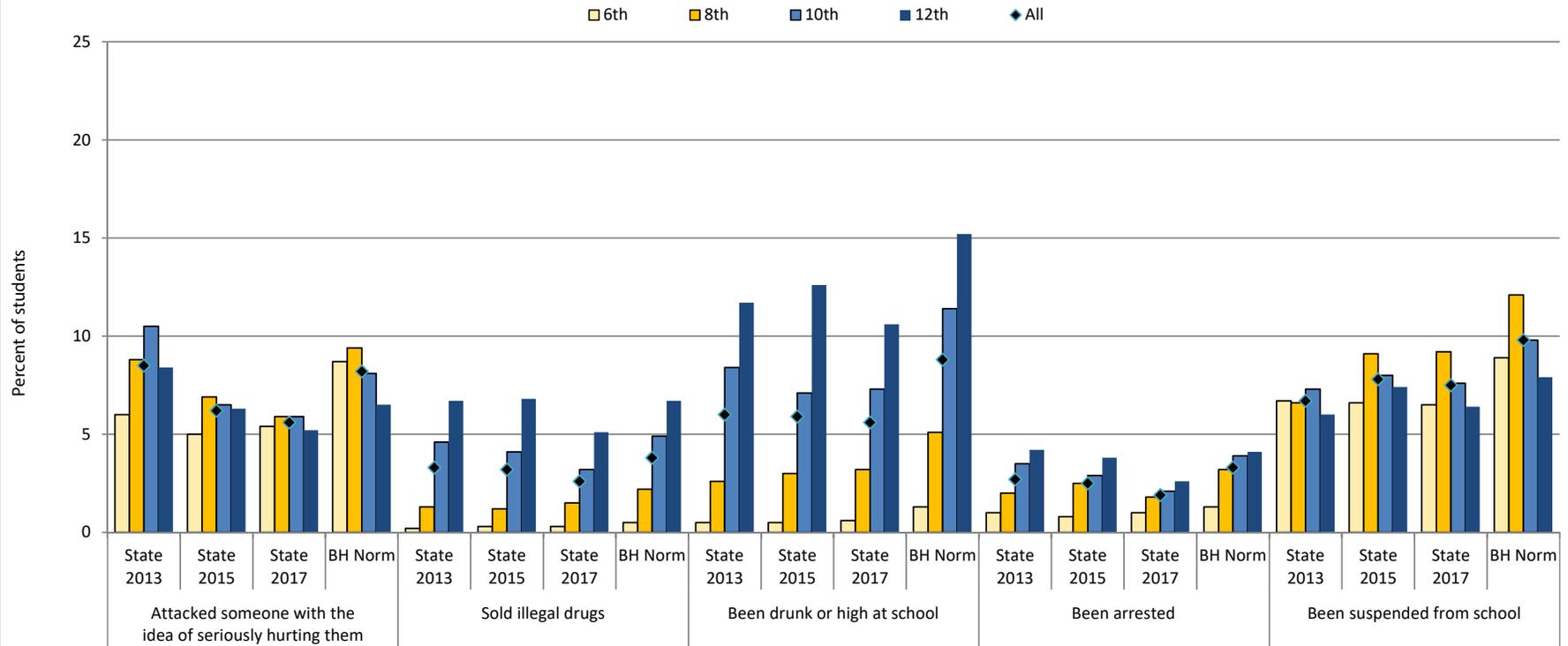
Table 4.1-1

Antisocial Behaviors (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 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm	State 2013	State 2015	State 2017	BH Norm
6th	6.0	5.0	5.4	8.7	0.2	0.3	0.3	0.5	0.5	0.5	0.6	1.3	1.0	0.8	1.0	1.3	6.7	6.6	6.5	8.9
8th	8.8	6.9	5.9	9.4	1.3	1.2	1.5	2.2	2.6	3.0	3.2	5.1	2.0	2.5	1.8	3.2	6.6	9.1	9.2	12.1
10th	10.5	6.5	5.9	8.1	4.6	4.1	3.2	4.9	8.4	7.1	7.3	11.4	3.5	2.9	2.1	3.9	7.3	8.0	7.6	9.8
12th	8.4	6.3	5.2	6.5	6.7	6.8	5.1	6.7	11.7	12.6	10.6	15.2	4.2	3.8	2.6	4.1	6.0	7.4	6.4	7.9
All	8.5	6.2	5.6	8.2	3.3	3.2	2.6	3.8	6.0	5.9	5.6	8.8	2.7	2.5	1.9	3.3	6.7	7.8	7.5	9.8

Figure 4.1-1

Antisocial Behavior: (PAYS 2013, 2015, 2017)



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 2017 PAYS questionnaire by both grade and gender.

Although the data gathered from the 2017 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 (10.0% for males compared to 5.1% for females), driving a vehicle after smoking marijuana (3.9% for males, 2.5% for females), and attacking someone with the intent of harming them (7.0% for males compared to 4.1% for females).

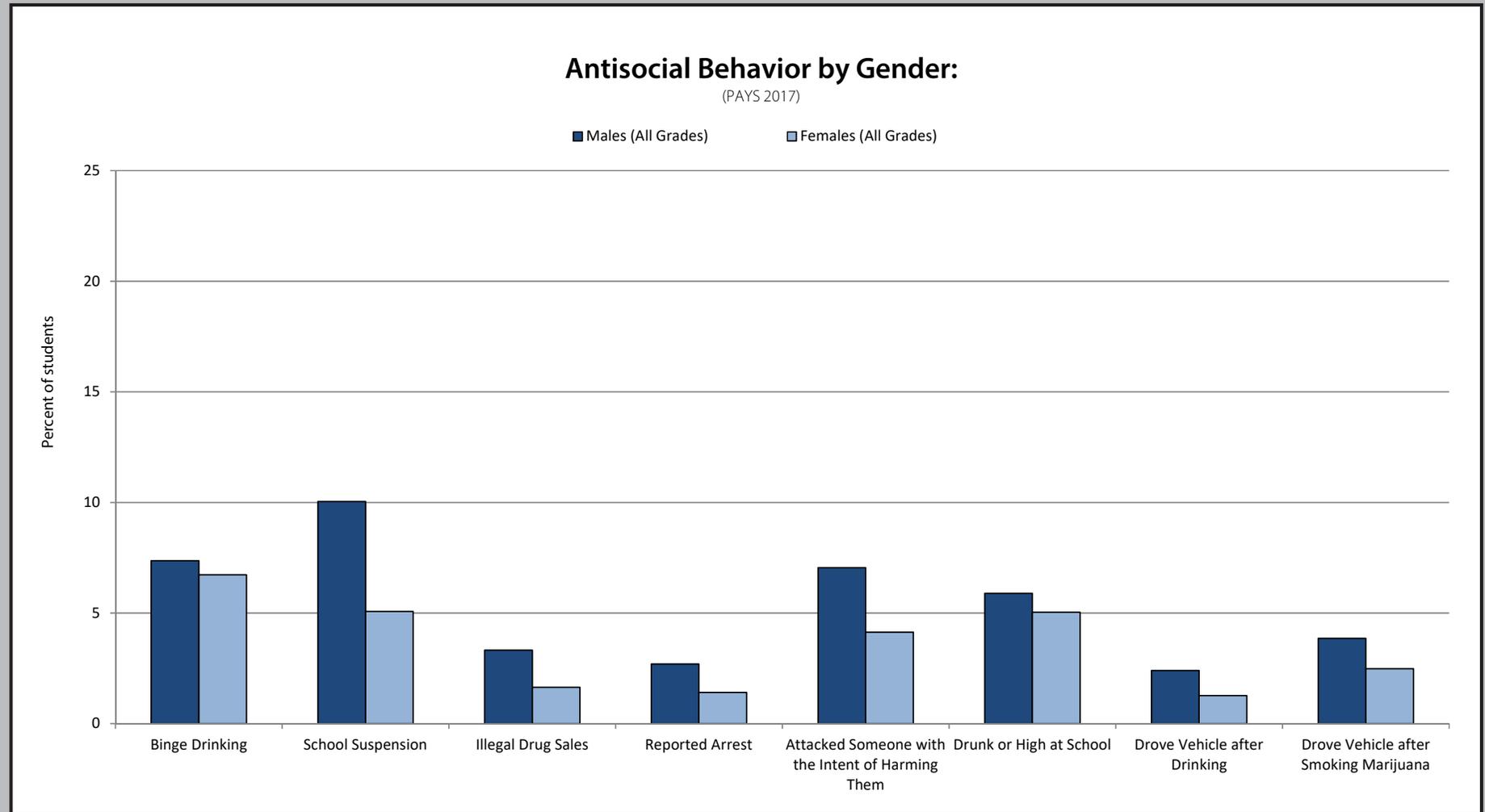
Table 4.2-1
Antisocial Behavior by Gender: Males

	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 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	1.6	1.4	1.4	9.0	9.2	8.7	0.3	0.4	0.3	1.5	1.1	1.0	7.5	7.0	6.5	0.4	0.7	0.6	0.3	0.5	0.5	0.1	0.3	0.3
8th	2.7	2.6	2.7	8.9	11.4	11.8	1.9	1.8	1.5	2.5	2.9	2.3	9.4	7.8	7.6	2.8	2.9	2.8	0.4	1.8	1.2	0.4	0.9	0.9
10th	12.1	8.0	8.4	9.2	10.1	10.4	6.6	5.1	4.5	5.2	3.7	3.6	12.1	7.6	7.4	9.6	7.4	7.8	2.6	1.9	1.9	3.7	2.3	2.4
12th	24.2	19.8	18.8	8.3	9.7	8.7	9.9	9.7	7.3	6.4	5.1	4.0	11.0	8.2	6.4	14.1	14.1	13.2	10.7	8.4	6.3	15.7	12.9	12.6
All Grades	10.3	7.9	7.4	8.9	10.1	10.0	4.8	4.3	3.3	4.0	3.2	2.7	10.1	7.6	7.0	7.0	6.3	5.9	3.7	3.2	2.4	5.3	4.3	3.9

Table 4.2-2
Antisocial Behavior by Gender: Females

	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 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	1.0	1.1	0.9	4.2	3.9	3.2	0.2	0.1	0.1	0.5	0.3	0.4	4.6	3.1	3.1	0.5	0.3	0.4	0.1	0.2	0.2	0.0	0.1	0.1
8th	3.4	3.9	3.1	4.2	6.6	6.0	0.8	0.6	0.8	1.5	2.0	1.4	8.0	5.9	5.0	2.4	3.0	3.0	0.4	0.5	0.6	0.3	0.4	0.5
10th	11.4	8.8	8.6	5.4	6.0	5.9	2.7	3.0	2.4	1.8	2.2	1.9	9.0	5.5	4.7	7.4	6.8	7.5	1.0	0.9	0.8	1.2	1.2	1.1
12th	19.4	16.4	15.5	3.8	5.2	4.8	3.6	4.0	3.3	2.0	2.4	1.8	5.8	4.3	3.6	9.2	11.1	9.4	6.7	4.4	3.7	9.2	8.6	8.7
All Grades	9.0	7.6	6.7	4.4	5.5	5.1	1.9	2.0	1.6	1.5	1.8	1.4	7.0	4.7	4.1	5.1	5.4	5.0	2.2	1.6	1.3	2.9	2.7	2.5

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 8.2% of students in all grades have been offered drugs at least one time in the past 12 months. Of all students surveyed, 20.5% indicate having been threatened at school at least once in the past year, and 3.8% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 8.3% of all students indicated having been attacked at school, and 1.2% indicated having been attacked with a weapon at school. In the past month, 1.2% 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 (1.9%), and 10th graders had the highest rate of being offered drugs at school (12.8%). However, 6th graders indicated the highest rates of being attacked at school in the past year (11.2%), and 8th graders indicated the highest rates of being threatened at school in the past year (24.4%), being threatened with a weapon at school in the past year (5.1%), and being attacked with a weapon at school (1.3%).

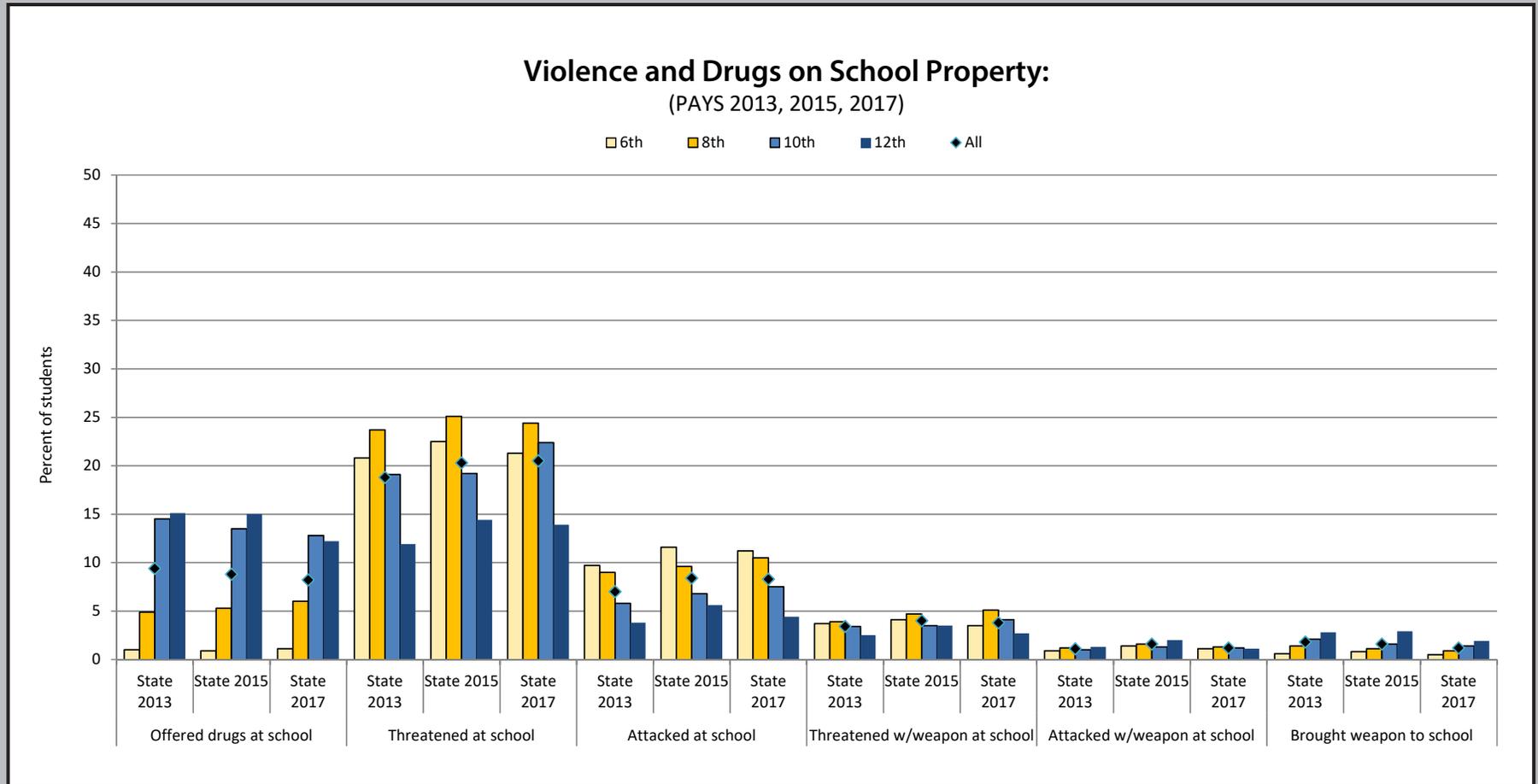
Since the 2015 survey, reports of being threatened at school decreased 1.2 percentage points for the 6th grade (from 22.5% in 2015 to 21.3% in 2017), but increased 3.2 percentage points in the 10th grade (from 19.2% in 2015 to 22.4% in 2017). The 12th grade saw several positive decreases in school-related violence and drug behavior; 12th grade rates of being offered drugs at school, being attacked at school, and bringing a weapon to school all noticeably decreased from 2015 to 2017.

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 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	1.0	0.9	1.1	20.8	22.5	21.3	9.7	11.6	11.2	3.7	4.1	3.5	0.9	1.4	1.1	0.6	0.8	0.5
8th	4.9	5.3	6.0	23.7	25.1	24.4	9.0	9.6	10.5	3.9	4.7	5.1	1.2	1.6	1.3	1.4	1.1	0.9
10th	14.5	13.5	12.8	19.1	19.2	22.4	5.8	6.8	7.5	3.4	3.5	4.1	1.0	1.3	1.2	2.1	1.6	1.4
12th	15.1	15.0	12.2	11.9	14.4	13.9	3.8	5.6	4.4	2.5	3.5	2.7	1.3	2.0	1.1	2.8	2.9	1.9
All	9.4	8.8	8.2	18.8	20.3	20.5	7.0	8.4	8.3	3.4	4.0	3.8	1.1	1.6	1.2	1.8	1.6	1.2

Figure 4.3-1



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 2017 questionnaire. Over one in four (28.2% of all students) indicated they had been bullied in the past year, 16.5% reported having been electronically bullied, and 4.6% said they had stayed home from school in the past year due to worries about bullying. Rates of being electronically bullied were highest in the 8th grade (18.7% of 8th graders reported having been electronically bullied).

Students were also asked about inappropriate sexual contact through technology. Of all students, 22.6% marked “YES!” or “yes” to this question and 10th graders reported the highest response to this question (31.5% marked “YES!” or “yes”).

Bullying and Internet Safety

Table 4.4-1

Grade	Inappropriate sexual contact through technology* (% answering "YES!" or "yes")			Stayed home from school because worried about being bullied			Electronic bullying (% answering "YES!" or "yes")			Percentage of students indicating some bullying in the past 12 months			Adults at school stop bullying when they see/hear it/student tells them about it		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	7.3	9.4	7.8	n/a	5.0	4.2	11.3	16.0	14.1	n/a	19.5	29.3	n/a	80.2	80.7
8th	17.5	20.2	20.9	n/a	6.1	5.5	17.7	18.9	18.7	n/a	19.8	31.4	n/a	66.8	65.3
10th	23.6	26.9	31.5	n/a	5.5	4.8	14.4	16.7	17.9	n/a	15.6	29.5	n/a	60.3	55.9
12th	19.1	23.4	28.1	n/a	4.5	3.9	11	13.8	14.9	n/a	12.9	22.8	n/a	54.8	52.5
All	17.4	20.3	22.6	n/a	5.3	4.6	13.7	16.3	16.5	n/a	16.9	28.2	n/a	65.1	63.0

Table 4.4-2

Bullying Frequency in the past year

Grade	No (not bullied in the past 12 months)	Yes, very rarely	Yes, now and then	Yes, several times per month	Yes, several times per week	Yes, almost daily
6th	67.8	14.7	10.3	2.2	2.1	2.9
8th	65.4	15.5	10.5	3.2	2.1	3.3
10th	68.8	14.8	10.3	2.6	1.8	1.7
12th	75.9	11.4	7.4	2.6	1.4	1.4
All	69.5	14.1	9.6	2.7	1.9	2.3

Figure 4.4-1

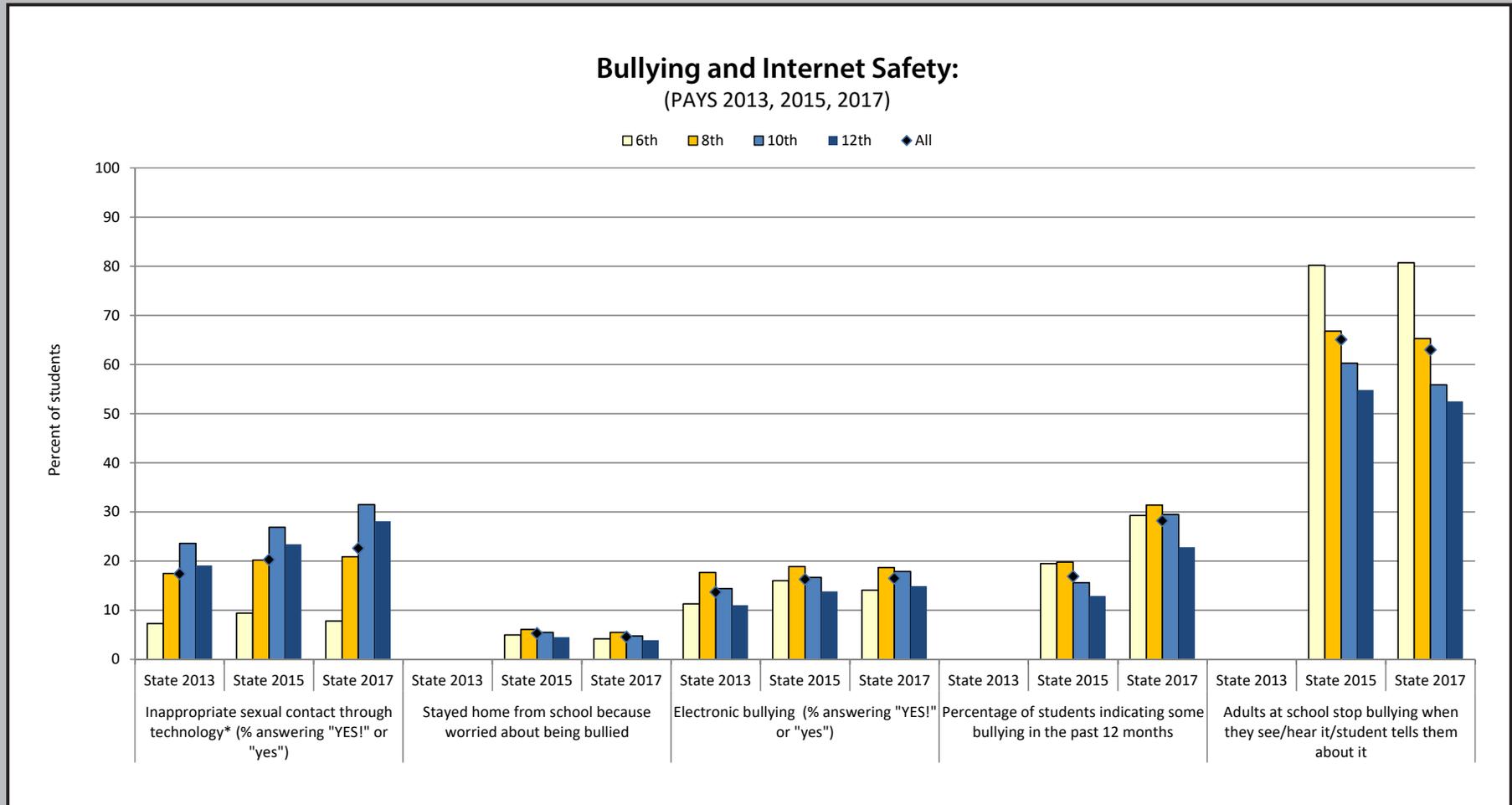
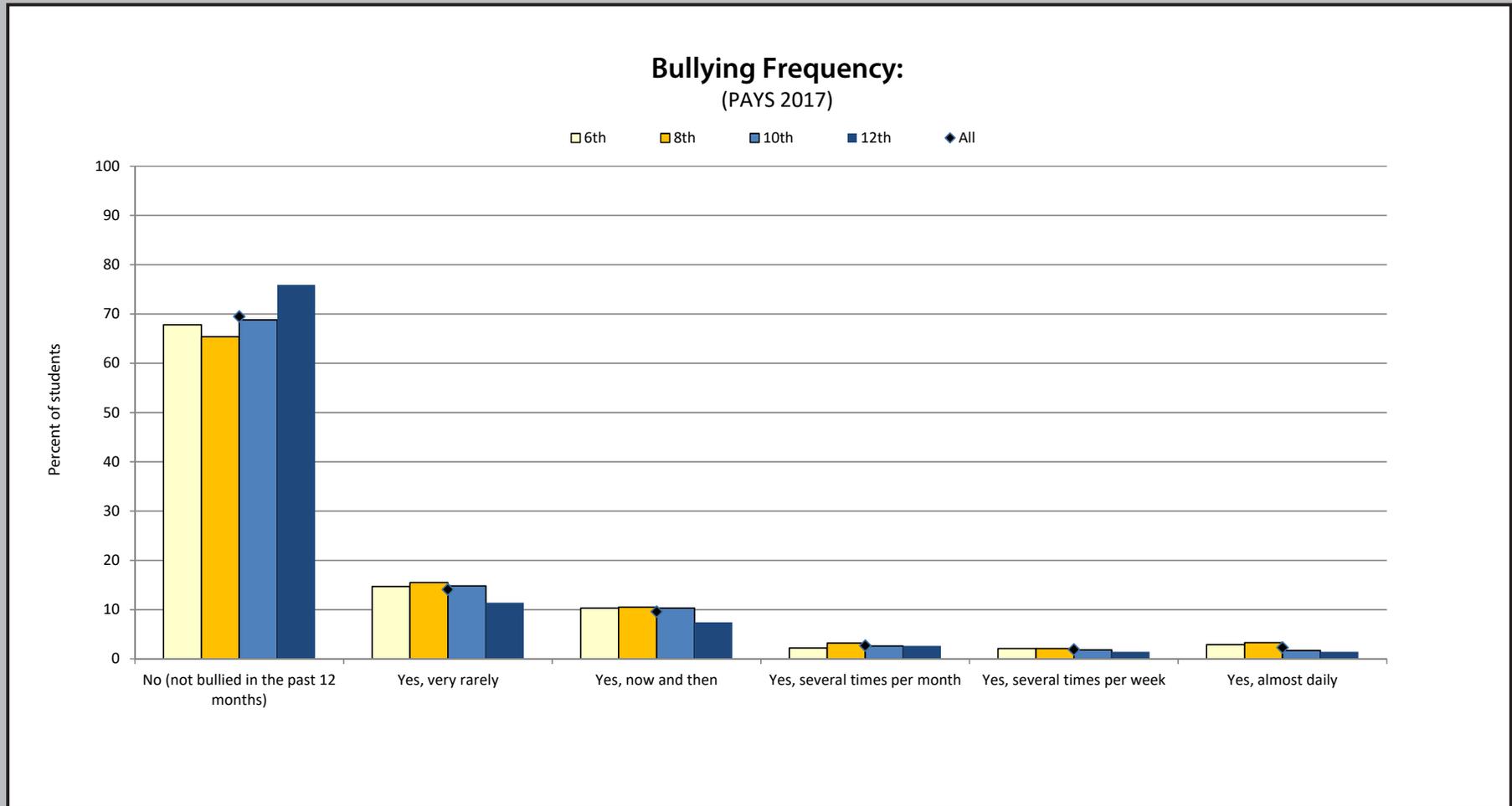


Figure 4.4-2



4.5 Additional Bullying Data

Additional bullying data were gathered through the 2017 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). The data in Table 4.5-1 (Bullying Locations) includes all students surveyed, while data in Table 4.5-2 are of students who indicated being bullied in the past year.

As for locations, while 70% of students report not being bullied in the past year, 22.9% reported being bullied on school property (22.7% of 6th graders, 27.1% of 8th graders, 23.1% of 10th graders, and 17.5% of 12th graders). The next highest locations were at home (8.3% experienced bullying here), in the community (6.3%), while going to or from school (5.4%), and at a school-sponsored event (4.1%).

Of students reporting they were bullied in the past year, the perceived reasons for being bullied were looks (i.e., clothing, hairstyle, etc.) (41.2%), size (height, weight, etc) (32.4%), social standing (16.9%), social conflict

(13.4%), grades at school (12.5%), family socioeconomic standing (10.6%), sex orientation (8.1%), skin color (7.4%), religion (5.7%), gender (5.6%), country of birth (2.2%), and county that family is from (3.6%). A large number of students also reported that they “don’t know why” they are bullied (32.4%) and that they were bullied for “some other reason” (37.7%).

**Table 4.5-1
Bullying Locations (of all students responding to the question)**

Grade	I was not bullied		On school property		At a school-sponsored event		While going to or from school		In the community		At home	
	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017
6th	75.0	68.2	19.1	22.7	2.8	2.9	7.4	6.7	5.6	5.2	7.8	7.9
8th	75.3	66.5	20.0	27.1	4.0	4.3	6.0	7.0	5.6	6.8	7.9	8.9
10th	80.7	70.1	14.4	23.1	3.6	4.4	4.5	4.3	4.8	6.2	7.8	9.1
12th	84.2	76.3	11.8	17.5	3.1	4.9	2.8	3.2	4.2	7.0	5.7	7.2
All	78.4	70.0	16.7	22.9	3.4	4.1	5.3	5.4	5.1	6.3	7.4	8.3

**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 disability)		Some other reason	
	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017	State 2015	State 2017		
6th	40.0	38.2	7.2	7.0	4.6	3.4	35.2	32.3	2.7	2.4	3.4	2.1	4.0	3.1	38.8	39.5	10.0	6.7	5.6	5.2	12.0	9.9	10.6	8.8	6.9	6.5	3.5	3.2	4.8	4.2	37.1	37.0
8th	33.1	31.7	7.7	7.4	7.3	6.0	38.8	37.0	4.8	3.8	3.4	2.2	4.0	3.8	49.1	46.5	13.4	13.3	5.9	5.4	13.5	13.7	18.9	17.1	14.2	12.6	10.1	8.8	4.6	5.2	39.2	40.3
10th	30.3	29.3	9.1	7.3	8.3	6.8	32.5	30.0	5.1	3.9	4.2	2.1	4.4	4.1	41.9	41.0	10.5	10.0	6.8	4.9	12.1	13.0	21.9	22.0	19.1	16.0	11.3	9.9	6.8	6.3	37.4	35.4
12th	26.3	29.8	10.9	7.9	10.1	6.6	32.1	27.0	5.4	3.8	4.2	2.3	5.1	3.1	42.1	33.4	12.1	11.2	8.1	7.6	15.3	13.0	21.6	20.9	19.9	21.1	10.5	11.0	6.8	7.0	33.1	36.6
All	33.2	32.4	8.4	7.4	7.3	5.7	35.4	32.4	4.4	3.5	3.7	2.2	4.3	3.6	43.7	41.2	11.6	10.6	6.4	5.6	13.1	12.5	17.8	16.9	14.3	13.4	8.8	8.1	5.5	5.5	37.3	37.7

Figure 4.4-1

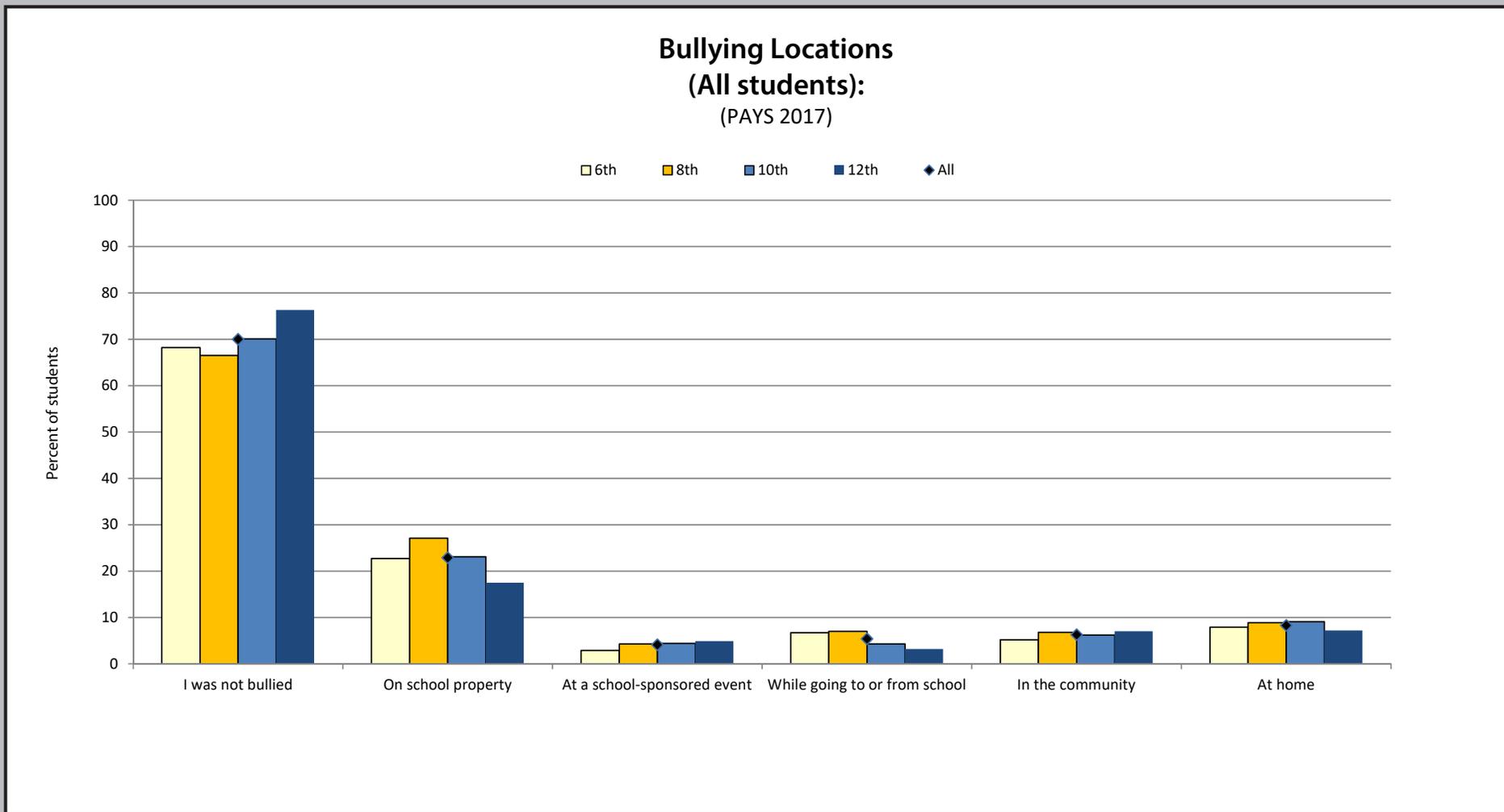
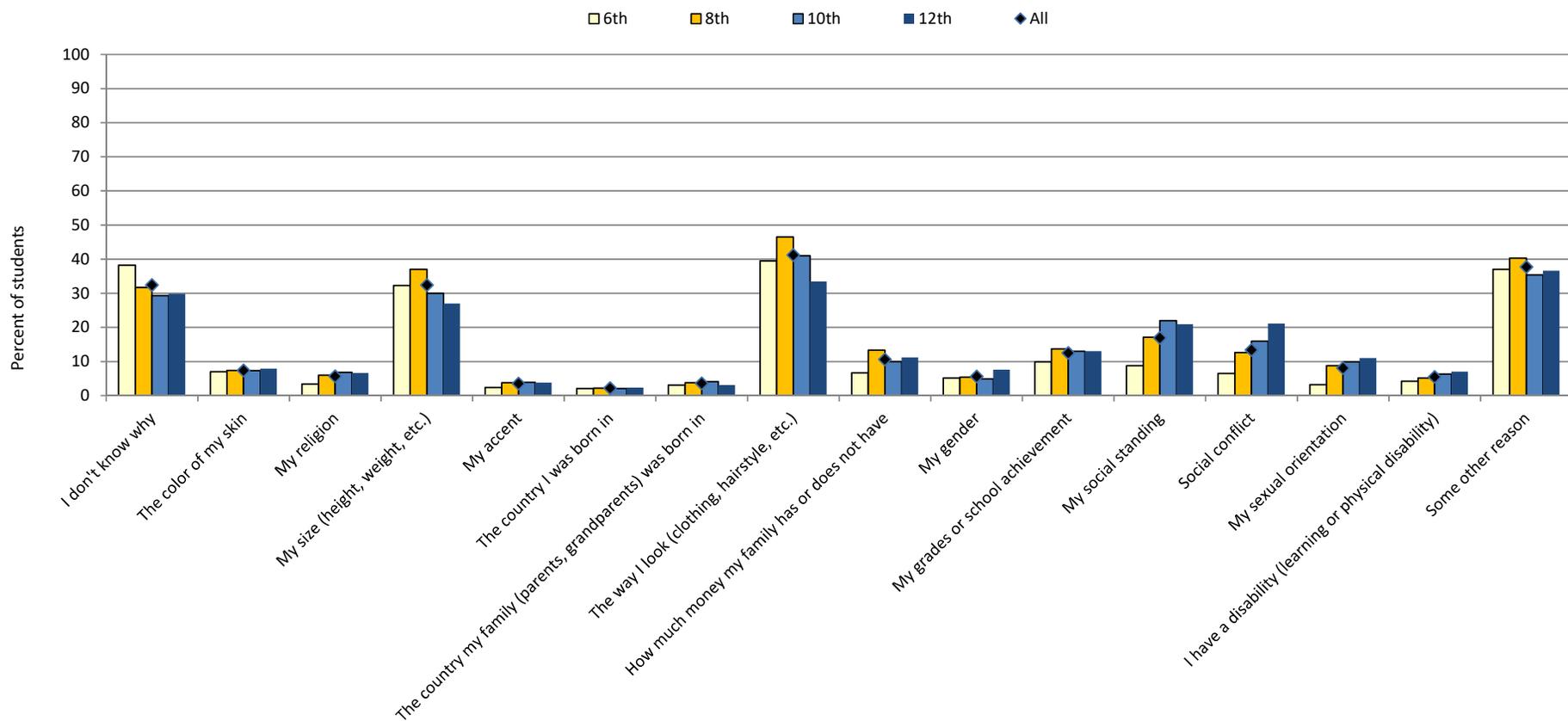


Figure 4.5-2

Perceived Reasons for Being Bullied, (Of students who indicated being bullied in the past year): (PAYS 2017)



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.

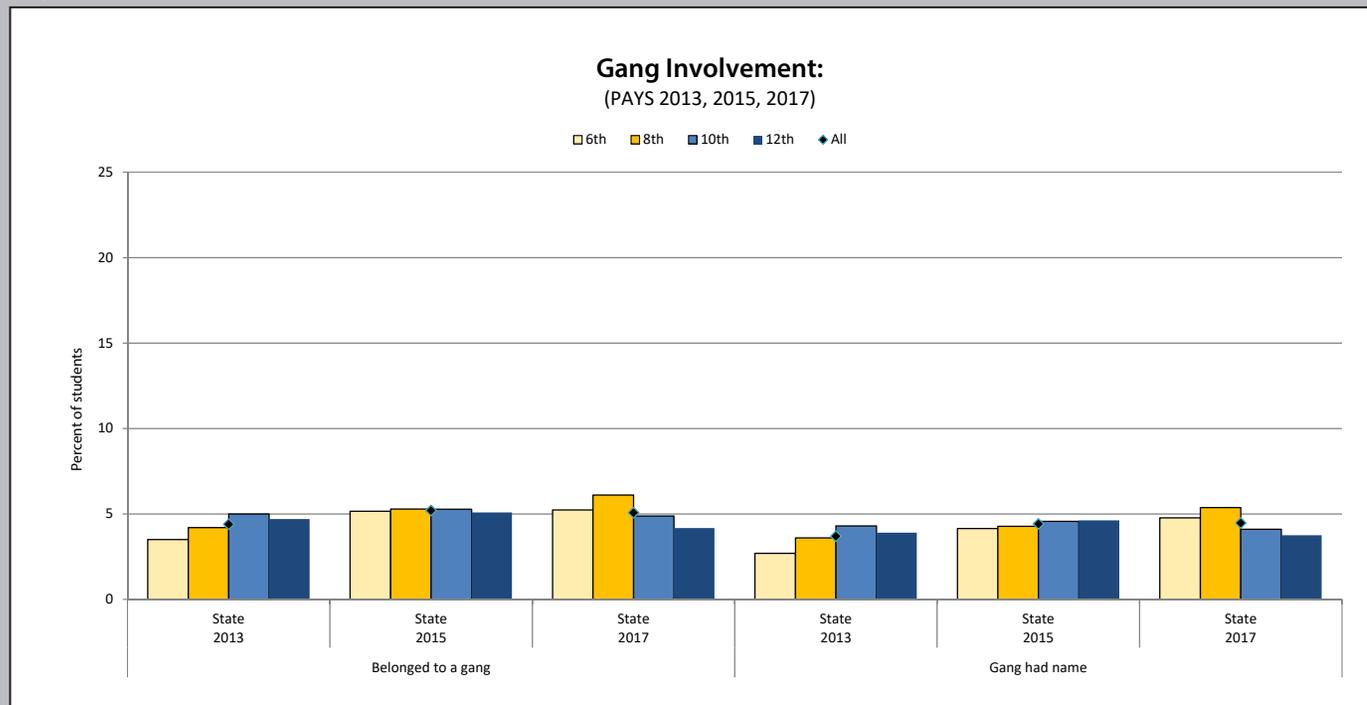
Gangs tend to cluster in high-crime, socially disorganized neighborhoods, where many youth are in trouble, feel unsafe, and are less attached to others in the community and where firearms are readily available.

Some of the gang-related data gathered through the 2017 PAYS are provided in Table 4.6-1 and Figure 4.6-1. In 2017, 5.1% of all students indicated that they had belonged to a gang at some point in their life, and 4.5% indicated their gang had a name.

Table 4.6-1

Gang Involvement (Lifetime)						
Grade	Belonged to a gang			Gang had name		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	3.5	5.2	5.2	2.7	4.1	4.8
8th	4.2	5.3	6.1	3.6	4.3	5.4
10th	5	5.3	4.9	4.3	4.6	4.1
12th	4.7	5.1	4.2	3.9	4.6	3.7
All	4.4	5.2	5.1	3.7	4.4	4.5

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.

About one in three students (36.0%) have gambled in their lifetime and nearly one in ten (9.9%) have gambled in the past month. Past-month gambling decreased one percentage point in the 10th grade from 2015 (12.3%) to 2017 (11.3%); and decreased 3.0 percentage points in the 12th grade from 2015 (14.5%) to 2017 (11.5%).

The individual activities most often participated in during the past year were playing the lottery (21.4% of all students, a grade-level peak of 23.5% in the 10th grade), betting on personal games of skill (17.9% of all students, a grade-level peak of 19.7% in the 10th grade), and betting on sports (13.8% of all students, a grade-level peak of 15.7% in the 10th grade).

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.

Figure 4.7-1

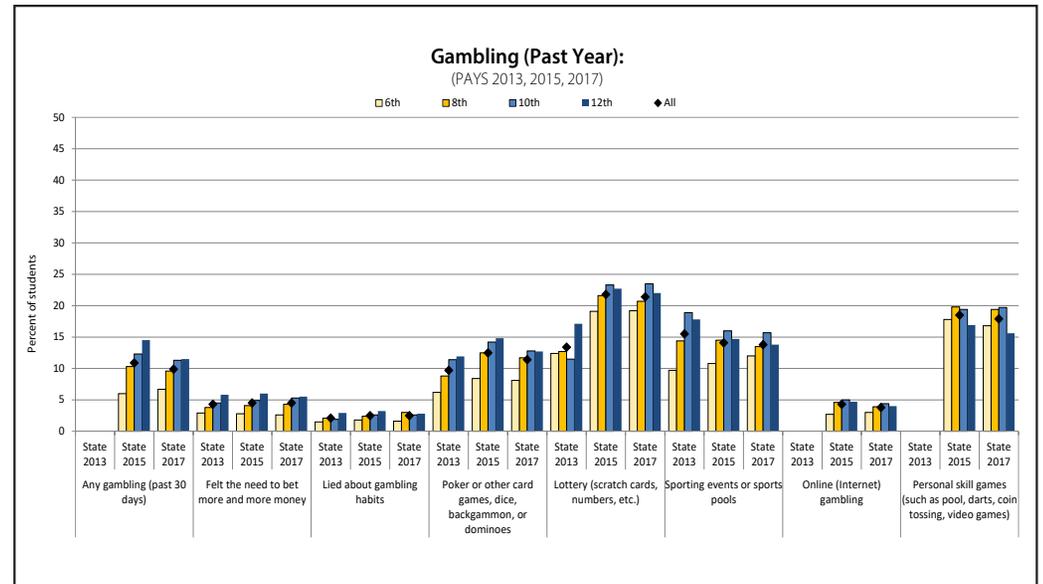


Table 4.7-1
Gambling (Past Year)

Grade	Any gambling (lifetime)			Any gambling (past 30 days)			Felt the need to bet more and more money			Lied about gambling habits			Poker or other card games, dice, backgammon, or dominoes			Lottery (scratch cards, numbers, etc.)			Sporting events or sports pools			Online (Internet) gambling			Personal skill games (such as pool, darts, coin tossing, video games)			Bet/gambled in some other way		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	n/a	21.9	21.8	n/a	6.0	6.7	2.9	2.8	2.6	1.5	1.8	1.6	6.2	8.4	8.1	12.4	19.1	19.2	9.7	10.8	12.0	n/a	2.7	3.0	n/a	17.8	16.8	n/a	7.2	7.0
8th	n/a	37.2	35.8	n/a	10.3	9.6	3.8	4.1	4.3	2.1	2.4	3.0	8.8	12.5	11.7	12.7	21.6	20.7	14.4	14.5	13.5	n/a	4.6	3.9	n/a	19.8	19.4	n/a	12.2	12.6
10th	n/a	43.4	43.2	n/a	12.3	11.3	4.5	4.9	5.3	1.9	2.6	2.6	11.4	14.2	12.8	11.5	23.3	23.5	18.9	16.0	15.7	n/a	5.0	4.4	n/a	19.4	19.7	n/a	14.6	15.0
12th	n/a	43.5	41.3	n/a	14.5	11.5	5.8	6.0	5.5	2.9	3.2	2.8	11.9	14.8	12.7	17.1	22.7	22.0	17.8	14.7	13.8	n/a	4.7	4.0	n/a	16.9	15.6	n/a	13.8	11.8
All	n/a	36.8	36.0	n/a	10.9	9.9	4.3	4.5	4.5	2.1	2.5	2.5	9.7	12.5	11.4	13.4	21.8	21.4	15.5	14.1	13.8	n/a	4.3	3.8	n/a	18.5	17.9	n/a	12.1	11.8

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 2.2% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 5.5% of that grade. More students

reported driving after smoking marijuana in the past year (3.5% of the total survey sample population, and 10.3% of 12th grade respondents).

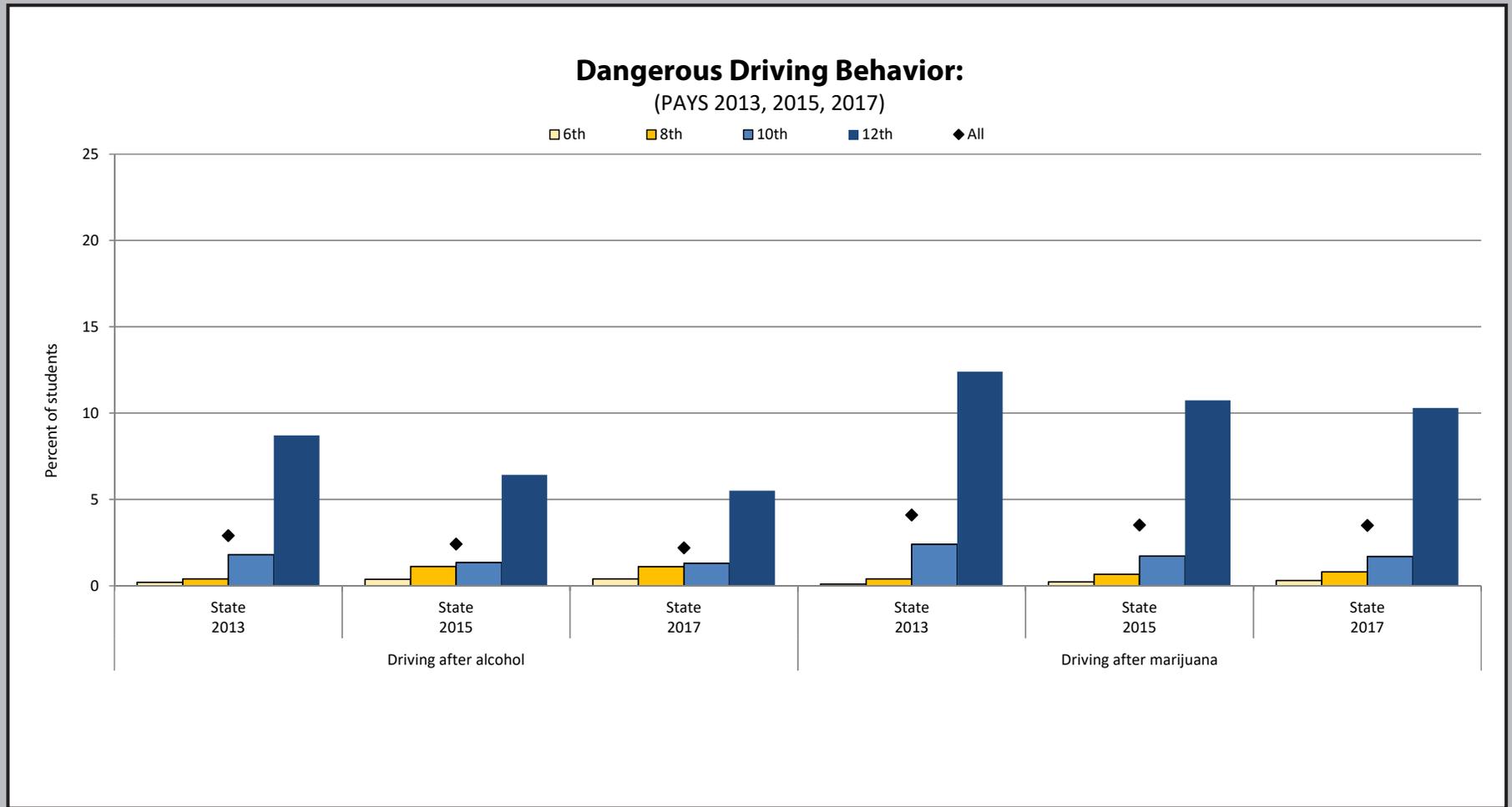
Three years of data are available for driving after drinking and driving after smoking marijuana. 2017 PAYS data show that the percent of Pennsylvania students reporting driving after drinking has decreased 0.7 percentage points since 2013 (rate of 2.9% in 2013, 2.4% in 2015, and 2.2% in 2017) and the percent of students reporting driving after consuming marijuana has decreased 0.6 percentage points (rate of 4.1% in 2013, and 3.5% in 2015 and 2017). 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 3.2 percentage points since 2013, and the 12th grade rate of driving after smoking marijuana is down 2.1 percentage points since 2013.

Table 4.8-1

Dangerous Driving Behavior: Driving After Consuming Alcohol Or Marijuana

	Driving after alcohol			Driving after marijuana		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	0.2	0.4	0.4	0.1	0.2	0.3
8th	0.4	1.1	1.1	0.4	0.7	0.8
10th	1.8	1.4	1.3	2.4	1.7	1.7
12th	8.7	6.4	5.5	12.4	10.7	10.3
All	2.9	2.4	2.2	4.1	3.5	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 2017 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 2017 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 38.1% 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; 24.8% of all students indicated that they sometimes thought life is not worth it; 35.1% of all students indicated that “at times I think I am no good at all” and 20.6% indicated that they felt that they were a failure. Further 14.0% 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.

- There was a slight decrease in reported rates of past-year self-harm since 2015 for all grades combined (a decrease of 1.1 percentage points from 15.1% in 2015 to 14.0% in 2017), in the 8th grade (a decrease of 1.4 percentage points, from 16.7% in 2015 to 15.3% in 2017), and in the 12th grade (a decrease of 1.7 percentage points, from 15.1% in 2015 to 13.4% in 2017).
- 40.7% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 13.4% indicated having the stress of worrying that food at home would run out; and 6.8% indicated the stress of having to skip a meal due to a lack of money.
- 16.5% of students in all grades combined indicated that they had considered suicide in the past year. The grade-level rates for this question were as follows: 8.8% of 6th graders, 16.2% of 8th graders, 20.2% of 10th graders, and 19.9% of 12th graders indicated they had considered suicide in the past year.
- 13.4% of students in all grades combined indicated that they had gone so far as to create a suicide plan at least once in the past year. The grade-level rates for this question were as follows: 6.8% of 6th graders, 13.2% of 8th graders, 16.4% of 10th graders, and 16.2% of 12th graders indicating they had created a suicide plan.
- In regard to those students who indicated they had attempted suicide in the past year, 5.9% of 6th graders, 10.1% of 8th graders, 11.5% of 10th graders, 12.0% of 12th graders, and 10.0% of all students indicated that they had attempted suicide at least one time in the past 12 months.

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**

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 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	26.4	33.9	32.3	14.7	18.1	17.9	24.7	29.5	27.7	12.3	15.6	14.2	n/a	10.4	9.7
8th	30.9	37.7	36.9	23.2	24.2	24.5	31.8	33.9	34.3	17.9	21.1	20.7	n/a	16.7	15.3
10th	36	40.6	41.4	26.9	26.0	27.5	37.7	37.3	37.9	20.7	21.2	23.4	n/a	17.8	17.1
12th	32.6	40.7	40.8	24.4	26.8	28.4	35.2	37.5	39.5	17.9	21.6	23.1	n/a	15.1	13.4
All	31.7	38.3	38.1	22.6	23.9	24.8	32.7	34.7	35.1	17.4	19.9	20.6	n/a	15.1	14.0

Table 5.1-2 **Suicide Risk**

Grade	Felt so sad or hopeless 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 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	16.8	14.9	14.9	6.9	8.7	8.8	4.7	6.2	6.8	4.2	5.8	5.9	1.0	1.2	1.2
8th	22.3	20.9	21.5	14.7	15.4	16.2	10.9	12.7	13.2	7.6	10.1	10.1	1.9	2.5	2.1
10th	27.3	23.9	25.6	20.4	19.2	20.2	15.7	15.1	16.4	9.6	10.5	11.5	2.4	2.6	2.4
12th	26.1	25.4	27.9	18.9	19.5	19.9	14.0	15.8	16.2	8.5	11.2	12.0	1.4	2.6	2.2
All	23.4	21.5	22.8	15.6	16.0	16.5	11.6	12.7	13.4	7.6	9.5	10.0	1.7	2.3	2.0

Table 5.1-3 **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 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	47.2	42.9	43.1	9.1	13.4	12.2	3.4	5.4	4.3
8th	43.7	42.6	42.8	8.6	14.9	14.4	3.7	6.6	6.8
10th	38.4	38.8	39.7	9.8	13.1	13.8	4.5	6.0	7.2
12th	36.7	37.4	37.6	10.5	13.6	13.1	5.8	8.1	8.4
All	41.2	40.3	40.7	9.5	13.7	13.4	4.4	6.6	6.8

Figure 5.1-1

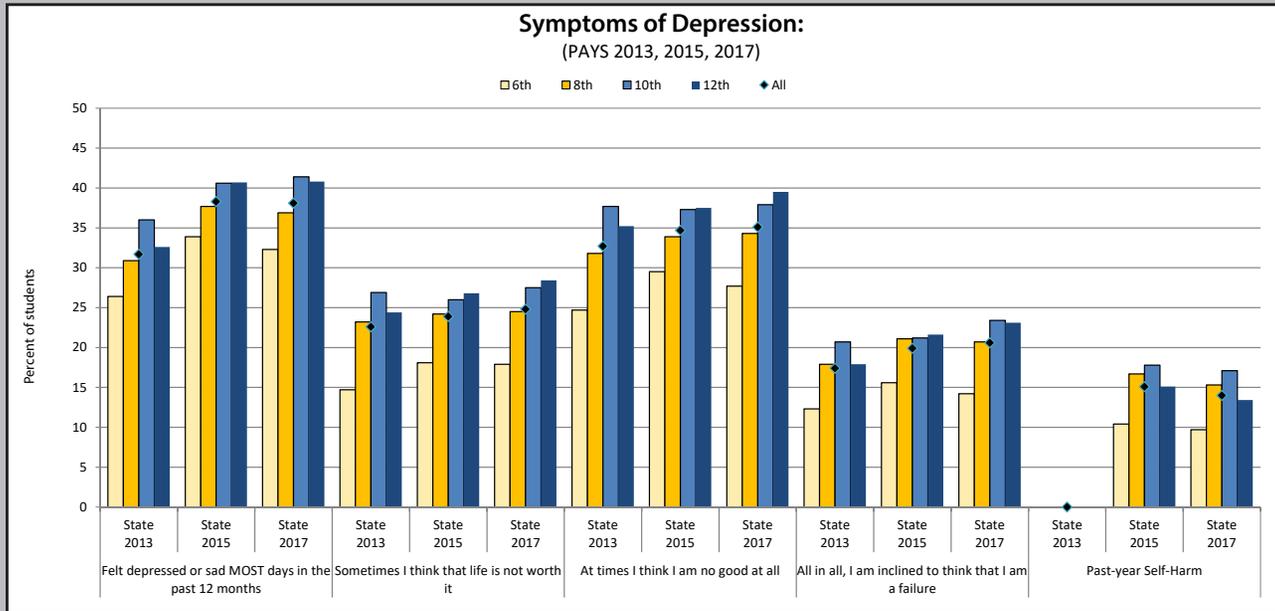


Figure 5.1-2

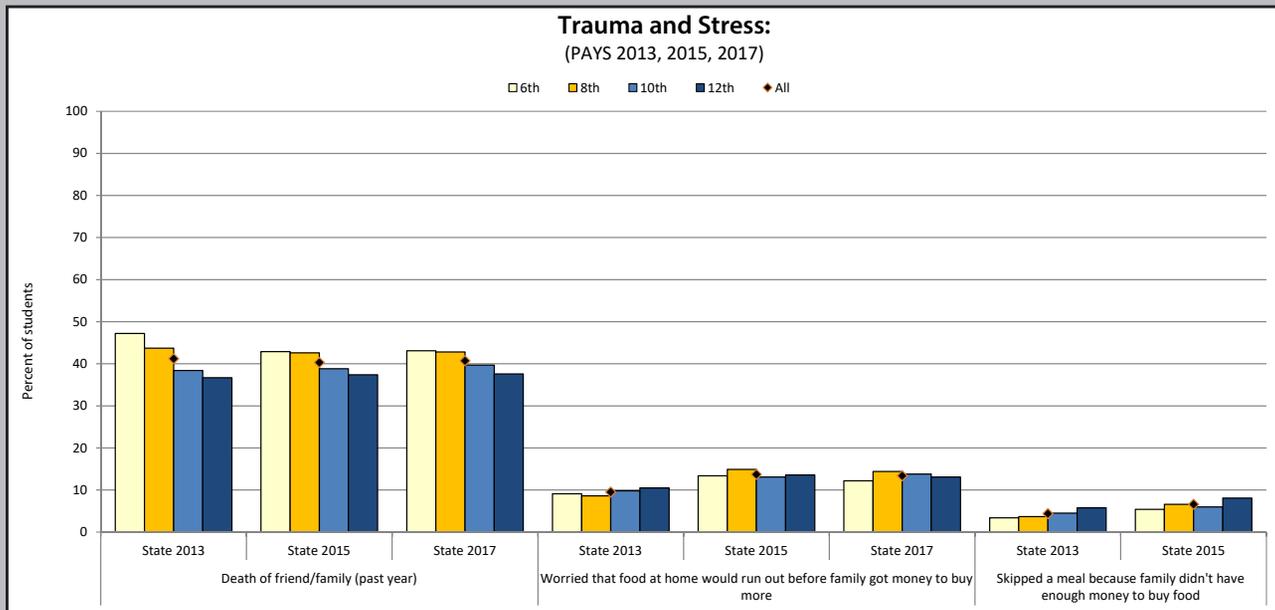
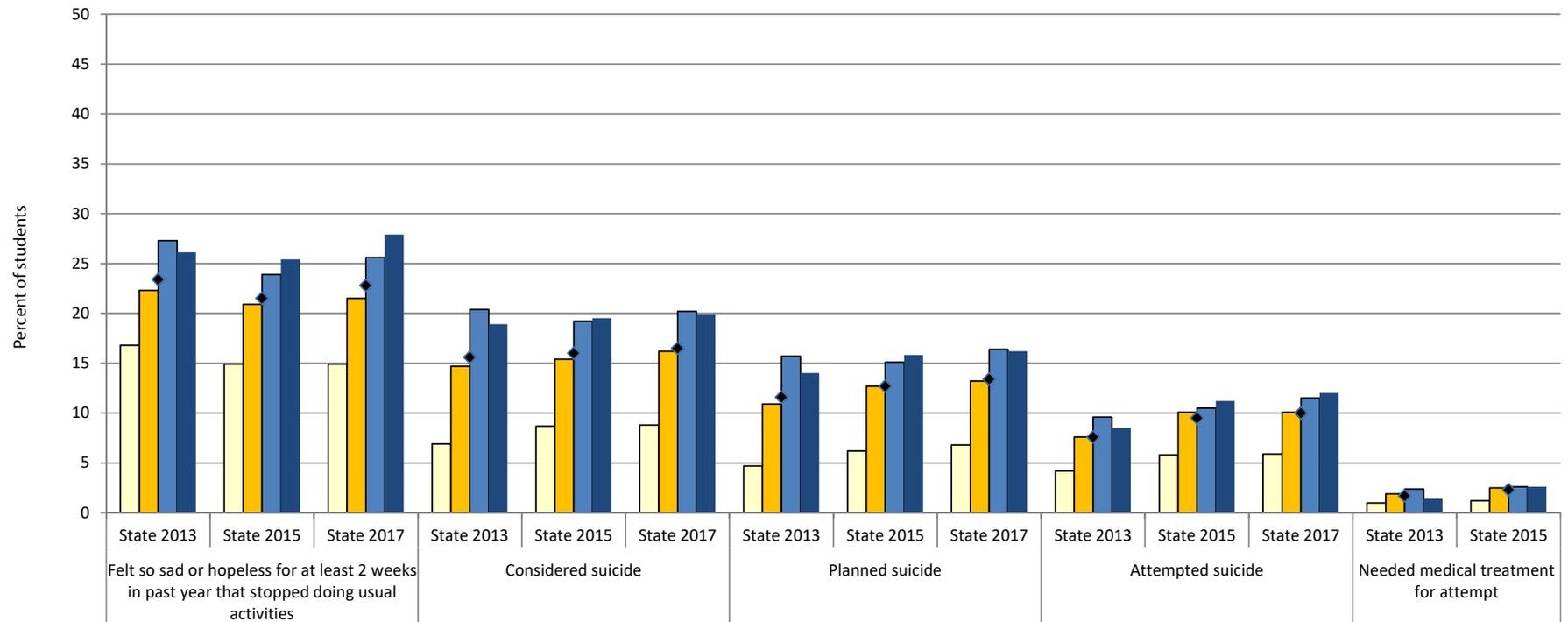


Figure 5.1-3

Suicide Risk: (PAYS 2013, 2015, 2017)

□ 6th □ 8th □ 10th □ 12th ◆ All



5.2 Depressive Symptoms and Substance Use

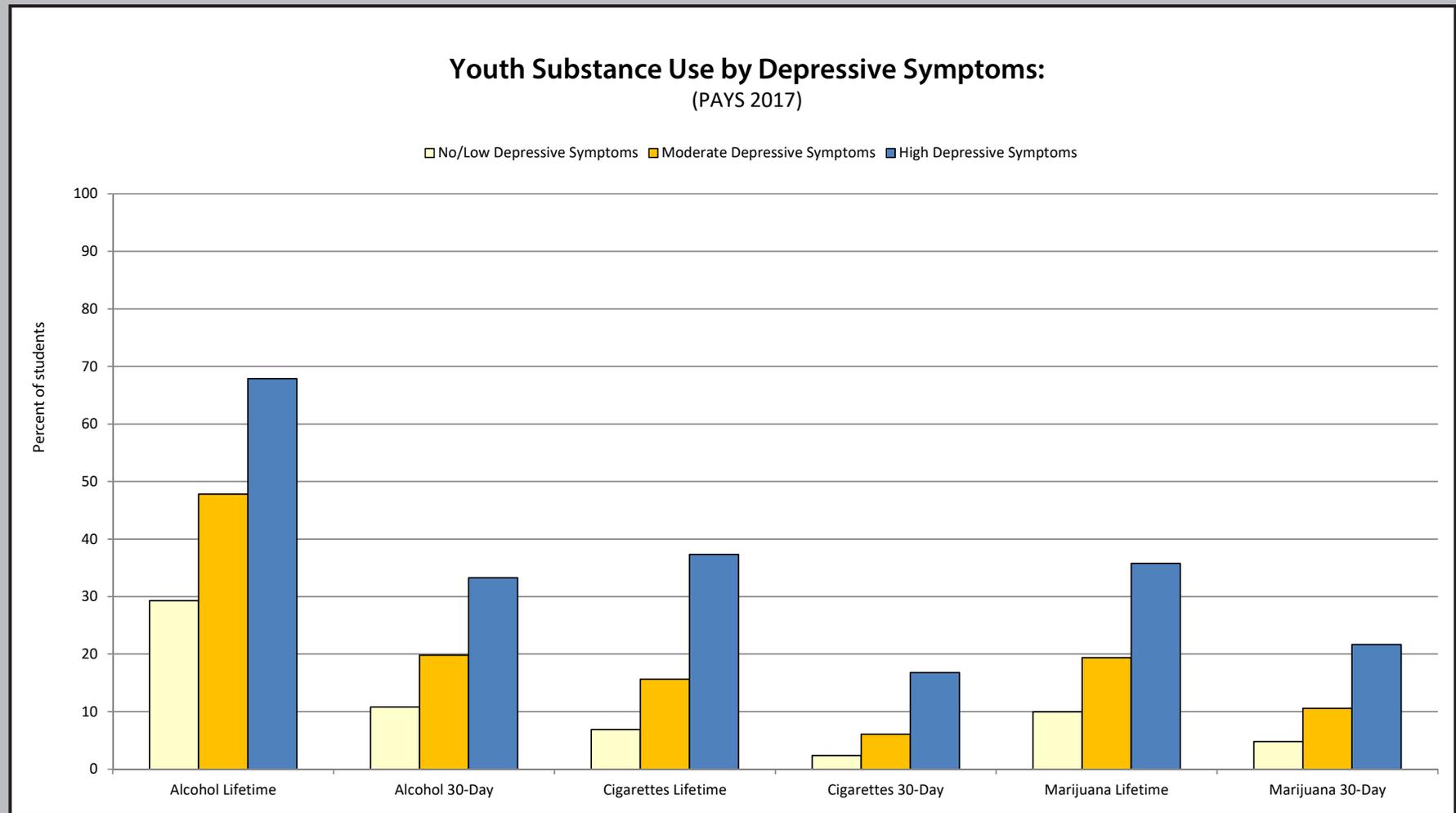
The substance use rate of youth who reported depressive symptoms is much greater than those who have a much more positive outlook on life. The four depressive symptoms that were asked on the survey questionnaire were: 1) Sometimes I think that life is not worth it, 2) At times I think I am no good at 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, 27.4% of students scored no/low on this calculated scale; 65.9% scored moderate on this scale; and 6.7% 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 over three times higher than non-depressed students. Depressed students indicate use rates that are seven times higher for past-month cigarette use and over four times higher for past month marijuana use in comparison to non-depressed students.

**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	27.4	65.9	6.7
Alcohol Lifetime	29.3	47.8	67.9
Alcohol 30-Day	10.8	19.8	33.3
Cigarettes Lifetime	6.9	15.6	37.3
Cigarettes 30-Day	2.4	6.1	16.8
Marijuana Lifetime	9.9	19.4	35.8
Marijuana 30-Day	4.8	10.6	21.7

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, 17.5% 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, 49.0% indicated feeling so sad or hopeless almost every day for at least two weeks in past year that they stopped

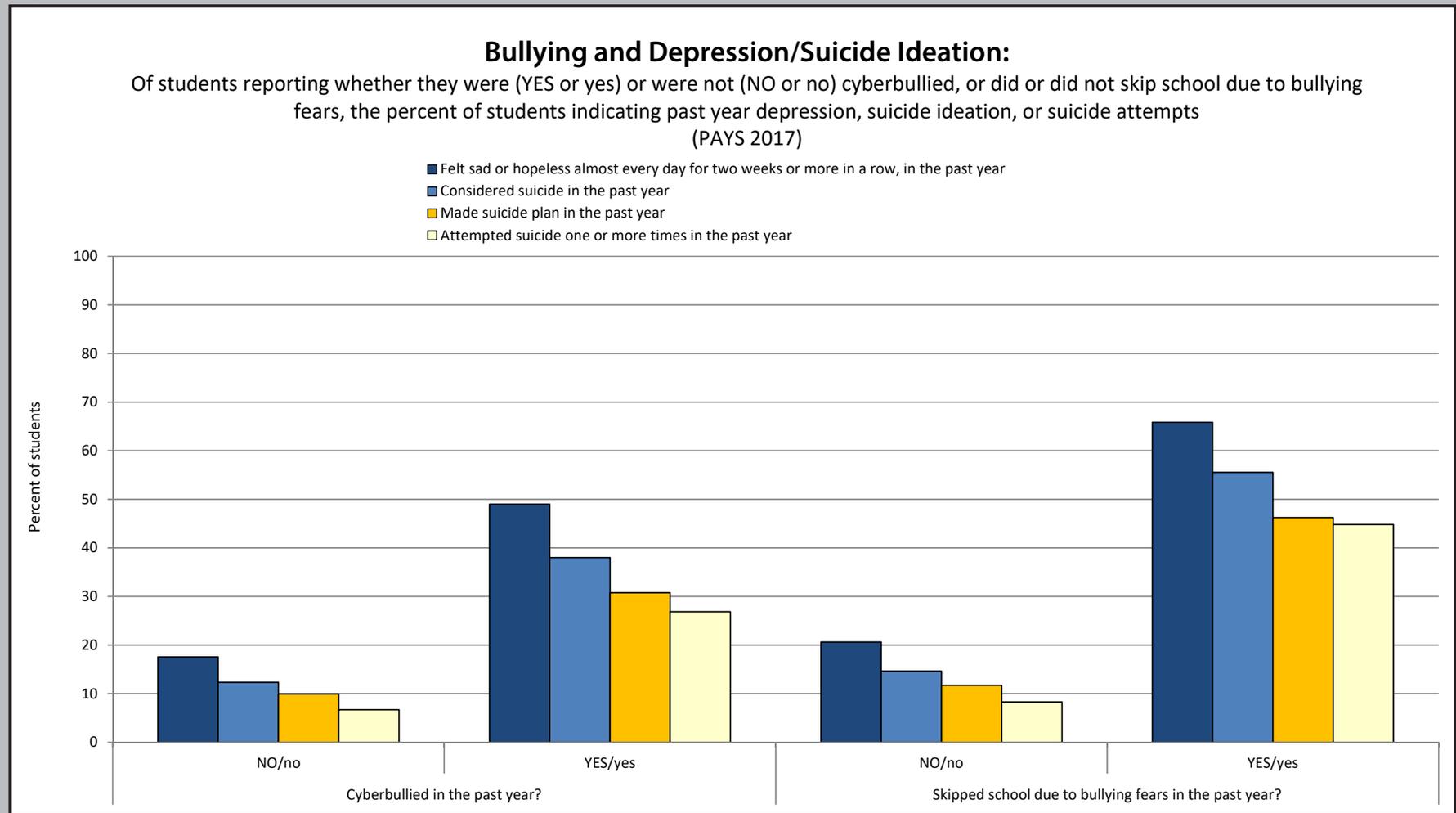
doing usual activities. Of students that indicated they had been cyberbullied in the past year, 38% had considered suicide in the past year, 30.8% had made a suicide plan in the past year, and 26.9% had attempted suicide in the past year.

The same relationships exist for students who indicated they had skipped school due to bullying fears in the past year. Of those students, 65.8% had felt so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities, 55.5% had considered suicide, 46.2% had made a suicide plan, and 44.8% 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 sad or hopeless almost every day for two weeks or more in a row, in the past year	17.5	49.0	20.6	65.8
Considered suicide in the past year	12.3	38.0	14.6	55.5
Made suicide plan in the past year	10.0	30.8	11.7	46.2
Attempted suicide one or more times in the past year	6.7	26.9	8.3	44.8

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,” 40.6% indicated they had used alcohol in their lifetime and 15.3% indicated they had used alcohol in the past month. In contrast, of students who marked “NO!” or “no” to that statement, 69.9% indicated they had used alcohol in their lifetime and 38.8% 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.

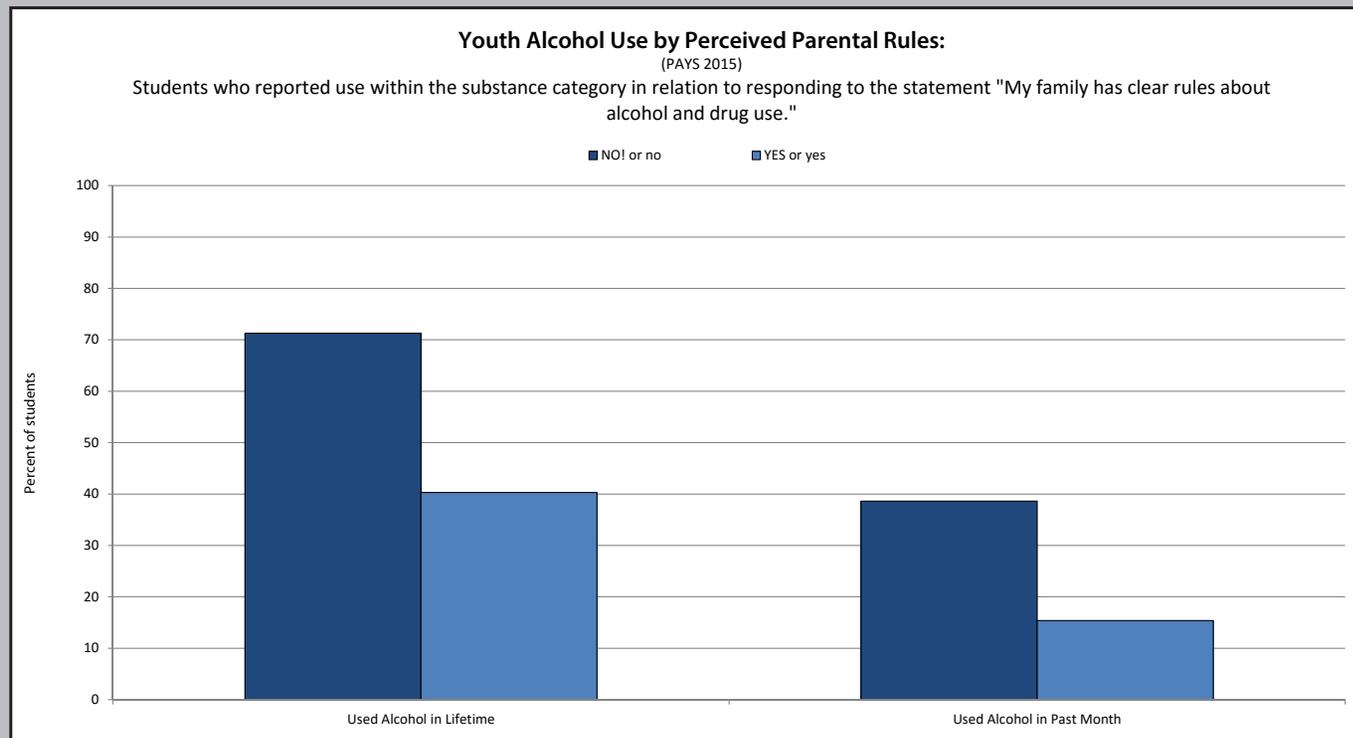
Table 6.1-1

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	69.9	38.8
YES or yes	40.6	15.3

Figure 6.1-1



6.2 Academic Performance and Substance Use

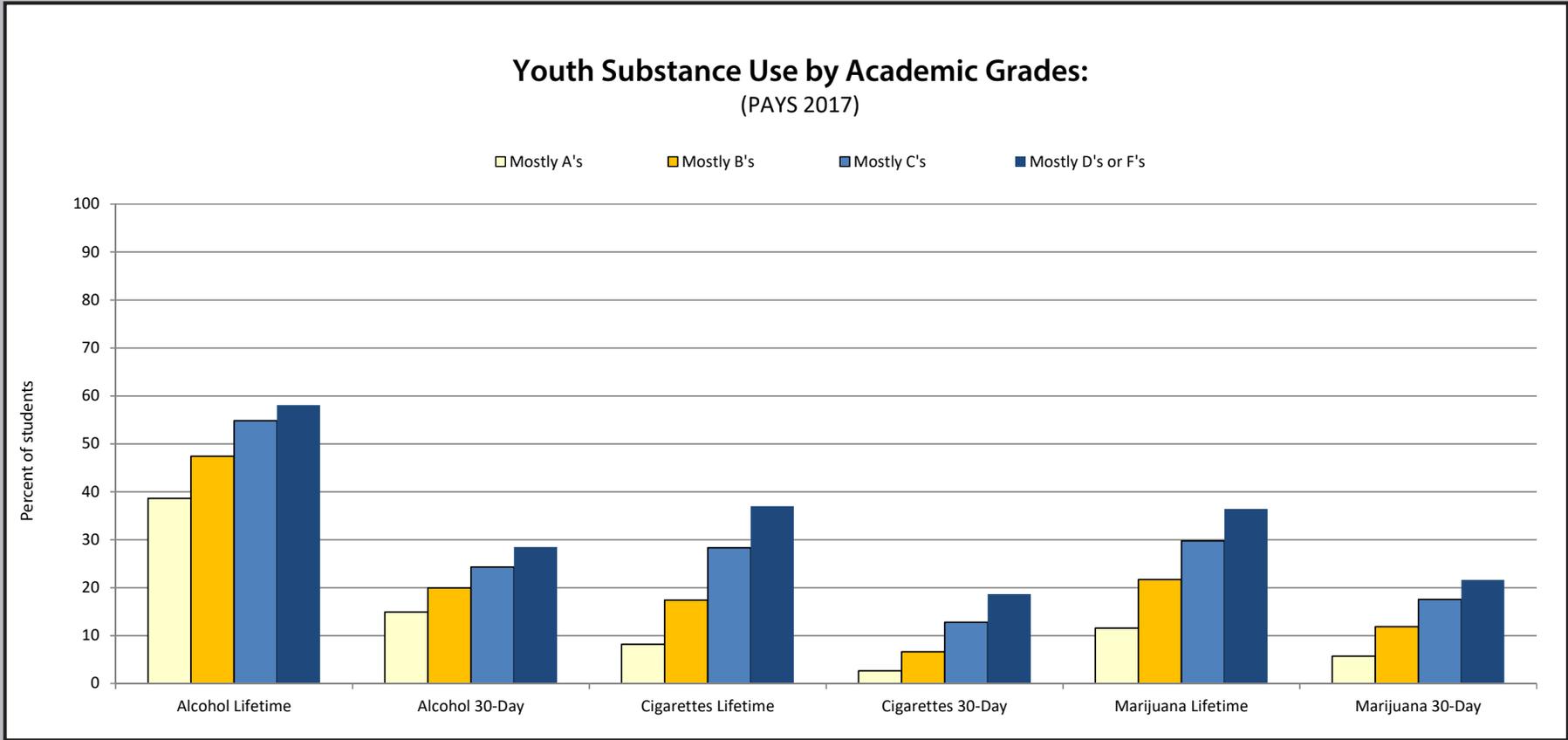
Table 6.2-1 and Figure 6.2-1 show a clear relationship between substance use and academic performance. Of the youth who report getting better grades, fewer have tried ATODs and fewer are currently using ATODs than those who report poorer grades. Failing (D or F) youth indicate past month alcohol use rates that are nearly two times higher than “A” students’ alcohol use rates, past month marijuana use rates that are nearly four times higher than the “A” students’ use rates, and past month cigarette use rates that are nearly 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	38.7	47.4	54.8	58.1
Alcohol 30-Day	14.9	19.9	24.3	28.5
Cigarettes Lifetime	8.2	17.4	28.3	37.0
Cigarettes 30-Day	2.7	6.6	12.8	18.6
Marijuana Lifetime	11.6	21.7	29.8	36.4
Marijuana 30-Day	5.7	11.9	17.5	21.6

Figure 6.2-1



6.3 Family Financial Stress and Substance Use

The 2017 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, 8.7% 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 (10.1%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 11.0%. Of youth who indicated they worried about food once a month or more, 18.0% of those youth indicated regular marijuana use. Such a trend can be seen for each substance category in Table/Figure 6.3-1.

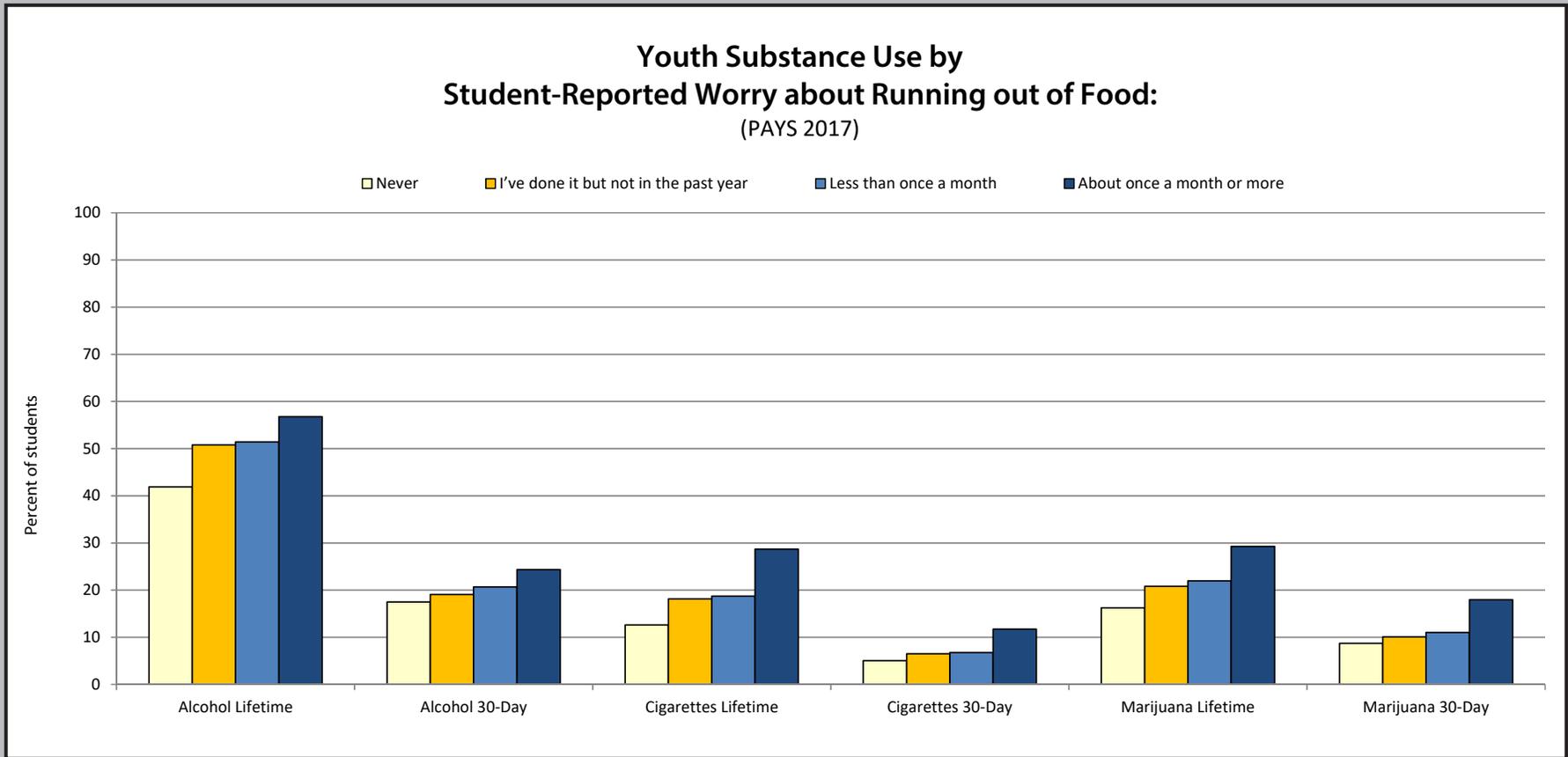
Table 6.3-1

Socioeconomics 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	41.9	50.8	51.4	56.8
Alcohol 30-Day	17.5	19.1	20.7	24.3
Cigarettes Lifetime	12.6	18.2	18.7	28.7
Cigarettes 30-Day	5.0	6.5	6.8	11.7
Marijuana Lifetime	16.3	20.8	22.0	29.3
Marijuana 30-Day	8.7	10.1	11.0	18.0

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, 93.6% indicated their parents felt it was “Wrong” or “Very wrong” to use tobacco, 89.5% perceived parental disapproval of marijuana use, 89.4% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.6% 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 (9.8% lifetime, 4.4% 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 37.5% for lifetime use and 19.8% 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 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	97.5	96.5	96.2	98.0	97.1	96.6	94.2	93.8	93.3	95.2	93.4	93.1
8th	96.4	95.4	95.1	95.9	94.7	93.1	94.1	92.5	92.6	96.6	94.1	93.8
10th	93.9	94.5	94.8	90.5	89.4	88.4	90.8	88.9	89.5	96.2	93.3	94.1
12th	86.9	86.2	88.9	85.7	83.3	81.6	85.6	81.8	82.8	94.6	92.0	93.4
All	93.5	93.0	93.6	92.3	90.9	89.5	91.1	89.2	89.4	95.7	93.2	93.6

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
	Has used in lifetime	Has used in lifetime
Not Wrong at All	47.4	34.3
A Little Bit Wrong	62.9	40.3
Wrong	37.5	19.8
Very wrong	9.8	4.4

Figure 6.4-1

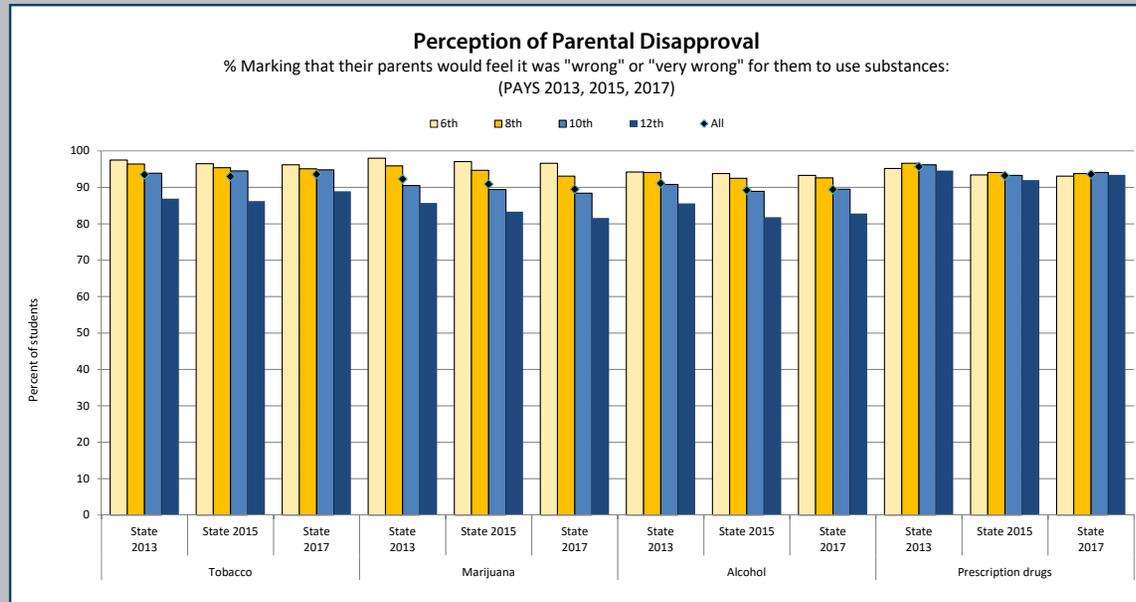
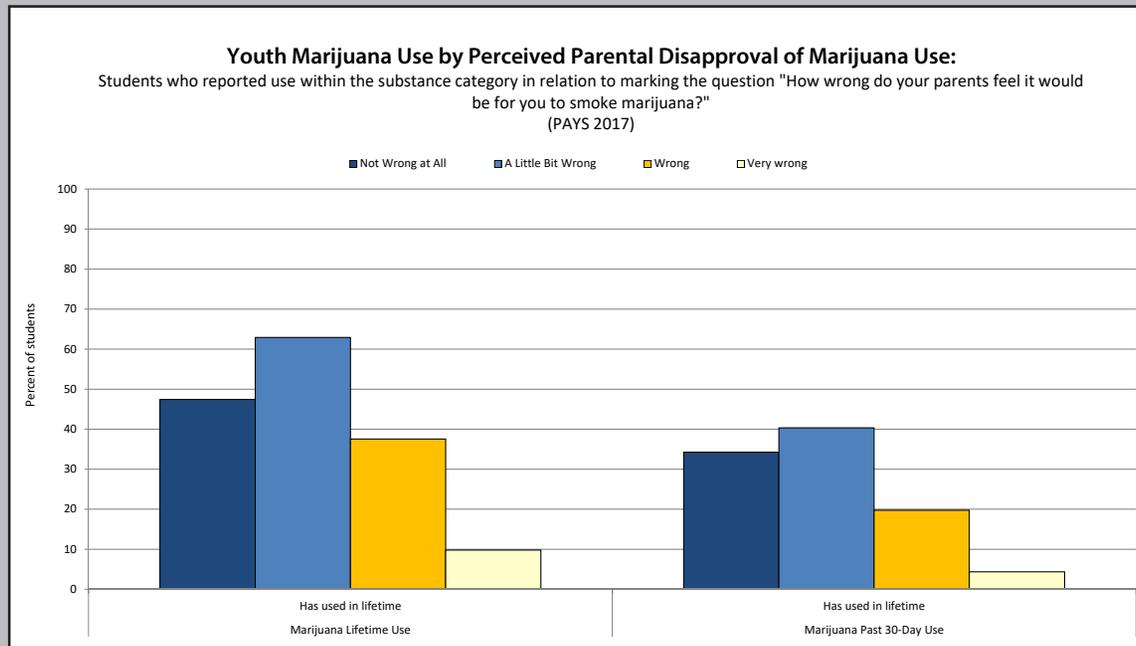


Figure 6.4-2



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 7.9% had tried marijuana in their lifetime and only 3.8% 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 (28.3%) and over three times higher for past-month use (14.0%). Youth who thought that there was a “Very good chance” they would be seen as cool were over 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?"

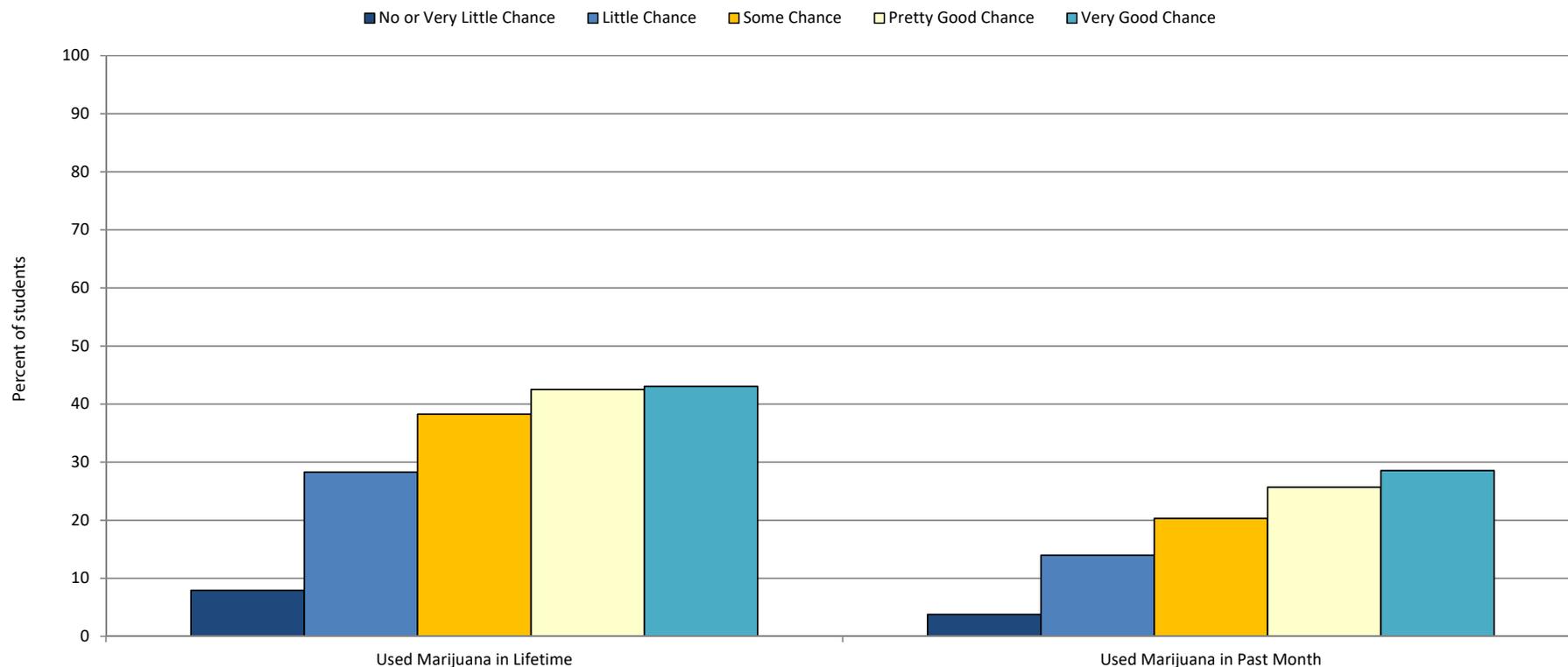
	Used Marijuana in Lifetime	Used Marijuana in Past Month
No or Very Little Chance	7.9	3.8
Little Chance	28.3	14.0
Some Chance	38.3	20.3
Pretty Good Chance	42.5	25.7
Very Good Chance	43.0	28.5

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 2017)



6.6 Transitions/Mobility and Substance Use

The 2017 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.

The 2017 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 13.0% indicated having moved one or two times in the past year, and 2.2% have moved three or more times in the past year. Also, 20.8% of students indicated they had changed homes one or two times in the past three years, and 5.3% changed homes three 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 transition is linked to higher substance use rates. For example, of students who indicated that they had "never" moved in the past three years, 16.1% of them had used marijuana in their lifetime, and 8.2% had used in the past month; whereas of the students who indicated they had moved 3 or more times in past three years, 30.1% had used marijuana in their lifetime, and 17.7% had used in the past month. 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**

Grade	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		
	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017	State 2013	State 2015	State 2017
6th	21.9	15.9	16.5	6.4	4.1	3.7	22.3	23.9	25.0	11.5	6.3	6.2	n/a	5.6	5.4	n/a	3.6	3.0
8th	16.6	14.0	13.7	3.9	2.4	2.1	20.3	20.7	22.6	7.1	5.7	6.0	n/a	4.2	4.2	n/a	4.6	4.7
10th	15.9	11.6	12.5	4.4	1.8	1.8	19.3	19.2	19.3	6.9	5.0	4.9	n/a	2.5	3.3	n/a	7.1	7.0
12th	14.5	12.3	10.0	3.1	2.2	1.5	17.7	17.8	17.1	5.8	4.8	4.2	n/a	3.3	3.3	n/a	9.8	9.2
All	17.1	13.4	13.0	4.4	2.6	2.2	19.8	20.3	20.8	7.7	5.4	5.3	n/a	3.9	4.0	n/a	6.3	6.1

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	42.2	46.1	52.0	54.1
Alcohol 30-Day	16.9	18.4	20.1	23.6
Cigarettes Lifetime	12.4	17.2	22.6	29.4
Cigarettes 30-Day	4.5	6.9	7.6	12.5
Marijuana Lifetime	16.1	19.8	22.3	30.1
Marijuana 30-Day	8.2	11.5	11.6	17.7

Figure 6.6-1

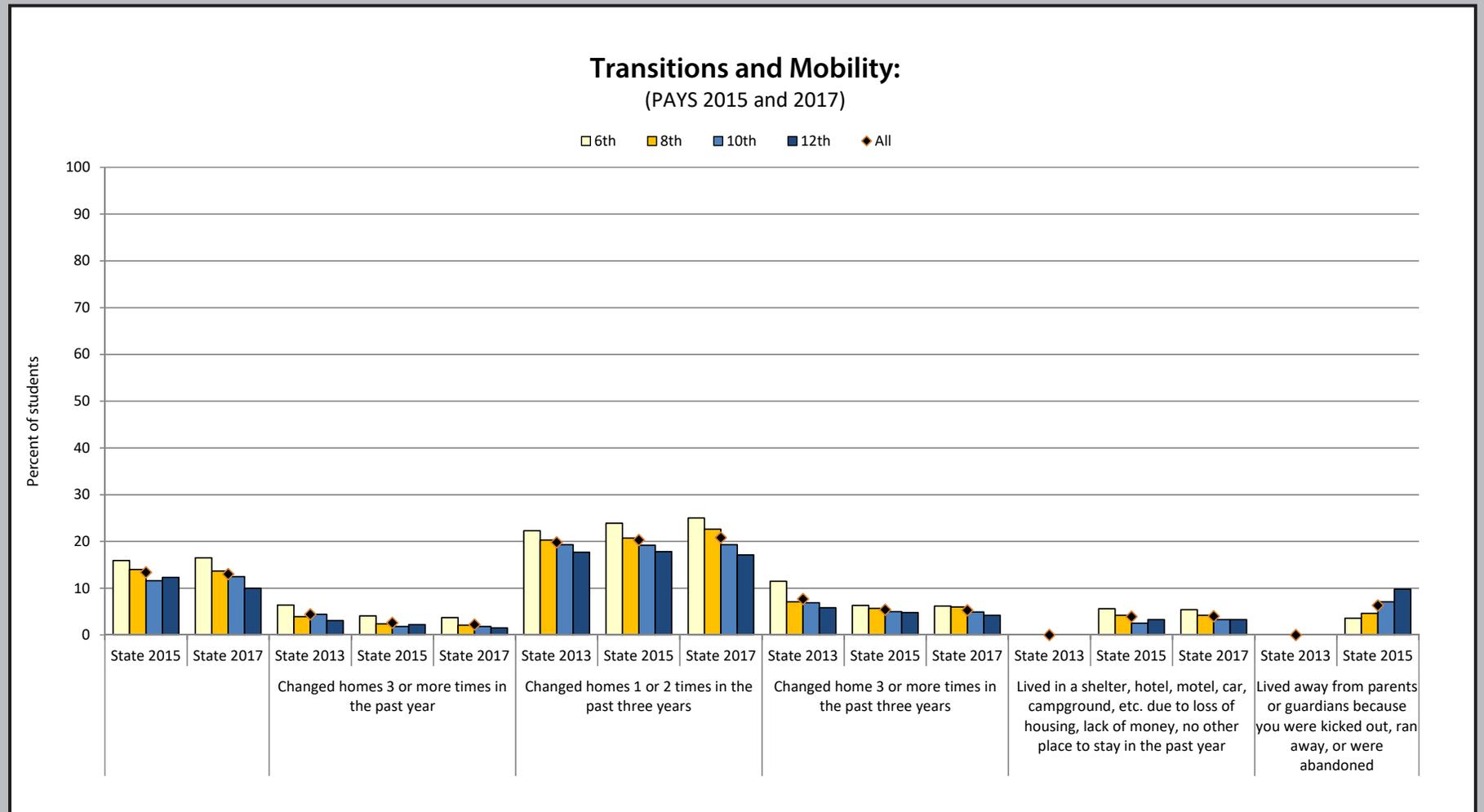
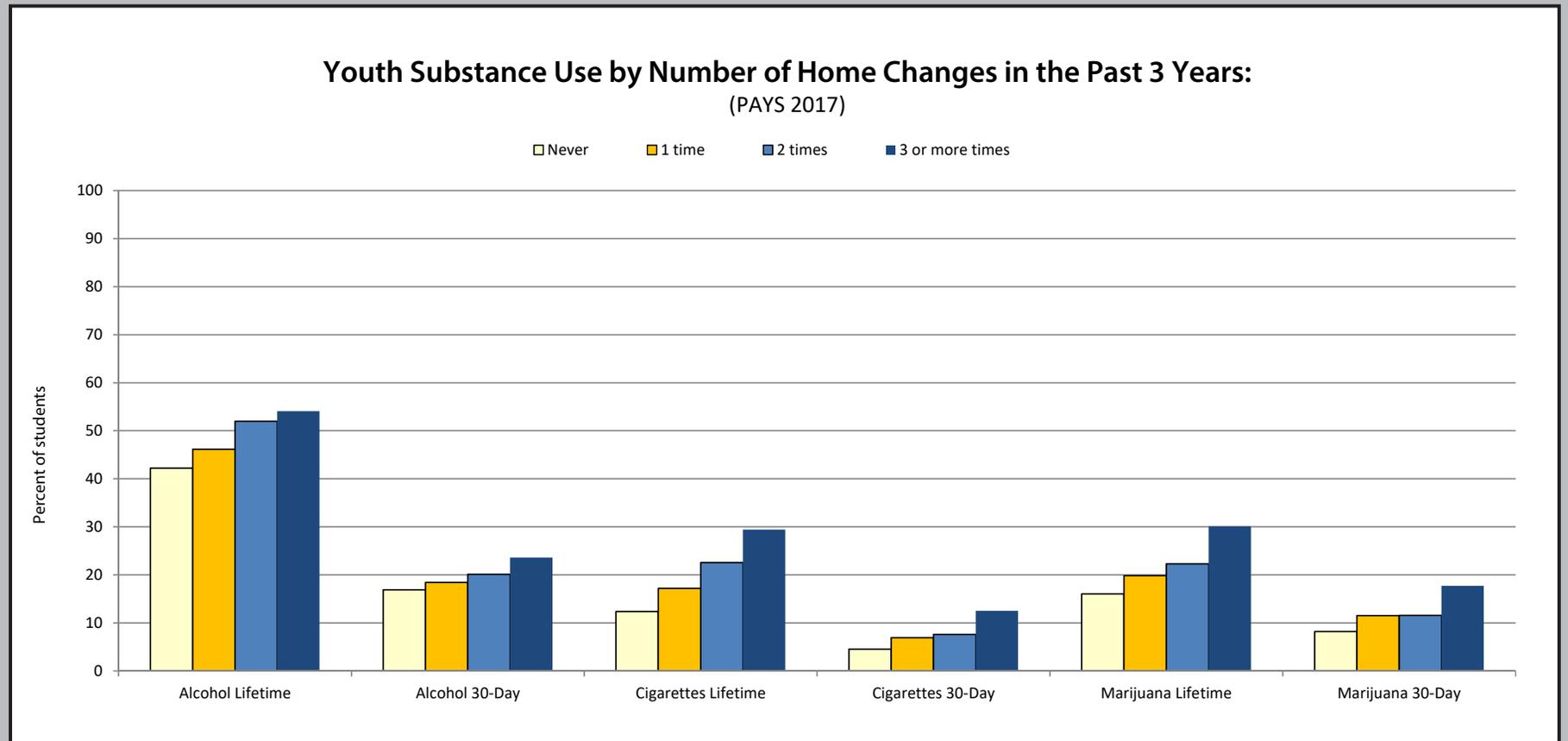


Figure 6.6-2



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

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

Family Domain Risk Factors

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

School Domain Protective Factors

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

School Domain Risk Factors

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

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

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

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	%
x1 How old are you?	10 or younger	0.2
	11	17.8
	12	6.3
	13	18.2
	14	6.6
	15	18.7
	16	7.3
	17	18.5
	18	6.2
	19 or older	0.4
x2 What grade are you in?	6th	24.2
	8th	24.9
	10th	26.0
	12th	25.0
x3 Are you of Hispanic, Latino, or Spanish origin?	No, not of Hispanic, Latino, or Spanish origin	84.7
	Yes, Mexican, Mexican Am., Chicano	3.2
	Yes, Puerto Rican	7.0
	Yes, Cuban	0.4
	Yes, another Hispanic, Latino, or Spanish origin	4.7
x4 What is your race?	White, Caucasian	76.6
	Black, African American	11.1
	American Indian or Alaska Native	3.7
	Asian Indian, Japanese, Native Hawaiian, Chinese, Korean, Guamanian or Chamorro, Filipino, Vietnamese, Samoan, Other Asian, Other Pacific Islander	6.4

Question	Response	%
x5 Are you?	Female	49.7
	Male	50.3
x6 Think of where you live most of the time. Which of the following people live there with you?	Mother	89.2
	Stepmother	4.8
	Foster mother	0.4
	Grandmother	9.4
	Aunt	2.9
	Father	68.1
	Stepfather	12.1
	Foster father	0.3
	Grandfather	5.4
	Uncle	2.9
	Other Adults	2.8
	Older sister(s)	23.6
	Younger sister(s)	29.3
	Older stepsister(s)	2.0
	Younger stepsister(s)	2.3
Older brother(s)	25.6	
Younger brother(s)	30.2	
Older stepbrother(s)	2.0	
Younger stepbrother(s)	2.2	
Other children	3.5	
x7 What is the language you use most often at home?	English	92.7
	Spanish	4.6
	Another language	2.7

Question	Response	%
x8a How wrong do your parents feel it would be for YOU to have one or two drinks of alcoholic beverage such as beer, wine, or hard liquor (vodka, whiskey, gin, or rum) nearly every day?	Not at all wrong	3.6
	A little bit wrong	7.0
	Wrong	18.1
	Very wrong	71.3
x8b How wrong do your parents feel it would be for YOU use prescription drugs not prescribed to you?	Not at all wrong	3.6
	A little bit wrong	2.8
	Wrong	12.0
	Very wrong	81.6
x9a How many times in your lifetime have you had beer, wine, or hard liquor?	0 Occasions	56.7
	1-2 Occasions	15.8
	3-5 Occasions	9.4
	6-9 Occasions	5.0
	10-19 Occasions	5.2
	20-39 Occasions	3.2
	40+ Occasions	4.6
x9b How many times in your lifetime have you used marijuana (pot, hash, cannabis, weed)?	0 Occasions	82.3
	1-2 Occasions	4.9
	3-5 Occasions	2.8
	6-9 Occasions	1.6
	10-19 Occasions	1.8
	20-39 Occasions	1.6
	40+ Occasions	5.0
x9c How many times in your lifetime have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high?	0 Occasions	95.7
	1-2 Occasions	2.6
	3-5 Occasions	0.8
	6-9 Occasions	0.3
	10-19 Occasions	0.2
	20-39 Occasions	0.1
40+ Occasions	0.2	

Question	Response	%
x9d How many times in your lifetime have you used cocaine?	0 Occasions	98.9
	1-2 Occasions	0.6
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
40+ Occasions	0.1	
x9e How many times in your lifetime have you used crack?	0 Occasions	99.6
	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	0.1	
x9f How many times in your lifetime have you used heroin?	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	
x9g How many times in your lifetime have you used hallucinogens (acid, LSD, shrooms)?	0 Occasions	97.4
	1-2 Occasions	1.5
	3-5 Occasions	0.6
	6-9 Occasions	0.2
	10-19 Occasions	0.2
	20-39 Occasions	0.1
40+ Occasions	0.1	

Question	Response	%
x9h How many times in your lifetime have you used methamphetamine (meth, crystal meth, crank)?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x9i How many times in your lifetime have you used Ecstasy or Molly?	0 Occasions	98.6
	1-2 Occasions	0.9
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9j How many times in your lifetime have you used metaclorazoles (such as Super MCZ serum, MCZ22)?	0 Occasions	100.0
	1-2 Occasions	
	3-5 Occasions	
	6-9 Occasions	
	10-19 Occasions	
	20-39 Occasions	
x9k How many times in your lifetime have you used performance enhancing drugs (such as steroids, human growth hormone) without a doctor telling you to take them?	0 Occasions	99.2
	1-2 Occasions	0.5
	3-5 Occasions	0.1
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x9l How many times in your lifetime have you used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Codeine) without a doctor telling you to take them?	0 Occasions	94.9
	1-2 Occasions	2.7
	3-5 Occasions	1.1
	6-9 Occasions	0.4
	10-19 Occasions	0.4
	20-39 Occasions	0.2
x9m How many times in your lifetime have you used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor telling you to take them?	0 Occasions	97.8
	1-2 Occasions	1.2
	3-5 Occasions	0.4
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.1
x9n How many times in your lifetime have you used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take them?	0 Occasions	97.0
	1-2 Occasions	1.5
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.3
	20-39 Occasions	0.2
x9o How many times in your lifetime have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze)?	0 Occasions	98.3
	1-2 Occasions	1.1
	3-5 Occasions	0.3
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9p 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	96.2
	1-2 Occasions	1.9
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.4
	20-39 Occasions	0.1
x9m How many times in your lifetime have you used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor telling you to take them?	0 Occasions	97.8
	1-2 Occasions	1.2
	3-5 Occasions	0.4
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.1
x9n How many times in your lifetime have you used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take them?	0 Occasions	97.0
	1-2 Occasions	1.5
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.3
	20-39 Occasions	0.2
x9o How many times in your lifetime have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze)?	0 Occasions	98.3
	1-2 Occasions	1.1
	3-5 Occasions	0.3
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9p 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	96.2
	1-2 Occasions	1.9
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.4
	20-39 Occasions	0.1
x9m How many times in your lifetime have you used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor telling you to take them?	0 Occasions	97.8
	1-2 Occasions	1.2
	3-5 Occasions	0.4
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.1
x9n How many times in your lifetime have you used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take them?	0 Occasions	97.0
	1-2 Occasions	1.5
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.3
	20-39 Occasions	0.2
x9o How many times in your lifetime have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze)?	0 Occasions	98.3
	1-2 Occasions	1.1
	3-5 Occasions	0.3
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9p 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	96.2
	1-2 Occasions	1.9
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.4
	20-39 Occasions	0.1

Question	Response	%
x9h How many times in your lifetime have you used methamphetamine (meth, crystal meth, crank)?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x9i How many times in your lifetime have you used Ecstasy or Molly?	0 Occasions	98.6
	1-2 Occasions	0.9
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9j How many times in your lifetime have you used metaclorazoles (such as Super MCZ serum, MCZ22)?	0 Occasions	100.0
	1-2 Occasions	
	3-5 Occasions	
	6-9 Occasions	
	10-19 Occasions	
	20-39 Occasions	
x9k How many times in your lifetime have you used performance enhancing drugs (such as steroids, human growth hormone) without a doctor telling you to take them?	0 Occasions	99.2
	1-2 Occasions	0.5
	3-5 Occasions	0.1
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x9l How many times in your lifetime have you used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Codeine) without a doctor telling you to take them?	0 Occasions	94.9
	1-2 Occasions	2.7
	3-5 Occasions	1.1
	6-9 Occasions	0.4
	10-19 Occasions	0.4
	20-39 Occasions	0.2
x9m How many times in your lifetime have you used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor telling you to take them?	0 Occasions	97.8
	1-2 Occasions	1.2
	3-5 Occasions	0.4
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.1
x9n How many times in your lifetime have you used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take them?	0 Occasions	97.0
	1-2 Occasions	1.5
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.3
	20-39 Occasions	0.2
x9o How many times in your lifetime have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze)?	0 Occasions	98.3
	1-2 Occasions	1.1
	3-5 Occasions	0.3
	6-9 Occasions	0.2
	10-19 Occasions	0.1
	20-39 Occasions	0.0
x9p 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	96.2
	1-2 Occasions	1.9
	3-5 Occasions	0.6
	6-9 Occasions	0.3
	10-19 Occasions	0.4
	20-39 Occasions	0.1

Question	Response	%
x10a How many times in the past 30 days have you had beer, wine, or hard liquor?	0 Occasions	82.1
	1-2 Occasions	10.9
	3-5 Occasions	4.1
	6-9 Occasions	1.6
	10-19 Occasions	0.8
	20-39 Occasions	0.2
x10b How many times in the past 30 days have you used marijuana (pot, hash, cannabis, weed)?	0 Occasions	90.3
	1-2 Occasions	3.9
	3-5 Occasions	1.8
	6-9 Occasions	1.0
	10-19 Occasions	1.0
	20-39 Occasions	0.7
x10c How many times in the past 30 days have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high?	0 Occasions	98.9
	1-2 Occasions	0.7
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x10d How many times in the past 30 days have you used cocaine?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x10e 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
x10f How many times in the past 30 days have you used heroin?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
	x10g How many times in the past 30 days have you used hallucinogens (acid, LSD, shrooms)?	0 Occasions
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
x10h How many times in the past 30 days have you used methamphetamine (meth, crystal meth, crank)?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	40+ Occasions	0.0
	x10i How many times in the past 30 days have you used Ecstasy or Molly?	0 Occasions
1-2 Occasions		0.2
3-5 Occasions		0.1
6-9 Occasions		0.0
10-19 Occasions		0.0
20-39 Occasions		0.0
x10j How many times in the past 30 days have you used cocaine?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0

Question	Response	%
x10a How many times in the past 30 days have you had beer, wine, or hard liquor?	0 Occasions	82.1
	1-2 Occasions	10.9
	3-5 Occasions	4.1
	6-9 Occasions	1.6
	10-19 Occasions	0.8
	20-39 Occasions	0.2
x10b How many times in the past 30 days have you used marijuana (pot, hash, cannabis, weed)?	0 Occasions	90.3
	1-2 Occasions	3.9
	3-5 Occasions	1.8
	6-9 Occasions	1.0
	10-19 Occasions	1.0
	20-39 Occasions	0.7
x10c How many times in the past 30 days have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high?	0 Occasions	98.9
	1-2 Occasions	0.7
	3-5 Occasions	0.2
	6-9 Occasions	0.1
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x10d How many times in the past 30 days have you used cocaine?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
x10e 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
x10f How many times in the past 30 days have you used heroin?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0
	x10g How many times in the past 30 days have you used hallucinogens (acid, LSD, shrooms)?	0 Occasions
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
x10h How many times in the past 30 days have you used methamphetamine (meth, crystal meth, crank)?	0 Occasions	99.9
	1-2 Occasions	0.1
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	40+ Occasions	0.0
	x10i How many times in the past 30 days have you used Ecstasy or Molly?	0 Occasions
1-2 Occasions		0.2
3-5 Occasions		0.1
6-9 Occasions		0.0
10-19 Occasions		0.0
20-39 Occasions		0.0
x10j How many times in the past 30 days have you used cocaine?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0

Question	Response	%
x10j How many times in the past 30 days have you used metaclorazoles (such as Super MCZ serum, MCZ22)?	0 Occasions	100.0
x10k How many times in the past 30 days have you used performance enhancing drugs (such as steroids, human growth hormone) without a doctor telling you to take them?	0 Occasions	99.7
	1-2 Occasions	0.2
	3-5 Occasions	0.0
	6-9 Occasions	0.0
	20-39 Occasions	0.0
x10l How many times in the past 30 days have you used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Codeine) without a doctor telling you to take them?	0 Occasions	98.7
	1-2 Occasions	0.9
	3-5 Occasions	0.3
	6-9 Occasions	0.1
	10-19 Occasions	0.1
x10m How many times in the past 30 days have you used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor telling you to take them?	0 Occasions	99.3
	1-2 Occasions	0.5
	3-5 Occasions	0.1
	6-9 Occasions	0.0
	10-19 Occasions	0.0
x10n How many times in the past 30 days have you used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take them?	0 Occasions	99.2
	1-2 Occasions	0.5
	3-5 Occasions	0.2
	6-9 Occasions	0.0
	10-19 Occasions	0.0
	20-39 Occasions	0.0
	40+ Occasions	0.0

Question	Response	%	
x10o How many times in the past 30 days have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze)?	0 Occasions	99.5	
	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	
	x10p 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	98.7
		1-2 Occasions	0.7
		3-5 Occasions	0.2
6-9 Occasions		0.1	
10-19 Occasions		0.1	
x11 Have you ever smoked cigarettes?	20-39 Occasions	0.0	
	40+ Occasions	0.1	
	Never	85.5	
	Once or twice	7.7	
	Once in a while but not regularly	3.7	
	Regularly in the past	1.4	
	Regularly now	1.7	
	x12 How frequently have you smoked cigarettes during the past 30 days?	Never	94.4
Once or twice		2.9	
Once or twice per week		0.9	
About once a day		0.5	
More than once a day		1.3	
x13 Have you ever used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?	Never	92.4	
	Once or twice	3.9	
	Once in a while but not regularly	1.6	
	Regularly in the past	0.8	
	Regularly now	1.3	

Question	Response	%
x14 How frequently have you used smokeless tobacco during the past 30 days?	Never	96.5
	Once or twice	1.5
	Once or twice per week	0.5
	About once a day	0.4
	More than once a day	1.1
x15 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	83.7
	Once or twice	10.0
	Once or twice per week	2.8
	About once a day	0.9
	More than once a day	2.6
x16 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?:	I did not vape.	74.1
	Just flavoring	15.0
	Nicotine	6.9
	Marijuana or hash oil	2.9
	Other substances	0.3
	I don't know	3.4
x17 If you wanted to get prescription drugs not prescribed to you, how easy would it be for you to get some?	Very hard	54.4
	Sort of hard	20.1
	Sort of easy	15.6
	Very easy	9.9
x18a How do you feel about someone your age Having one or two drinks of an alcoholic beverage (beer, wine, hard liquor) nearly every day?	Strongly disapprove	57.1
	Somewhat disapprove	15.2
	Neither approve or disapprove	17.6
	Approve	3.3
	Don't know/ Can't say	6.7

Question	Response	%
x18b How do you feel about someone your age smoking one or more packs of cigarettes a day?	Strongly disapprove	80.6
	Somewhat disapprove	7.7
	Neither approve or disapprove	6.9
	Approve	0.8
	Don't know/ Can't say	4.0
x18c How do you feel about someone your age using marijuana once a month or more?	Strongly disapprove	56.9
	Somewhat disapprove	10.3
	Neither approve or disapprove	17.6
	Approve	10.2
	Don't know/ Can't say	4.9
x18d How do you feel about someone your age using prescription drugs not prescribed to them?	Strongly disapprove	75.2
	Somewhat disapprove	11.4
	Neither approve or disapprove	7.9
	Approve	0.7
	Don't know/ Can't say	4.8
x19 Think back over the last two weeks. How many times have you had five or more alcoholic drinks in a row?	None	92.5
	Once	4.1
	Twice	1.8
	3-5 times	1.0
	6-9 times	0.2
	10 or more times	0.4
x20a How willing are you to try alcohol (beer, wine, coolers, hard liquor such as vodka, whiskey, gin, or rum) before you are 21?	I would never try it	41.2
	I probably wouldn't try it	14.6
	I'm not sure whether or not I would try it	17.7
	I would like to try it	17.8
	I would use it any chance I got	8.7
x20b How willing are you to try marijuana (pot, hash, cannabis, weed) before you are 21?	I would never try it	65.2
	I probably wouldn't try it	9.5
	I'm not sure whether or not I would try it	9.3
	I would like to try it	8.7
	I would use it any chance I got	7.3

Question	Response	%
a1 During the last four weeks, how many whole days of school have you missed because you skipped or 'cut'?	None	85.0
	1 day	8.1
	2 days	3.2
	3 days	1.6
	4 to 5 days	1.3
	6 to 10 days	0.5
a2 How important do you think the things you are learning in school are going to be for your later life?	11 or more days	0.4
	Very important	35.5
	Quite important	21.9
	Fairly important	22.1
	Slightly important	15.0
a3 How interesting are most of your courses to you?	Not at all important	5.5
	Very interesting and stimulating	17.2
	Quite interesting	27.3
	Fairly interesting	32.0
	Slightly Dull	14.8
a4 Putting them all together, what were your grades like last year?	Very Dull	8.8
	Mostly A's	50.5
	Mostly B's	34.6
	Mostly C's	11.2
	Mostly D's	2.5
a5 How often do you feel that the school work you are assigned is meaningful and important?	Mostly F's	1.1
	Never	10.8
	Seldom	15.9
	Sometimes	32.9
	Often	23.4
a6a Now thinking back over the past year in school, how often did you enjoy being in school?	Almost Always	17.0
	Never	12.2
	Seldom	12.1
	Sometimes	34.3
	Often	26.7
	Almost Always	14.6

Question	Response	%
a6b Now thinking back over the past year in school, how often did you hate being in school?	Never	15.0
	Seldom	19.4
	Sometimes	34.5
	Often	18.4
	Almost Always	12.6
a6c Now thinking back over the past year in school, how often did you try to do best work in school?	Never	2.8
	Seldom	3.2
	Sometimes	12.4
	Often	27.6
a7 Are your school grades better than the grades of most students in your class?	Almost Always	54.0
	NO!	6.2
	no	25.9
	yes	50.6
a8 Teachers ask me to work on special classroom projects.	YES!	17.4
	NO!	15.7
	no	46.2
	yes	28.7
a9 There are lots of chances for students in my school to talk one-on-one with a teacher.	YES!	9.4
	NO!	6.3
	no	16.5
	yes	48.3
a10 I have lots of chances to be part of class discussions or activities.	YES!	28.9
	NO!	3.8
	no	9.4
	yes	53.4
a11 In my school, students have lots of chances to help decide things like class activities and rules.	YES!	33.4
	NO!	12.5
	no	34.0
	yes	38.6
	YES!	14.8

Question	Response	%
a12 There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class.	NO!	2.7
	no	4.6
	yes	38.3
	YES!	54.4
a13 My teacher(s) notices when I am doing a good job and lets me know about it.	NO!	7.3
	no	25.1
	yes	47.5
	YES!	20.0
a14 I feel safe at my school.	NO!	5.4
	no	11.2
	yes	50.2
	YES!	33.2
a15 The school lets my parents know when I have done something well.	NO!	18.9
	no	41.1
	yes	27.6
	YES!	12.3
a16 My teachers praise me when I work hard in school.	NO!	12.4
	no	34.9
	yes	38.7
	YES!	14.0
a17 My neighbors notice when I am doing a good job and let me know.	NO!	36.9
	no	40.5
	yes	16.2
	YES!	6.3
a18 There are people in my neighborhood who are proud of me when I do something well.	NO!	29.9
	no	32.9
	yes	27.5
	YES!	9.6

Question	Response	%
a19 There are people in my neighborhood who encourage me to do my best.	NO!	25.8
	no	27.3
	yes	32.8
	YES!	14.1
a20 I like my neighborhood.	NO!	8.3
	no	13.3
	yes	47.0
	YES!	31.3
a21 I'd like to get out of my neighborhood.	NO!	34.9
	no	36.2
	yes	18.0
	YES!	11.0
a22 If I had to move, I would miss the neighborhood I now live in.	NO!	11.0
	no	19.3
	yes	36.6
	YES!	33.1
a23a How wrong do your friends feel it would be for YOU to have one or two drinks of an alcoholic beverage nearly every day?	Not Wrong at All	11.1
	A Little Bit Wrong	16.3
	Wrong	22.4
	Very wrong	50.2
a23b How wrong do your friends feel it would be for YOU to use tobacco?	Not Wrong at All	10.7
	A Little Bit Wrong	10.4
	Wrong	19.4
	Very wrong	59.5
a23c How wrong do your friends feel it would be for YOU to use marijuana?	Not Wrong at All	18.6
	A Little Bit Wrong	13.3
	Wrong	14.6
	Very wrong	53.6

Question	Response	%
a23d How wrong do your friends feel it would be for YOU to use prescription drugs not prescribed to you?	Not Wrong at All	6.7
	A Little Bit Wrong	6.6
	Wrong	17.9
	Very wrong	68.9
a24a How easy would it be for you to get beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum)?	Very hard	40.0
	Sort of hard	16.7
	Sort of easy	20.8
	Very easy	22.4
a24b How easy would it be for you to get cigarettes?	Very hard	53.6
	Sort of hard	13.5
	Sort of easy	13.2
	Very easy	19.7
a24c How easy would it be for you to get a handgun?	Very hard	72.3
	Sort of hard	13.1
	Sort of easy	6.8
	Very easy	7.8
a24d How easy would it be for you to get a drug like cocaine, LSD, or amphetamines?	Very hard	78.7
	Sort of hard	10.6
	Sort of easy	5.8
	Very easy	5.0
a24e How easy would it be for you to get marijuana?	Very hard	57.8
	Sort of hard	9.9
	Sort of easy	12.1
	Very easy	20.2
a25 If a kid drank some beer, wine, or hard liquor (for example: vodka, whiskey, gin, or rum) in your neighborhood could he or she be caught by the police?	NO!	18.0
	no	45.3
	yes	23.3
	YES!	13.4

Question	Response	%
a26 If a kid smoked marijuana in your neighborhood would he or she be caught by the police?	NO!	18.0
	no	40.0
	yes	24.8
	YES!	17.2
a27a How wrong would most adults (over 21) in your neighborhood think it is for kids your age to drink alcohol?	Not Wrong at All	5.2
	A Little Bit Wrong	14.0
	Wrong	28.6
	Very wrong	52.2
a27b How wrong would most adults (over 21) in your neighborhood think it is for kids your age to smoke cigarettes?	Not Wrong at All	5.4
	A Little Bit Wrong	8.8
	Wrong	24.2
	Very wrong	61.6
a27c How wrong would most adults (over 21) in your neighborhood think it is for kids your age to use marijuana?	Not Wrong at All	5.6
	A Little Bit Wrong	9.1
	Wrong	20.8
	Very wrong	64.6
a28a Have you ever belonged to a gang?	Yes	5.1
	No	94.9
a28b If you have ever belonged to a gang, did that gang have a name?	Yes	4.5
	No	7.3
	I have never belonged to a gang	88.2
a29 How old were you when you first belonged to a gang?	Never have	94.8
	10 or younger	1.6
	11	0.9
	12	0.7
	13	0.8
	14	0.4
	15	0.4
16	0.2	
17 or Older	0.1	

Question	Response	%
b1 My parents ask me what I think before most family decisions affecting me are made.	NO!	11.2
	no	23.0
	yes	44.2
	YES!	21.6
b2 If I had a personal problem, I could ask my mom or dad for help.	NO!	7.1
	no	10.6
	yes	38.8
	YES!	43.5
b3 My parents give me lots of chances to do fun things with them.	NO!	5.8
	no	14.6
	yes	40.9
	YES!	38.7
b4 My parents notice when I am doing a good job and let me know about it.	Never or Almost Never	8.5
	Sometimes	26.6
	Often	31.2
	All the time	33.6
b5 How often do your parents tell you they're proud of you for something you've done?	Never or Almost Never	9.6
	Sometimes	24.7
	Often	31.6
	All the time	34.1
b6a Do you feel very close to your: Mother?	NO!	4.9
	no	8.0
	yes	26.5
	YES!	60.6
b6b Do you feel very close to your: Father?	NO!	11.5
	no	13.4
	yes	28.9
	YES!	46.1

Question	Response	%
b7a Do you share your thoughts and feelings with your: Mother?	NO!	9.7
	no	19.5
	yes	33.9
	YES!	36.9
b7b Do you share your thoughts and feelings with your: Father?	NO!	18.5
	no	27.3
	yes	31.6
	YES!	22.6
b8a Do you enjoy spending time with your mother?	NO!	3.9
	no	5.3
	yes	33.0
	YES!	57.9
b8b Do you enjoy spending time with your father?	NO!	8.7
	no	7.1
	yes	32.5
	YES!	51.7
b9 When I am not at home, one of my parents knows where I am and who I am with.	NO!	2.5
	no	5.6
	yes	36.8
	YES!	55.1
b10 If you skipped school, would you be caught by your parents?	NO!	3.8
	no	8.7
	yes	30.0
	YES!	57.5
b11 My parents ask if I've gotten my homework done.	NO!	5.6
	no	13.9
	yes	33.8
	YES!	46.8

Question	Response	%
b12 Would your parents know if you did not come home on time?	NO!	3.5
	no	12.3
	yes	35.6
	YES!	48.7
b13 The rules in my family are clear.	NO!	3.0
	no	9.6
	yes	41.0
	YES!	46.4
b14 If you carried a handgun without your parent's permission, would you be caught by them?	NO!	3.7
	no	8.4
	yes	21.6
	YES!	66.2
b15 People in my family often insult or yell at each other.	NO!	26.4
	no	39.7
	yes	22.6
	YES!	11.3
b16 We argue about the same things in my family over and over.	NO!	24.8
	no	36.3
	yes	26.7
	YES!	12.2
b17 People in my family have serious arguments.	NO!	33.4
	no	39.0
	yes	18.2
	YES!	9.4
b18 If you drank some beer, wine, or liquor (for example vodka, whiskey, gin, or rum) without your parent's permission, would you be caught by them?	NO!	7.8
	no	23.1
	yes	22.7
	YES!	46.4

Question	Response	%
b19 My family has clear rules about alcohol and drug use.	NO!	3.2
	no	9.9
	yes	29.1
	YES!	57.8
b20a About how many adults (over 21) have you known personally who in the past year have: Gotten drunk or high?	None	42.1
	1	14.3
	2	11.8
	3 or 4	11.8
	5 or more	20.1
b20b About how many adults (over 21) have you known personally who in the past year have: Used marijuana, crack, cocaine, or other drugs?	None	72.8
	1	9.4
	2	6.3
	3 or 4	4.9
	5 or more	6.6
b20c About how many adults (over 21) have you known personally who in the past year have: Sold or dealt drugs?	None	85.7
	1	6.2
	2	3.3
	3 or 4	2.0
	5 or more	2.9
b20d About how many adults (over 21) have you known personally who in the past year have: Done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?	None	85.1
	1	6.8
	2	3.1
	3 or 4	2.0
	5 or more	3.0
b21a How many of your brothers or sisters ever: Drank beer, wine or hard liquor (for example, vodka, whiskey or gin)?	I don't have any	14.1
	None	60.9
	1	14.9
	2	6.0
	3 or 4	2.7
	5 or more	1.4

Question	Response	%
b21b How many of your brothers or sisters ever: Smoked cigarettes?	I don't have any	15.0
	None	68.2
	1	11.0
	2	3.4
	3 or 4	1.4
	5 or more	1.1
b21c How many of your brothers or sisters ever: Smoked marijuana?	I don't have any	15.3
	None	67.6
	1	10.8
	2	3.7
	3 or 4	1.6
	5 or more	1.1
b21d How many of your brothers or sisters ever: Took a handgun to school?	I don't have any	16.5
	None	82.8
	1	0.3
	2	0.1
	3 or 4	0.1
	5 or more	0.2
b21e How many of your brothers or sisters ever: Been suspended or expelled from school?	I don't have any	14.8
	None	68.8
	1	11.5
	2	3.2
	3 or 4	1.0
	5 or more	0.7
b22 Has anyone in your family ever had a severe alcohol or drug problem?	Yes	27.7
	No	72.3
b23a How wrong do your parents feel it would be for you to: Pick a fight with someone?	Not Wrong at All	4.6
	A Little Bit Wrong	18.0
	Wrong	34.7
	Very wrong	42.7

Question	Response	%
b23b How wrong do your parents feel it would be for you to: Steal anything worth more than \$5	Not Wrong at All	2.9
	A Little Bit Wrong	3.8
	Wrong	22.0
	Very wrong	71.3
b23c How wrong do your parents feel it would be for you to: Draw graffiti, or write things or draw pictures on buildings or other property (without the owner's permission)?	Not Wrong at All	3.3
	A Little Bit Wrong	4.6
	Wrong	20.5
	Very wrong	71.6
b23d How wrong do your parents feel it would be for you to: Drink beer, wine or hard liquor (for example, vodka, whiskey, gin, or rum) regularly?	Not Wrong at All	3.7
	A Little Bit Wrong	6.9
	Wrong	18.5
	Very wrong	70.9
b23e How wrong do your parents feel it would be for you to: Smoke cigarettes?	Not Wrong at All	3.4
	A Little Bit Wrong	3.0
	Wrong	12.7
	Very wrong	81.0
b23f How wrong do your parents feel it would be for you to: Use marijuana	Not Wrong at All	4.7
	A Little Bit Wrong	5.8
	Wrong	12.6
	Very wrong	76.9
b24a How many times have you? Worried that food at home would run out before your family got money to buy more?	Never	77.1
	I've done it, but not in the past year	9.5
	Less than once a month	4.7
	About once a month	3.5
	2 or 3 times a month	2.4
	Once a week or more	2.8
b24b How many times have you? Skipped a meal because your family didn't have enough money to buy food?	Never	88.0
	I've done it, but not in the past year	5.2
	Less than once a month	2.3
	About once a month	1.4
	2 or 3 times a month	1.4
	Once a week or more	1.7

Question	Response	%
c1 I like to see how much I can get away with.	Very false	53.3
	Somewhat false	23.9
	Somewhat true	18.5
	Very true	4.2
c2 I ignore the rules that get in my way.	Very false	58.3
	Somewhat false	24.7
	Somewhat true	13.9
	Very true	3.2
c3 I do the opposite of what people tell me, just to get them mad.	Very false	65.6
	Somewhat false	20.8
	Somewhat true	10.7
	Very true	2.9
c4 In the past 12 months have you felt depressed or sad MOST days, even if you feel OK sometimes?	NO!	34.8
	no	27.1
	yes	24.3
	YES!	13.8
c5 Sometimes I think that life is not worth it.	NO!	51.5
	no	23.6
	yes	16.4
	YES!	8.4
c6 At times I think I am no good at all.	NO!	40.9
	no	24.0
	yes	24.4
	YES!	10.8
c7 All in all, I am inclined to think that I am a failure.	NO!	50.4
	no	29.0
	yes	13.0
	YES!	7.6

Question	Response	%
c8a How much do you think people risk harming themselves (physically or in other ways) if they take 1-2 alcoholic drinks nearly every day?	No risk	14.1
	Slight risk	19.8
	Moderate risk	29.3
	Great risk	36.8
c8b How much do you think people risk harming themselves (physically or in other ways) if they drink 5 or more drinks once or twice a week?	No risk	12.3
	Slight risk	16.5
	Moderate risk	31.5
	Great risk	39.8
c8c How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes per day?	No risk	11.5
	Slight risk	8.0
	Moderate risk	17.7
	Great risk	62.7
c8d How much do you think people risk harming themselves (physically or in other ways) if they try marijuana once or twice?	No risk	32.8
	Slight risk	24.6
	Moderate risk	16.8
	Great risk	25.8
c8e How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana once or twice a week?	No risk	23.9
	Slight risk	18.5
	Moderate risk	22.6
	Great risk	34.9
c8f How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana regularly?	No risk	19.5
	Slight risk	11.6
	Moderate risk	16.7
	Great risk	52.2
c8g How much do you think people risk harming themselves (physically or in other ways) if they use prescription drugs that are not prescribed to them?	No risk	9.9
	Slight risk	7.7
	Moderate risk	21.1
	Great risk	61.3

Question	Response	%
c9 How often do you attend religious services or activities?	Never	30.3
	Rarely	29.5
	1-2 times a month	14.8
	Once a week or more	25.4
c10a How wrong do you think it is for someone your age to stay away from school all day when their parents think they are at school?	Not Wrong at All	4.6
	A Little Bit Wrong	13.8
	Wrong	31.4
	Very wrong	50.2
c10b How wrong do you think it is for someone your age to take a handgun to school?	Not Wrong at All	2.8
	A Little Bit Wrong	1.1
	Wrong	5.0
	Very wrong	91.2
c10c How wrong do you think it is for someone your age to steal anything worth more than \$5?	Not Wrong at All	3.7
	A Little Bit Wrong	9.3
	Wrong	28.7
	Very wrong	58.3
c10d How wrong do you think it is for someone your age to pick a fight?	Not Wrong at All	6.0
	A Little Bit Wrong	18.0
	Wrong	33.0
	Very wrong	43.0
c10e How wrong do you think it is for someone your age to attack someone with the idea of seriously hurting them?	Not Wrong at All	3.5
	A Little Bit Wrong	4.8
	Wrong	17.0
	Very wrong	74.6
c10f How wrong do you think it is for someone your age to drink beer, wine or hard liquor (for example, vodka, whiskey, gin, or rum) regularly?	Not Wrong at All	5.5
	A Little Bit Wrong	11.8
	Wrong	21.3
	Very wrong	61.4

Question	Response	%
c10g How wrong do you think it is for someone your age to smoke cigarettes?	Not Wrong at All	4.9
	A Little Bit Wrong	7.5
	Wrong	18.1
	Very wrong	69.5
c10h How wrong do you think it is for someone your age to use LSD, cocaine, amphetamines or another illegal drug?	Not Wrong at All	3.4
	A Little Bit Wrong	3.2
	Wrong	10.3
	Very wrong	83.1
c10i How wrong do you think it is for someone your age to use marijuana?	Not Wrong at All	14.5
	A Little Bit Wrong	13.9
	Wrong	14.1
	Very wrong	57.5
c11a How many times have you done what feels good no matter what?	Never	54.3
	I've done it, but not in the past year	12.5
	Less than once a month	10.0
	About once a month	7.1
	2 or 3 times a month	6.5
c11b How many times have you done something dangerous because someone dared you to do it?	Once a week or more	9.5
	Never	63.4
	I've done it, but not in the past year	17.3
	Less than once a month	9.8
c11c How many times have you done crazy things even if they are a little dangerous?	About once a month	4.5
	2 or 3 times a month	2.9
	Once a week or more	2.1
	Never	50.9
	I've done it, but not in the past year	20.3
	Less than once a month	12.7
	About once a month	7.0
	2 or 3 times a month	5.0
	Once a week or more	4.1

Question	Response	%
c12a What are the chances you would be seen as cool if you: carried a handgun?	No or Very Little Chance	83.9
	Little Chance	8.4
	Some Chance	4.1
	Pretty Good Chance	1.6
	Very Good Chance	2.0
c12b What are the chances you would be seen as cool if you: began drinking alcoholic beverages regularly, that is, at least once or twice a month?	No or Very Little Chance	67.3
	Little Chance	13.7
	Some Chance	9.8
	Pretty Good Chance	6.0
	Very Good Chance	3.3
c12c What are the chances you would be seen as cool if you: smoked cigarettes?	No or Very Little Chance	79.3
	Little Chance	11.0
	Some Chance	5.1
	Pretty Good Chance	2.3
	Very Good Chance	2.3
c12d What are the chances you would be seen as cool if you: used marijuana?	No or Very Little Chance	65.3
	Little Chance	10.9
	Some Chance	10.2
	Pretty Good Chance	7.2
	Very Good Chance	6.4
c13 I think it is okay to take something without asking as long as you get away with it.	NO!	64.5
	no	30.3
	yes	4.1
	YES!	1.2
c14 It is all right to beat up people if they start the fight.	NO!	34.9
	no	22.9
	yes	25.4
	YES!	16.8
c15 I think sometimes it's okay to cheat at school.	NO!	47.6
	no	32.5
	yes	16.5
	YES!	3.4

Question	Response	%
c16 It is important to be honest with your parents, even if they become upset or you get punished.	NO!	7.7
	no	9.1
	yes	39.3
	YES!	44.0
c17a Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: been arrested?	None	92.5
	1	4.3
	2	1.4
	3	0.6
c17b Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: dropped out of school?	None	95.5
	1	3.2
	2	0.7
	3	0.3
c17c Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Stolen or tried to steal a motor vehicle such as a car or motorcycle?	None	97.3
	1	1.7
	2	0.5
	3	0.1
c17d Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: been suspended from school?	None	81.6
	1	11.0
	2	3.9
	3	1.3
c17e Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: carried a handgun?	None	96.6
	1	1.8
	2	0.7
	3	0.2
	4	0.6

Question	Response	%
c17f Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: tried beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum) when their parents didn't know about it?	None	62.9
	1	11.4
	2	9.1
	3	4.5
	4	12.1
c17g Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: smoked cigarettes?	None	81.7
	1	8.7
	2	4.4
	3	1.8
	4	3.4
c17h Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: sold illegal drugs?	None	91.5
	1	4.4
	2	2.0
	3	0.7
	4	1.4
c17i Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: used LSD, cocaine, amphetamines or another illegal drug?	None	94.1
	1	3.2
	2	1.3
	3	0.5
	4	1.0
c17j Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: used marijuana?	None	70.5
	1	9.3
	2	6.6
	3	4.1
	4	9.5
a30 In the past 12 months, how many of your best friends have been a member of a gang?	None	91.5
	1	3.3
	2	1.7
	3	0.8
	4	2.7

Question	Response	%
d1a In the past year, how many times have you played cards for money?	Not at all	88.6
	Less than once a month	7.8
	1 to 3 times a month	2.1
	More than 3 times a month	1.5
d1b In the past year, how many times have you played the lottery for money?	Not at all	78.6
	Less than once a month	14.9
	1 to 3 times a month	4.7
	More than 3 times a month	1.8
d1c In the past year, how many times have you bet on sports for money?	Not at all	86.2
	Less than once a month	8.0
	1 to 3 times a month	3.1
	More than 3 times a month	2.7
d1d In the past year, how many times have you gambled on the internet for money?	Not at all	96.2
	Less than once a month	1.9
	1 to 3 times a month	0.9
	More than 3 times a month	1.1
d1e In the past year, how many times have you bet on games of skill for money?	Not at all	82.1
	Less than once a month	10.0
	1 to 3 times a month	3.7
	More than 3 times a month	4.2
d1f In the past year, how many times have you bet in some other way for money?	Not at all	88.2
	Less than once a month	7.6
	1 to 3 times a month	2.3
	More than 3 times a month	1.9
d2 How many times (if any) have you, in your lifetime bet/gambled for money or anything of value?	0	64.0
	1-2	15.1
	3-5	8.6
	6-9	4.3
	10-19	3.8
	20-39	1.7
	40 or more	2.5

Question	Response	%
d3 In the past 30 days have you bet/gambled for money or anything of value?	Yes	9.9
	No	90.1
d4a Have you ever felt the need to bet more and more money?	Yes	4.5
	No	95.5
d4b Have you ever felt the need to lie to important people (such as your family/friends) about how much you gamble?	Yes	2.5
	No	97.5
d5 If you drank alcohol during the past 12 months, how did you usually get it?	Did not drink any alcohol	69.5
	Bought it in a store	1.3
	Bought it at a restaurant, bar or club	0.8
	Bought it at a public event such as a concert or sporting event	0.9
	Gave someone money to buy it for me	8.1
	Parents provided it to me	6.0
	Friends' parents provided it to me	4.9
	Friends, brothers, or sisters over 21 provided it to me	6.9
	Friends, brothers, or sisters under 21 provided it to me	4.7
	Other relatives provided it to me	3.6
Other source provided it to me	6.5	
Took without permission, stole, or found it	8.7	
d6 If you used any prescription drugs without a prescription during the last 12 months, how did you get them?	I did not take any prescription drugs without a doctor's prescription	90.2
	Took them from a family member living in my home	1.9
	Took them from other relatives not living in my home	0.5
	Took them from someone not related to me	0.5
	A friend or family member gave them to me	2.0
	Bought them from someone	1.4
	Ordered them over the Internet	0.4

Question	Response	%	
d7a Driven a motor vehicle while or shortly after drinking?	I don't drive	63.8	
	Never	33.2	
	Before, but not in the past year	0.8	
	About once or twice a year	1.4	
	About once or twice a month	0.4	
	About once or twice a week	0.1	
	Almost every day	0.2	
	d7b Driven a motor vehicle while or shortly after using marijuana (pot, hash, cannabis, weed)?	I don't drive	63.4
		Never	32.1
		Before, but not in the past year	1.1
About once or twice a year		1.4	
About once or twice a month		0.9	
About once or twice a week		0.5	
Almost every day		0.8	
e1a In the past 12 months, how often have you: Been threatened to be hit or beaten up on school property?	Never	79.5	
	Once	10.0	
	2 or 3 times	6.2	
	4 or 5 times	1.6	
	6 to 9 times	0.7	
	10 or more times	2.0	
e1b In the past 12 months, how often have you: Been attacked and hit by someone or beaten up on school property?	Never	91.7	
	Once	5.2	
	2 or 3 times	1.9	
	4 or 5 times	0.5	
	6 to 9 times	0.2	
10 or more times	0.5		
e1c In the past 12 months, how often have you: Been threatened by someone with a weapon on school property?	Never	96.2	
	Once	2.4	
	2 or 3 times	0.7	
	4 or 5 times	0.2	
	6 to 9 times	0.1	
	10 or more times	0.3	

Question	Response	%
e1d In the past 12 months, how often have you: Been attacked by someone with a weapon on school property?	Never	98.8
	Once	0.6
	2 or 3 times	0.2
	4 or 5 times	0.1
	6 to 9 times	0.1
	10 or more times	0.2
e2 How many times in the past 12 months have you: Been offered, given, or sold an illegal drug on school property?	Never	91.8
	1 or 2 times	5.3
	3 to 5 times	1.6
	6 to 9 times	0.4
	10 or more times	0.9
e3 In the past 12 months, in which of the following activities did you participate?	Organized community activities (such as scouting, 4H, service clubs, YMCA, etc)	23.1
	Family supported activities or hobbies (such as dance, gymnastics, hiking, biking, skating, etc.)	42.9
	School sponsored activities (such as sports, music, clubs, after school programs, etc.)	59.9
	Faith-based activities (such as choir, youth group, mission, church leagues, etc)	23.9
	Job, employed	24.9
	Volunteer	28.1
	Other activities	28.6
	I do not participate	13.0
e4 How many times in your lifetime have you: Brought a weapon (such as a handgun, knife, etc.) to school?	0 times	94.7
	1 or 2 times	4.0
	3 to 5 times	0.5
	6 to 9 times	0.2
	10 to 19 times	0.1
	20 to 39 times	0.1
	40 or more times	0.4
e5 How many times in the last 30 days have you: Brought a weapon (such as a handgun, knife, etc.) to school?	Never	98.8
	1 or 2 times	0.7
	3 to 5 times	0.1
	6 to 9 times	0.1
	10 or more times	0.3

Question	Response	%
e6a How many times in the past 12 months have you attacked someone with the idea of seriously hurting them?	0 times	94.4
	1 or 2 times	4.1
	3 to 5 times	0.8
	6 to 9 times	0.3
	10 to 19 times	0.1
	20 to 39 times	0.1
	40 or more times	0.3
e6b How many times in the past 12 months have you been arrested?	0 times	98.1
	1 or 2 times	1.4
	3 to 5 times	0.2
	6 to 9 times	0.1
	10 to 19 times	0.1
	20 to 39 times	0.0
	40 or more times	0.1
e6c How many times in the past 12 months have you been drunk or high at school?	0 times	94.4
	1 or 2 times	2.9
	3 to 5 times	1.1
	6 to 9 times	0.5
	10 to 19 times	0.4
	20 to 39 times	0.2
	40 or more times	0.5
e6d How many times in the past 12 months have you been suspended from school?	0 times	92.5
	1 or 2 times	5.5
	3 to 5 times	1.1
	6 to 9 times	0.4
	10 to 19 times	0.3
	20 to 39 times	0.1
	40 or more times	0.2
e6e How many times in the past 12 months have you sold illegal drugs?	0 times	97.4
	1 or 2 times	1.0
	3 to 5 times	0.5
	6 to 9 times	0.3
	10 to 19 times	0.2
	20 to 39 times	0.2
	40 or more times	0.4

Question	Response	%
e6f 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	86.0
	1 or 2 times	6.7
	3 to 5 times	2.6
	6 to 9 times	1.4
	10 to 19 times	1.2
	20 to 39 times	0.7
e7 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?	40 or more times	1.5
	No	96.0
	Yes, but for less than a month	1.9
	Yes, but for more than a month	1.1
e8 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, for most of the year	1.1
	No	93.9
e9a How many times have you changed homes in the ?past 12 months?	Yes	6.1
	Never	84.8
	1	10.3
	2	2.7
e9b Including the last 12 months, How many times have you changed homes in the last three years?	3 or more	2.2
	Never	73.9
	1	14.9
	2	5.8
f1a During the past 12 months, have you been bullied through texting and/or social media?	3 or more	5.3
	NO!	58.0
	no	25.5
	yes	11.7
f1b Have you stayed home from school this year because you were worried about being bullied?	YES!	4.8
	NO!	73.8
	no	21.6
	yes	2.9
	YES!	1.7

Question	Response	%
f1c Do adults at your school stop bullying when they see/hear it or when a student tells them about it?	NO!	16.2
	no	20.9
	yes	36.7
	YES!	26.2
f1d Please state whether you have been bullied during the past 12 months.	No	69.5
	Yes, very rarely	14.1
	Yes, now and then	9.6
	Yes, several times per month	2.7
	Yes, several times per week	1.9
f1e If you have been bullied in any way in the past 12 months, where were you bullied? I was not bullied	Yes, almost daily	2.3
	I was not bullied	68.7
	On school property	22.0
	At a school-sponsored event	4.0
	While going to or from school	5.1
f1f If you have been bullied in the past 12 months by other students, why were you bullied? I have not been made fun of by other students	In the community	6.2
	At home	8.0
	I have not been made fun of by other students	62.7
	I don't know why	10.8
	The color of my skin	2.4
	My religion	1.9
	My size (height, weight, etc.)	10.7
	My accent	1.1
	The country I was born in	0.7
	The country my family (parents, grandparents) was born in	1.2
The way I look (clothing, hairstyle, etc.)	13.5	
How much money my family has or does not have	3.5	
My gender	1.9	
My grades or school achievement	4.2	
My social standing	5.7	
Social conflict	4.6	
My sexual-orientation	2.7	
I have a disability (learning or physical disability)	1.9	
Some other reason	12.5	

Question	Response	%
f2 If you were hurt or abused by another person in the past 12 months, how were you hurt or abused? Physical injury	Physical injury	7.5
	Threats	8.0
	Emotional abuse, insults, name-calling	20.5
	Isolation from friends and family	4.0
	Control of what you were wearing	2.6
	Control with whom you socialized	3.8
	Other injury or abuse	3.5
f3 In the past 12 months, did anyone when using technology ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual?	Yes	22.6
	No	77.4
f4a 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	22.8
	No	77.2
f4b Did you ever seriously consider attempting suicide?	Yes	16.5
	No	83.5

Question	Response	%
f4c Did you make a plan about how you would attempt suicide?	Yes	13.4
	No	86.6
f4d How many times did you actually attempt suicide?	0 times	90.0
	1 time	5.0
	2 or 3 times	3.2
	4 or 5 times	0.9
	6 or more times	0.9
f4e 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	78.3
	Yes	2.0
f5 In the past 12 months, have any of your friends or family members close to you died?	No	19.7
	Yes	40.7
	No	59.3

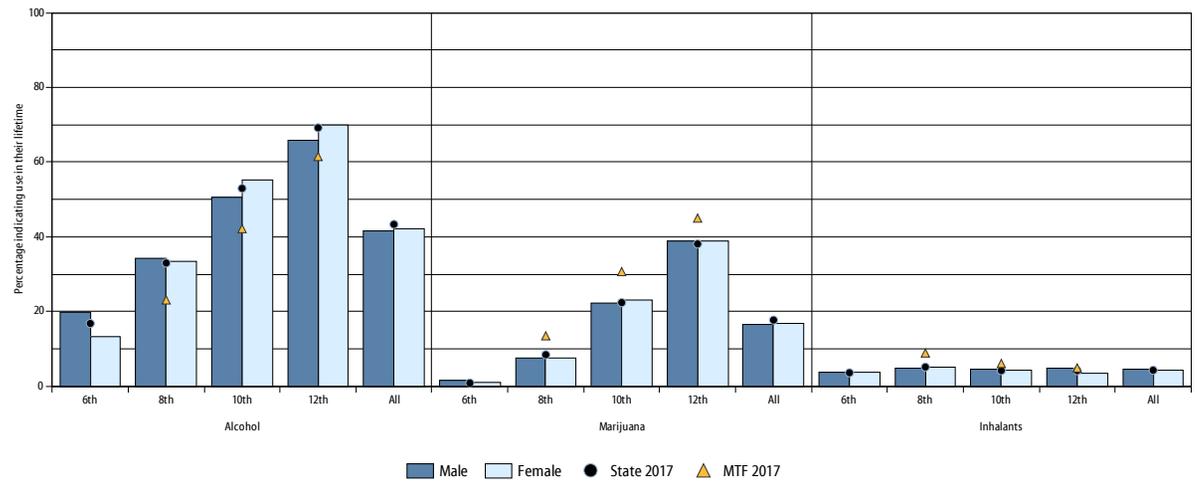
Appendix C: PAYS Summary Data by Gender

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 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 2017 PAYS

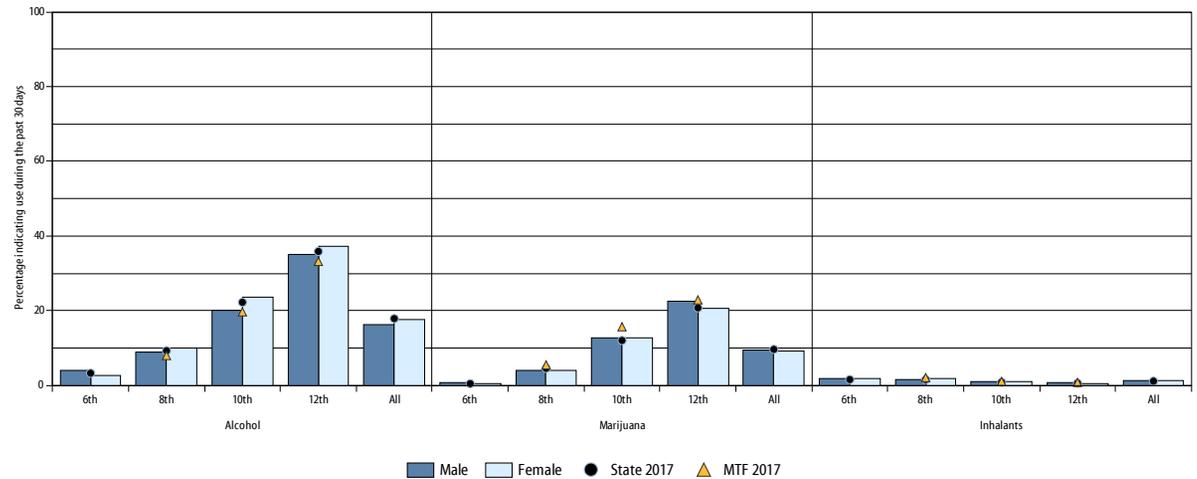
Early initiation and higher prevalence drugs - Lifetime use
State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

Early initiation and higher prevalence drugs - 30-day use, Statewide Sample 2017 PAYS

Early initiation and higher prevalence drugs - 30-day use
State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

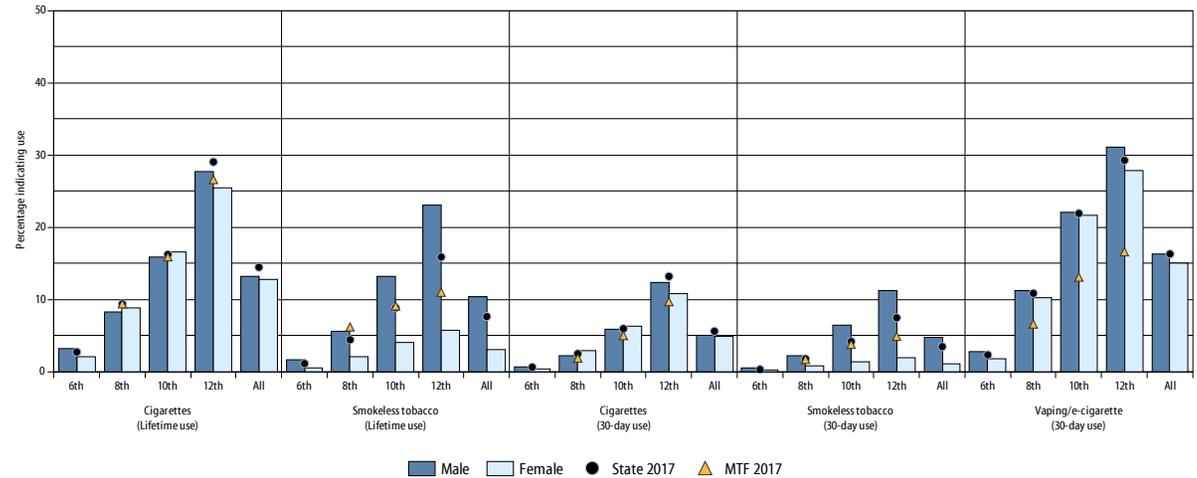
NOTE:

Please see the PAYS Web Tool at 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 2017 PAYS

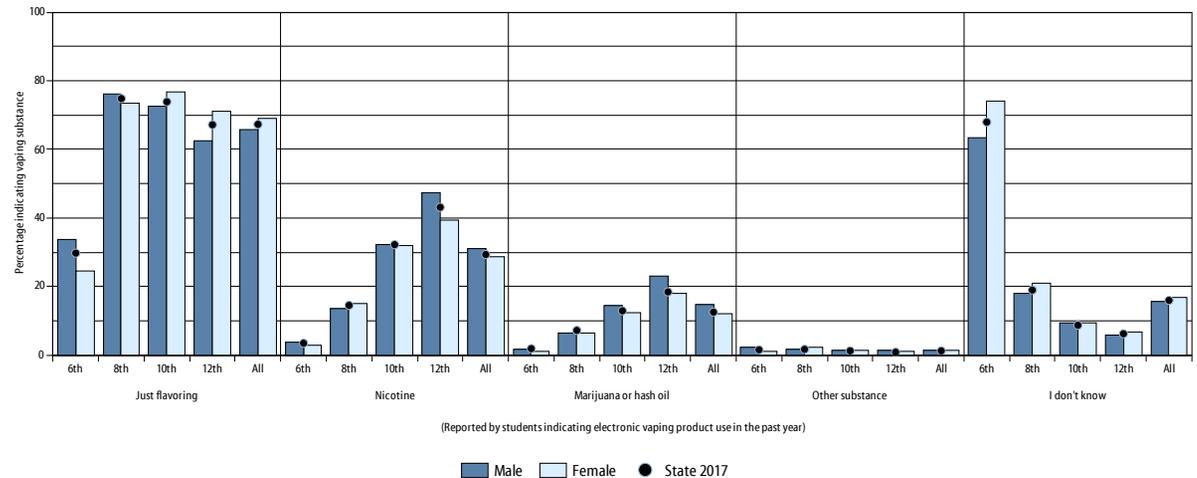
Tobacco and Vaping - Lifetime and 30-day use
State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

Vaping Substances Used During the Past 12 Months (of past-year users), Statewide Sample 2017 PAYS

Vaping substances used by students indicating electronic vaping product use in the past year
State of Pennsylvania 2017 Pennsylvania Youth Survey



(Reported by students indicating electronic vaping product use in the past year)

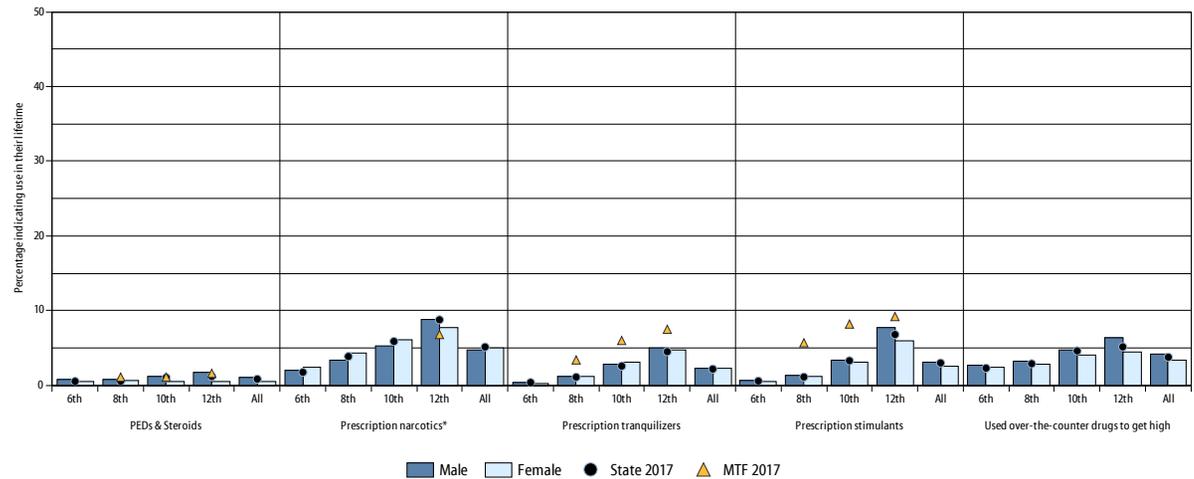
5/19/2018

NOTE:
Please see the PAYS Web Tool at 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

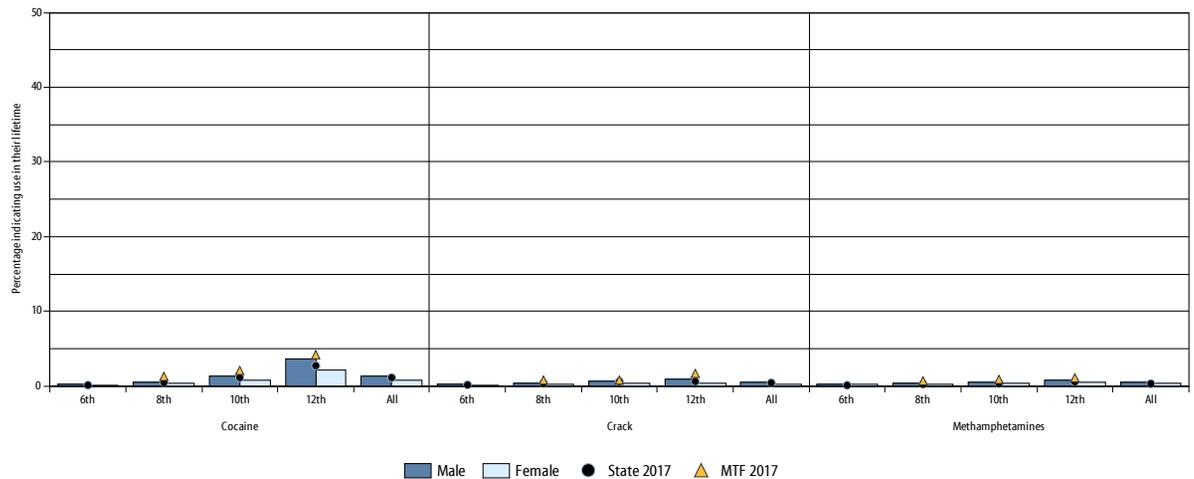
Prescription and over-the-counter drugs and medications - Lifetime, Statewide Sample 2017 PAYS

Prescription and over-the-counter drugs and medications - Lifetime use
State of Pennsylvania 2017 Pennsylvania Youth Survey



Prescription and over-the-counter drugs and medications - 30-day use, Statewide Sample 2017 PAYS

Other drugs (cocaine, crack, methamphetamines) - Lifetime use
State of Pennsylvania 2017 Pennsylvania Youth Survey



NOTE:

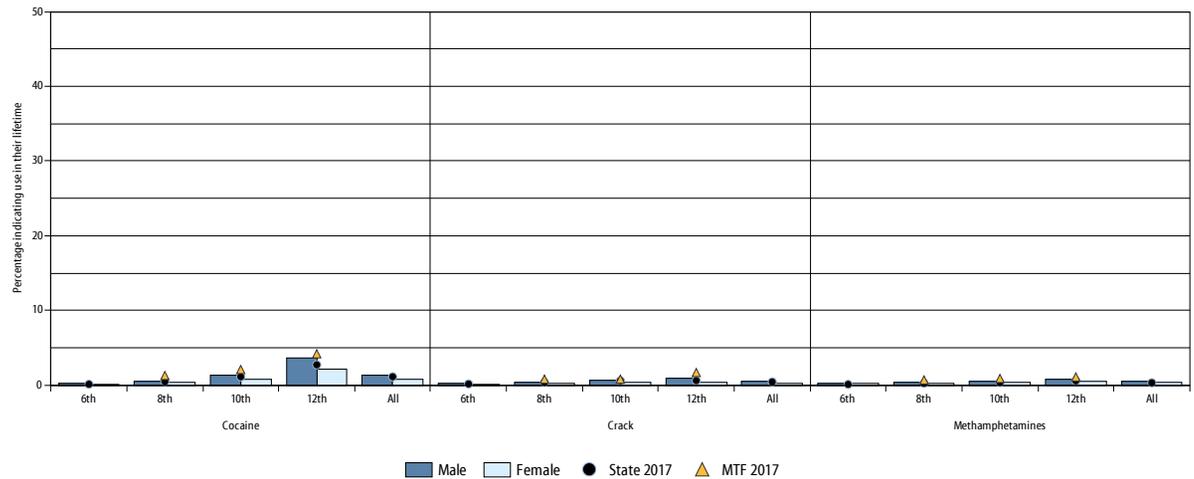
*The most recent national data available for lifetime narcotic prescription drug use in 8th and 10th graders are from the 2014 Monitoring the Future administration. (However, 12th grade data are from the 2017 administration.)

Please see the PAYS Web Tool at 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 2017 PAYS

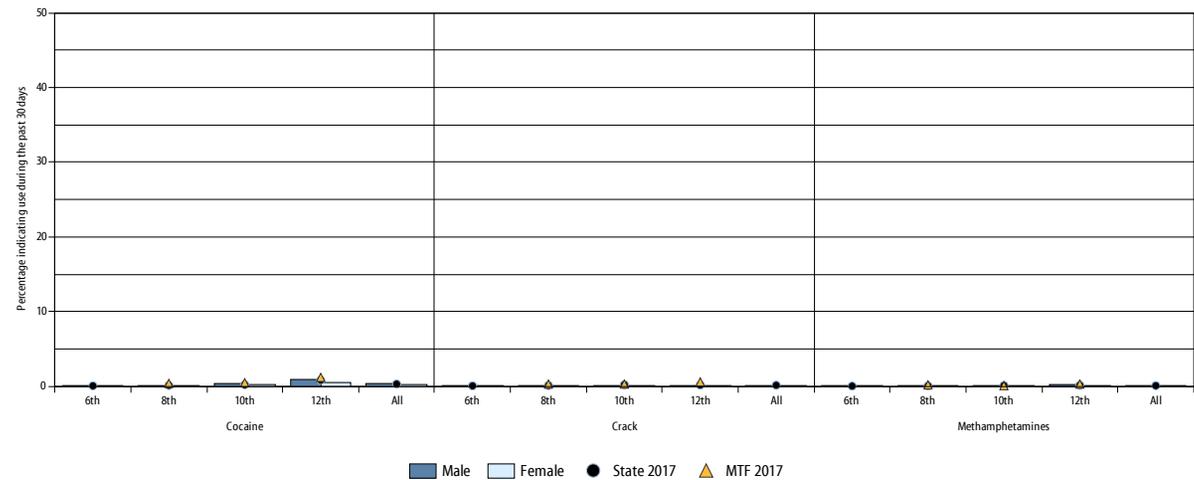
Other drugs (cocaine, crack, methamphetamines) - Lifetime use
State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

Other drugs (cocaine, crack, methamphetamines) - 30-day use, Statewide Sample 2017 PAYS

Other drugs (cocaine, crack, methamphetamines) - 30-day use
State of Pennsylvania 2017 Pennsylvania Youth Survey



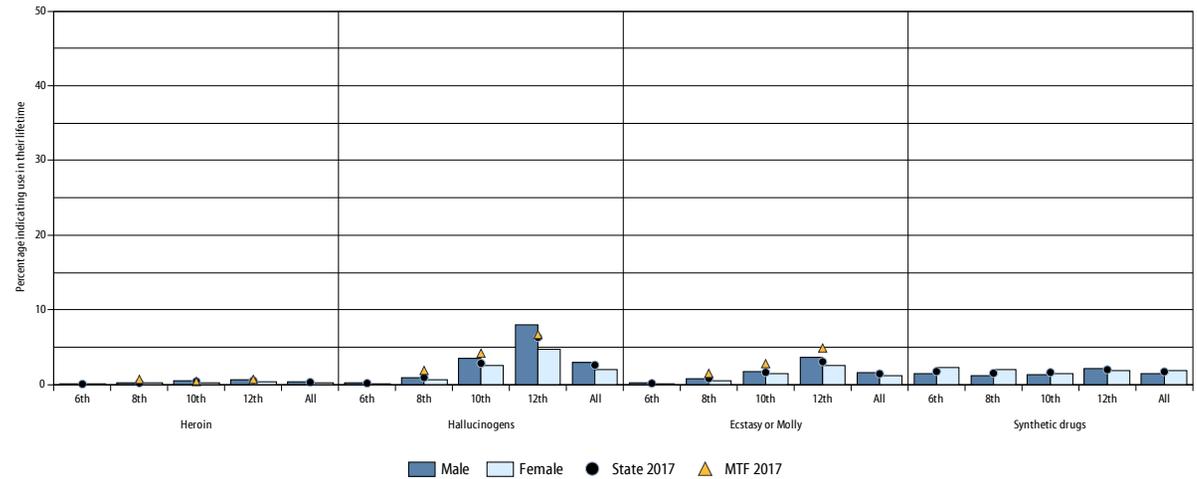
5/19/2018

NOTE:
Please see the PAYS Web Tool at 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

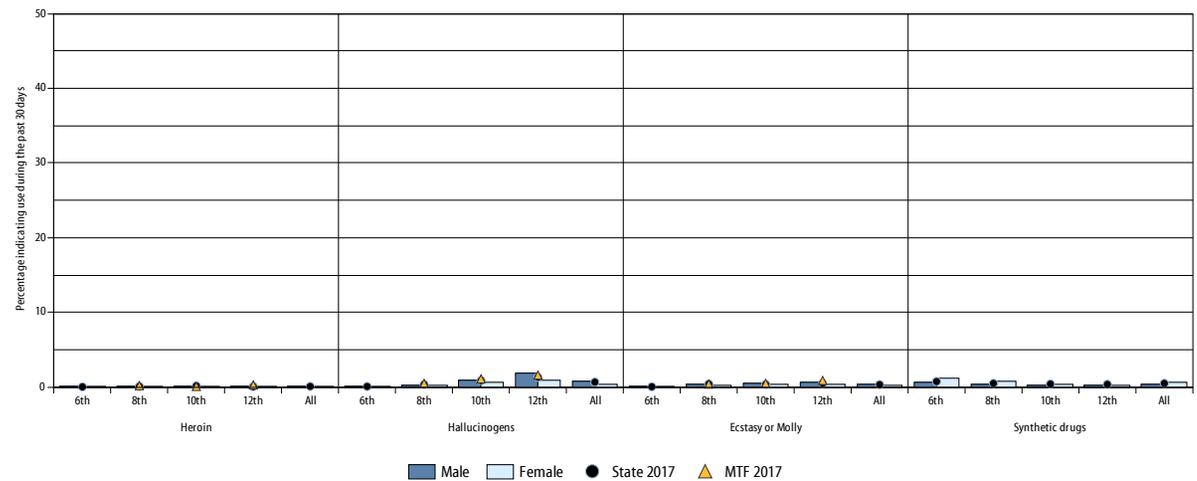
Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use, Statewide Sample 2017 PAYS

Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use
State of Pennsylvania 2017 Pennsylvania Youth Survey



Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use, Statewide Sample 2017 PAYS

Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use
State of Pennsylvania 2017 Pennsylvania Youth Survey



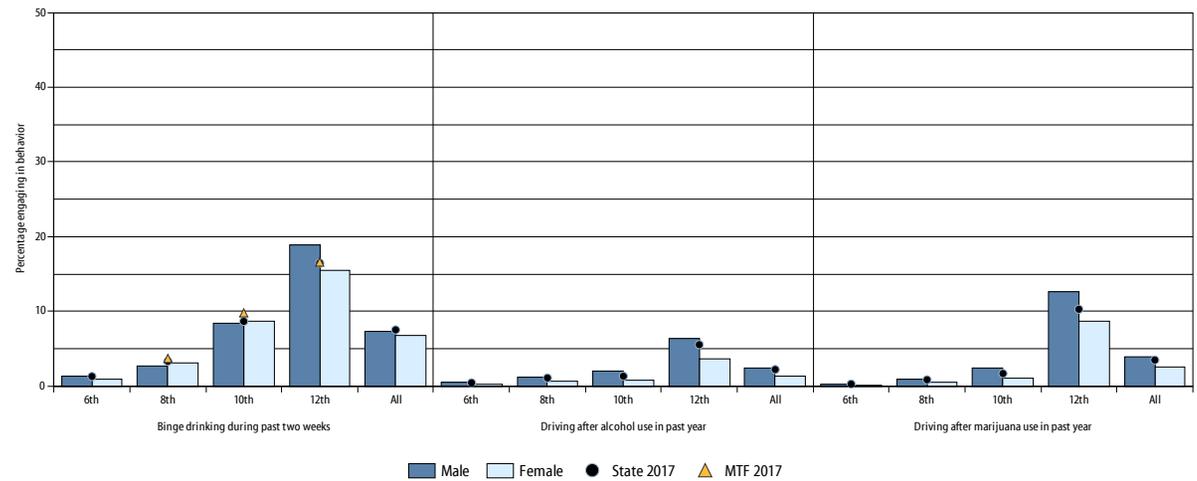
NOTE:
*The most recent national data available for 30-day synthetic drug use are from the 2014 Monitoring the Future administration.

Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool 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

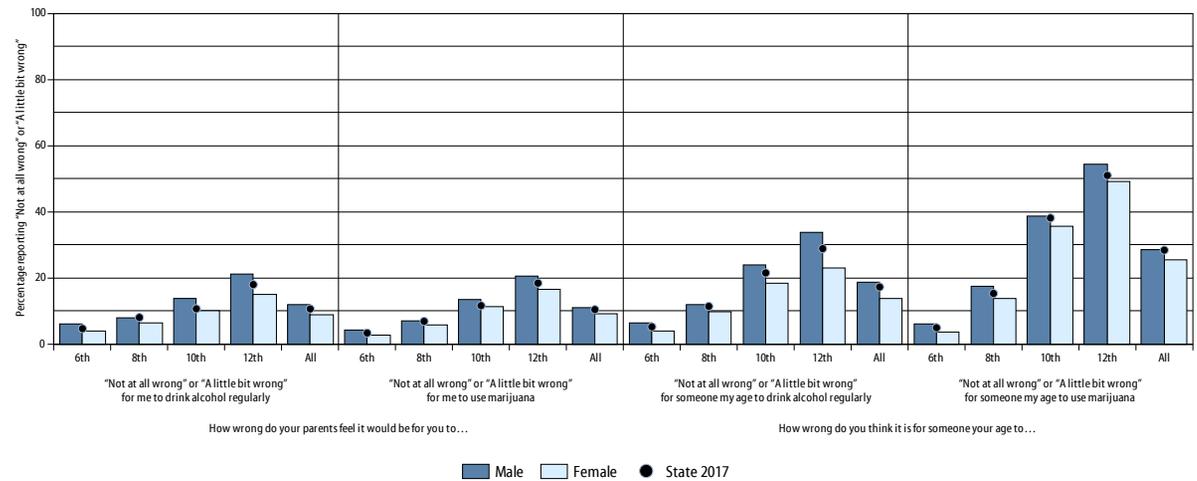
Risky substance use-related behavior, Statewide Sample 2017 PAYS

Risky substance use-related behavior
State of Pennsylvania 2017 Pennsylvania Youth Survey



Access and willingness to use, Statewide Sample 2017 PAYS

Attitudes favorable toward drug use
State of Pennsylvania 2017 Pennsylvania Youth Survey



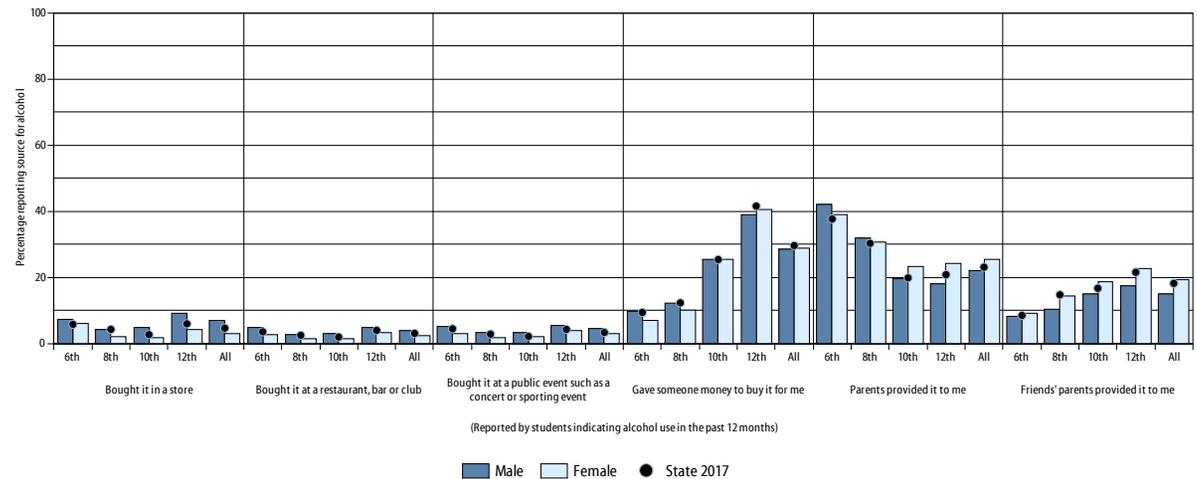
NOTE:
*Questions were revised in 2017 to add the qualifier "before you are 21." Rates reported in 2017 may be lower than previous years' data.

Please see the PAYS Web Tool at 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

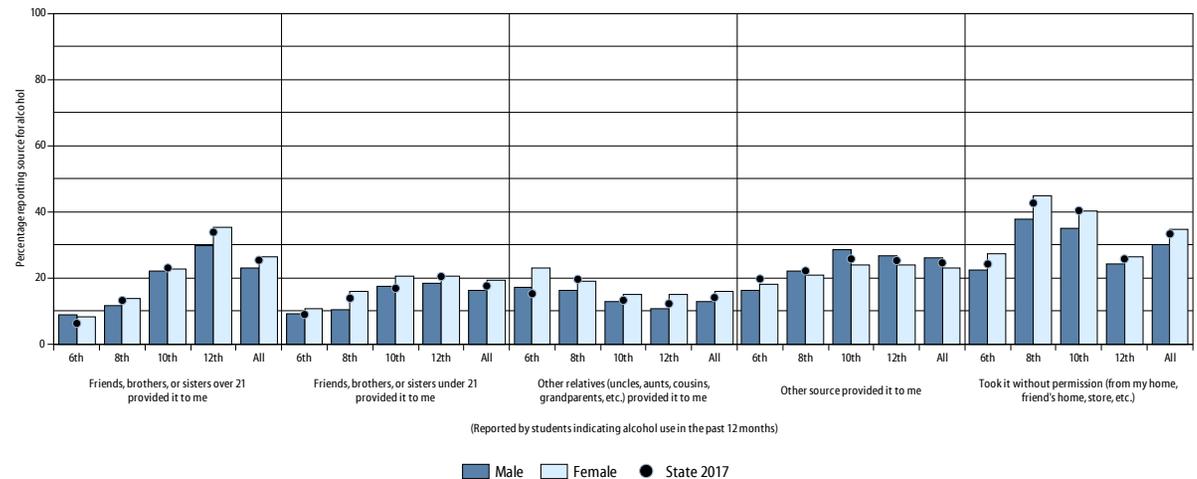
Sources of alcohol, Statewide Sample 2017 PAYS

Sources of alcohol by students who reported alcohol use
State of Pennsylvania 2017 Pennsylvania Youth Survey



Sources of alcohol, continued, Statewide Sample 2017 PAYS

Sources of alcohol by students who reported alcohol use (cont'd)
State of Pennsylvania 2017 Pennsylvania Youth Survey

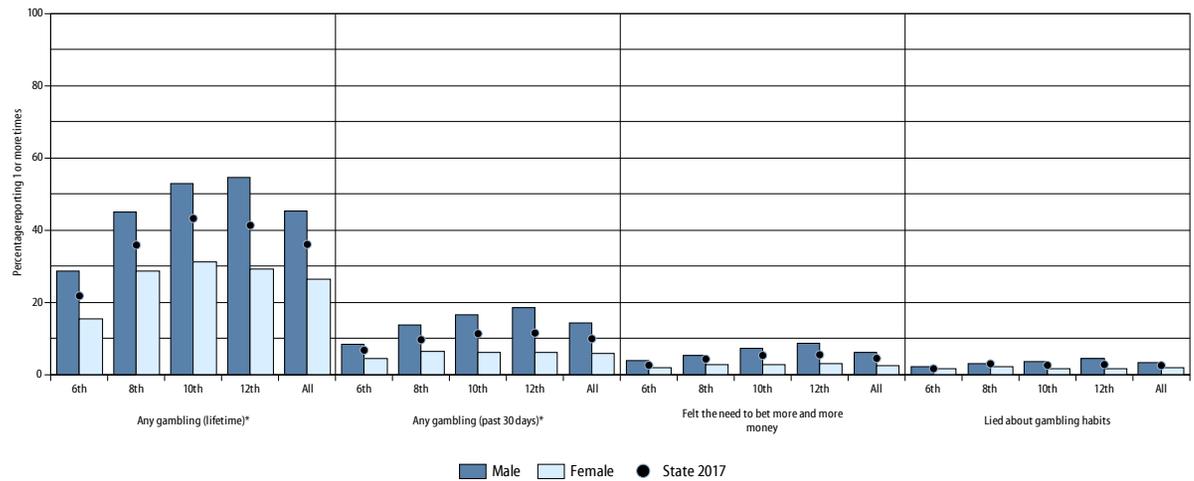


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Antisocial Behavior by Gender

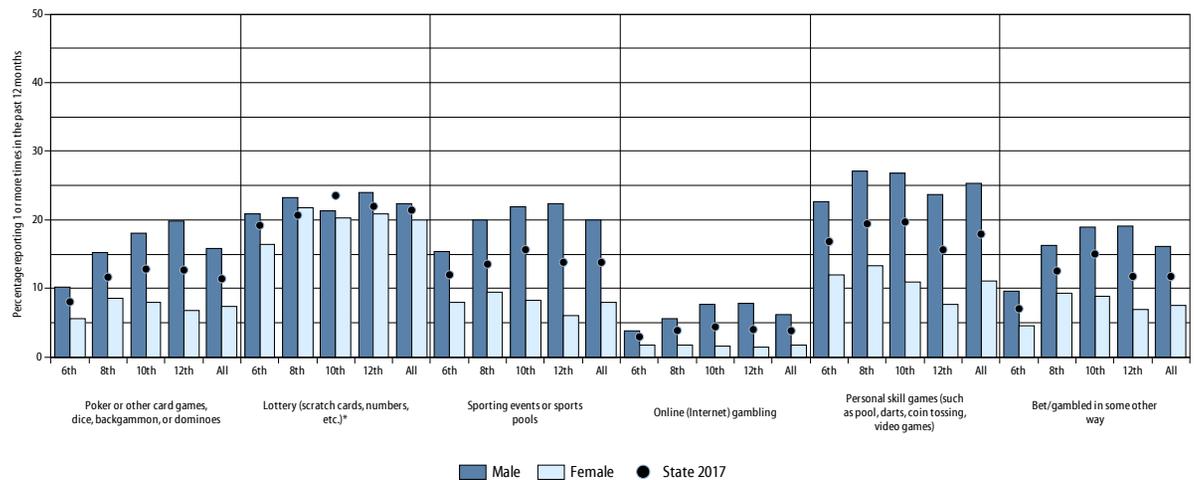
Gambling, Statewide Sample 2017 PAYS

Gambling
State of Pennsylvania 2017 Pennsylvania Youth Survey



Types of gambling, Statewide Sample 2017 PAYS

Types of gambling
State of Pennsylvania 2017 Pennsylvania Youth Survey



NOTE:

*Lifetime and 30 day gambling were not measured prior to 2017. (Previous PAYS administrations measured gambling over the past 12 months.)

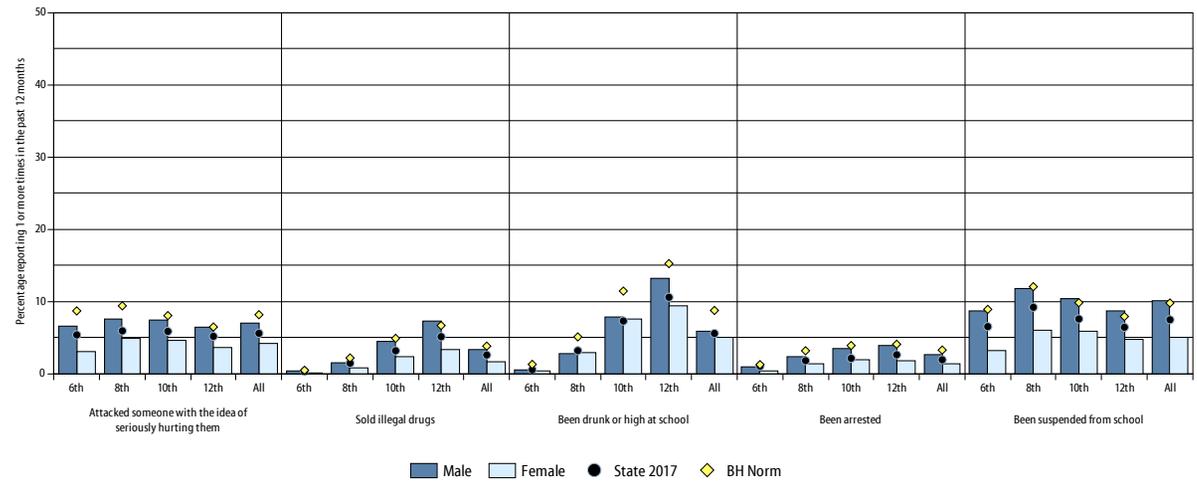
*The lottery response category was revised in 2017 with additional examples (scratch cards, numbers, etc.) Rates reported in 2017 may be higher than previous years' data.

Please see the PAYS Web Tool at 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 2017 PAYS

Other antisocial behavior State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

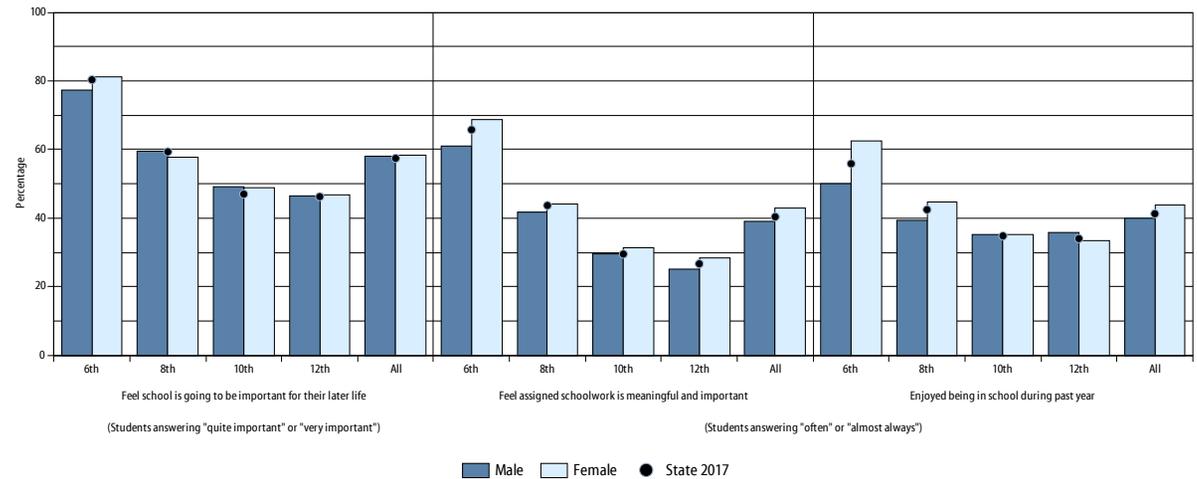
NOTE:

Please see the PAYS Web Tool at 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 2017 PAYS

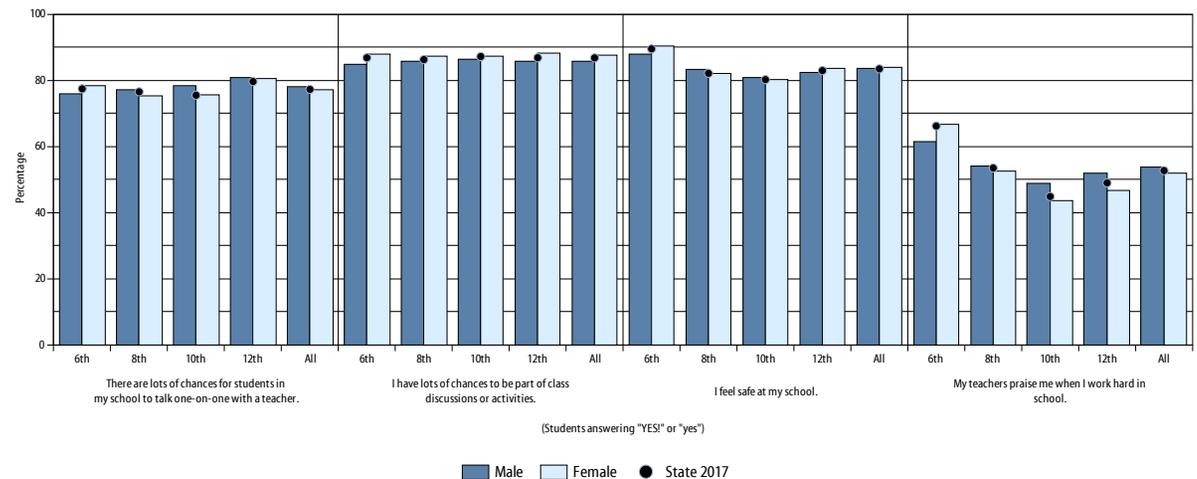
Commitment and involvement in school - Perceived importance of school State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

Positive school environment, Statewide Sample 2017 PAYS

Commitment and involvement in school - Positive school environment State of Pennsylvania 2017 Pennsylvania Youth Survey



5/19/2018

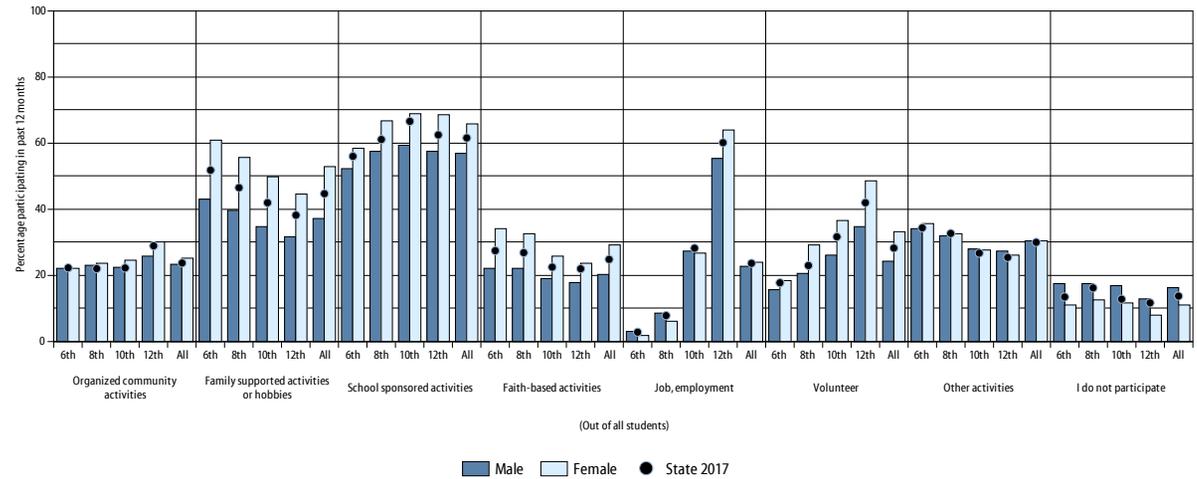
NOTE:

Please see the PAYS Web Tool at 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

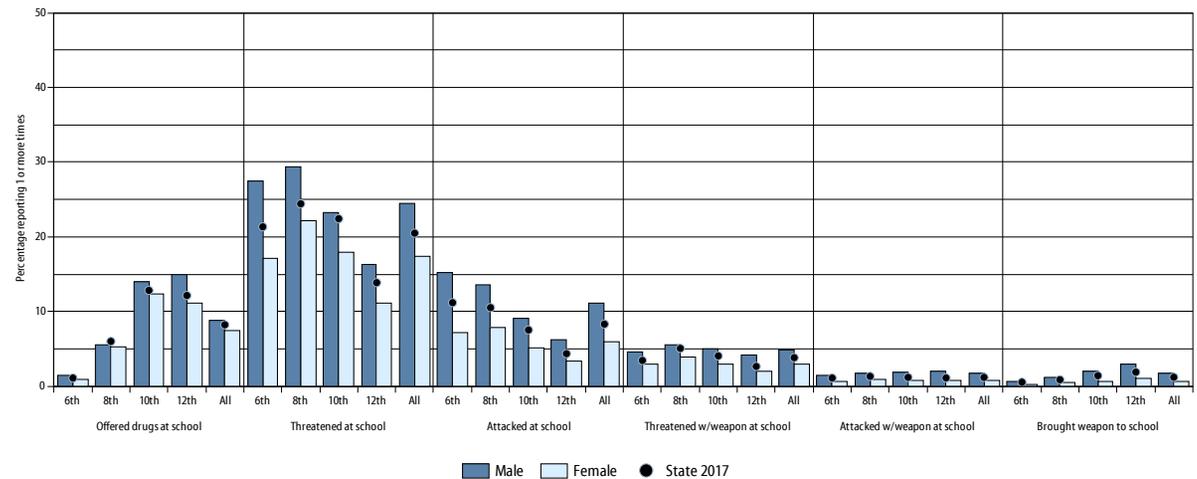
Involvement in after-school and community activities, Statewide Sample 2017 PAYS

Involvement in pro-social activities
State of Pennsylvania 2017 Pennsylvania Youth Survey



Violence and drugs on school property, Statewide Sample 2017 PAYS

Violence and drugs on school property
State of Pennsylvania 2017 Pennsylvania Youth Survey

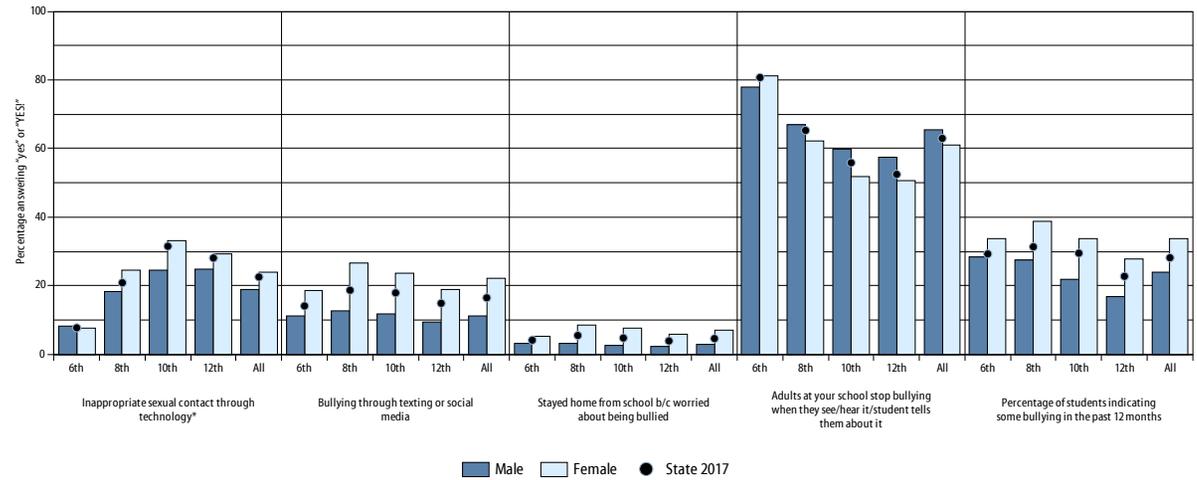


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Bullying and Internet safety, Statewide Sample 2017 PAYS

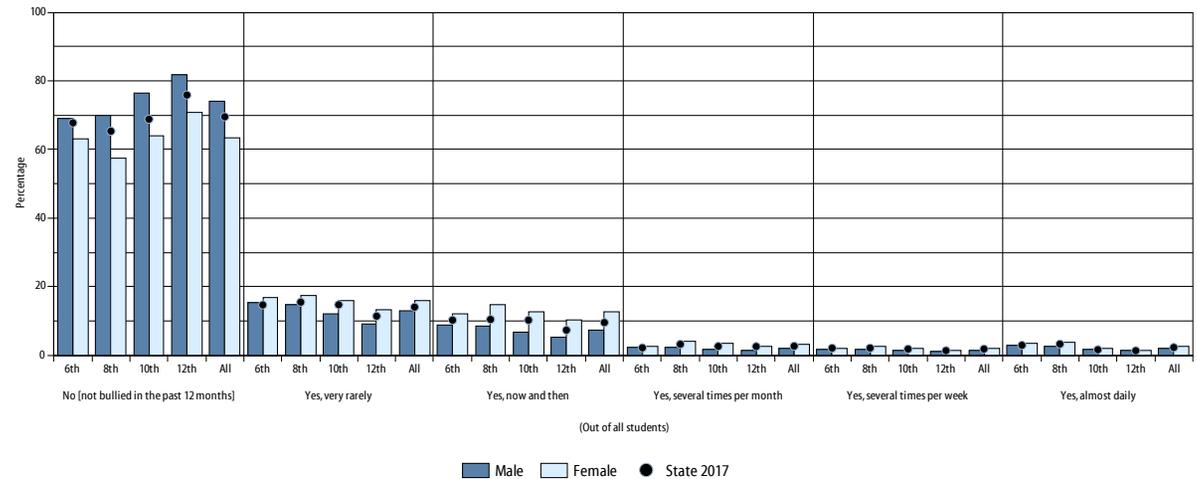
Bullying and Internet safety
State of Pennsylvania 2017 Pennsylvania Youth Survey



5.10.2018

Frequency of bullying, Statewide Sample 2017 PAYS

Frequency of bullying by students indicating some bullying in the past year*
State of Pennsylvania 2017 Pennsylvania Youth Survey

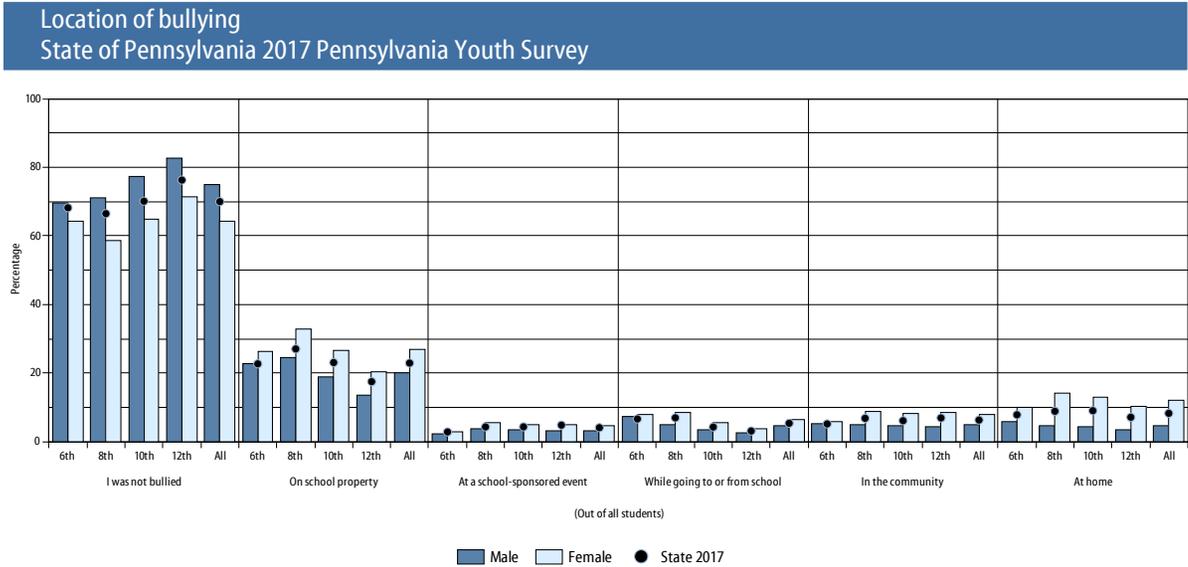


5.10.2018

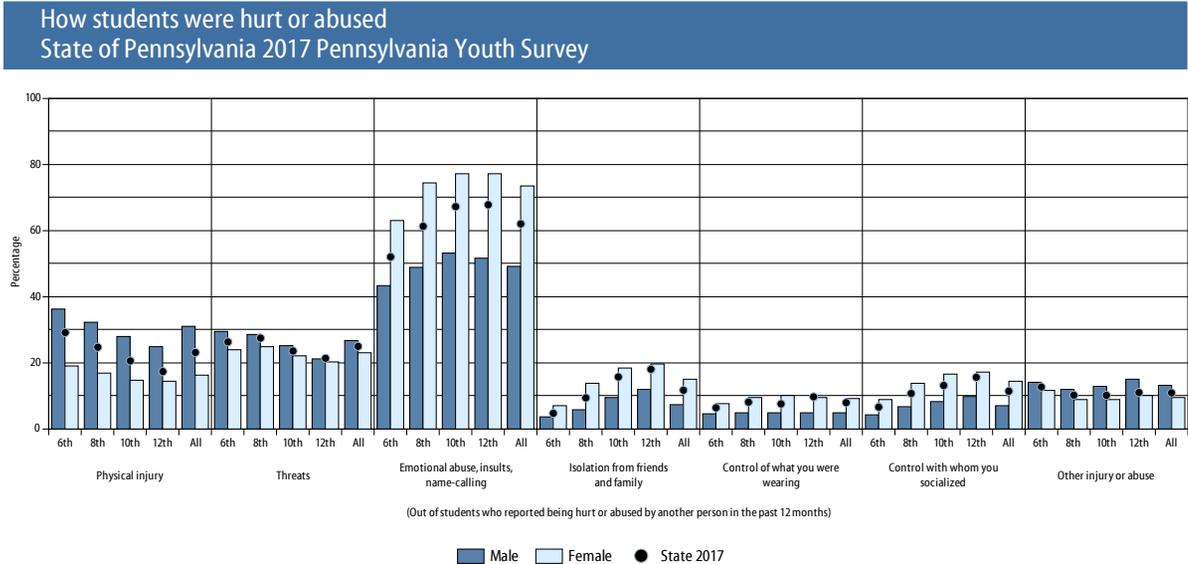
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Location of bullying, Statewide Sample 2017 PAYS



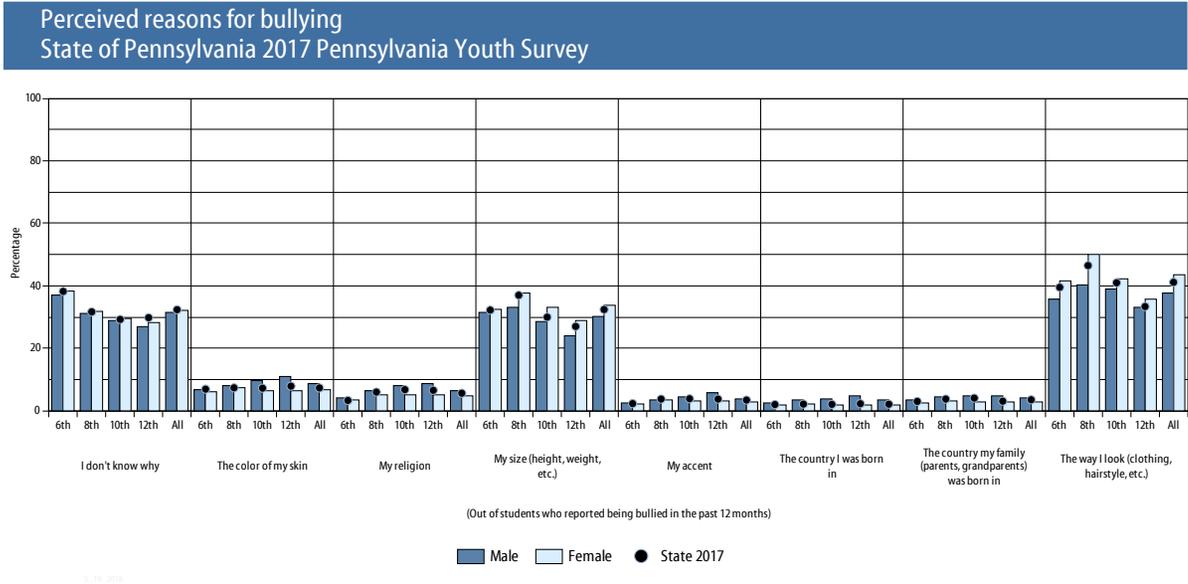
How students were hurt or abused, Statewide Sample 2017 PAYS



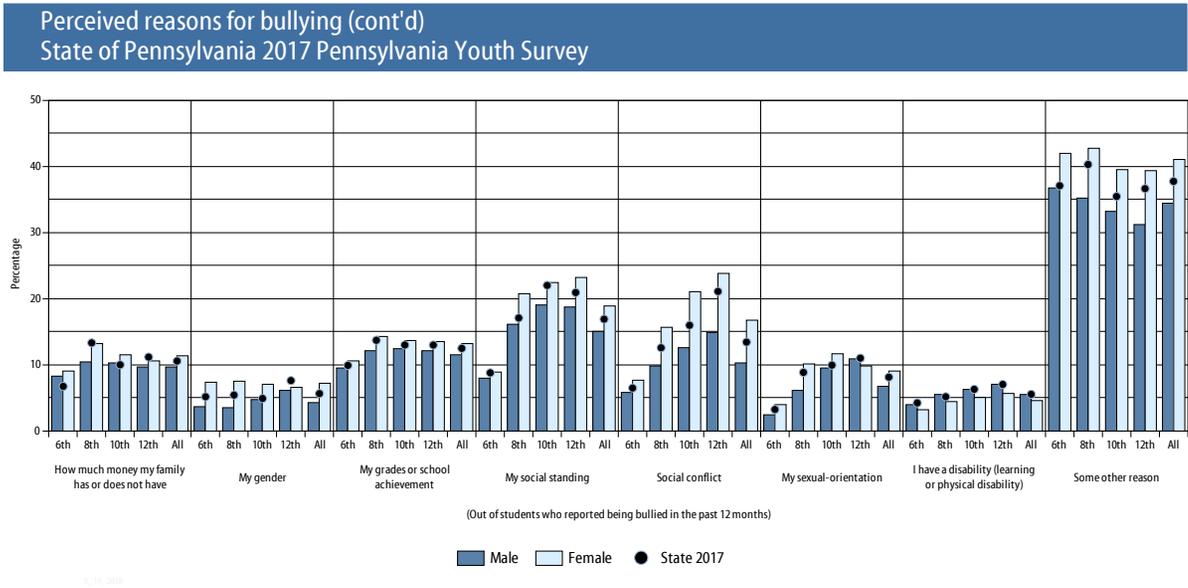
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Perceived reasons for bullying, Statewide Sample 2017 PAYS



Perceived reasons for bullying, continued, Statewide Sample 2017 PAYS

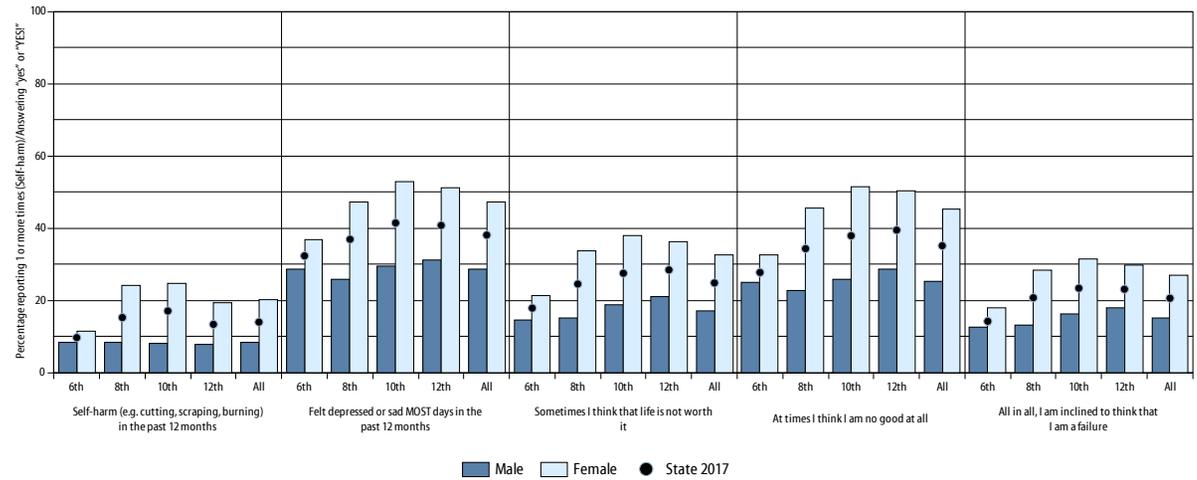


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Social and Emotional Health by Gender

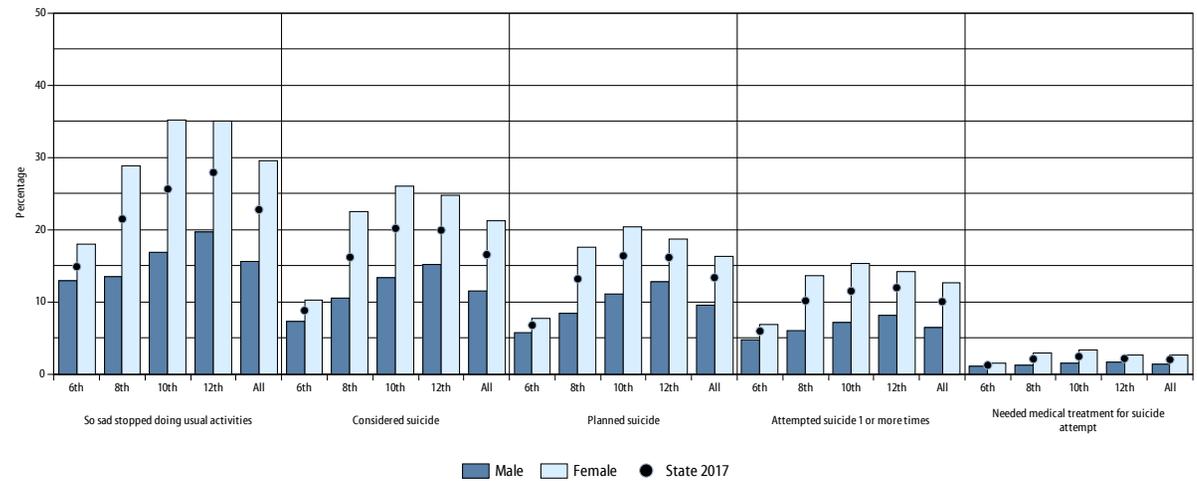
Mental Health Concerns, Statewide Sample 2017 PAYS

Mental Health Concerns State of Pennsylvania 2017 Pennsylvania Youth Survey



Suicide risk, Statewide Sample 2017 PAYS

Suicide risk State of Pennsylvania 2017 Pennsylvania Youth Survey

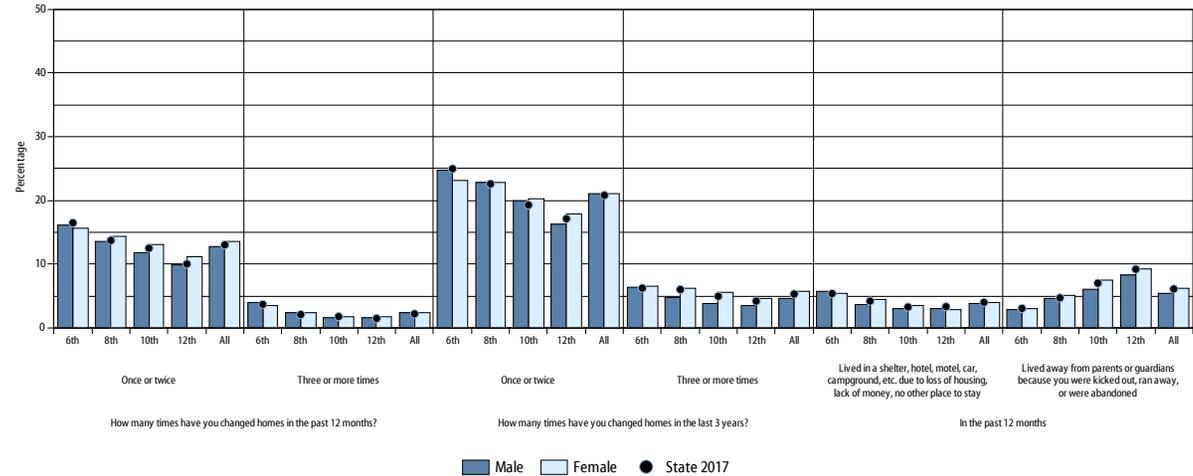


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Social and Emotional Health by Gender

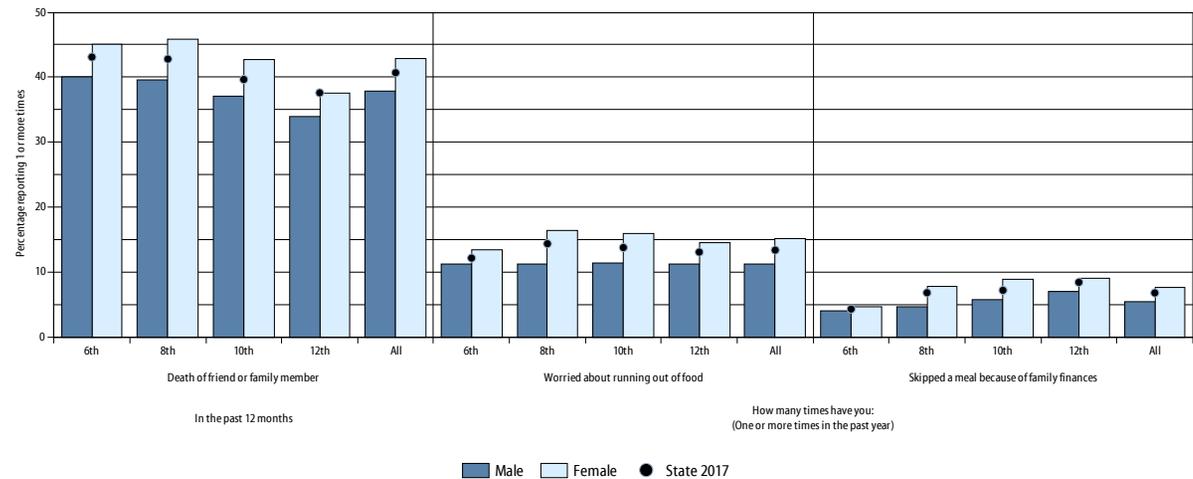
Transitions and mobility, Statewide Sample 2017 PAYS

Transitions and mobility State of Pennsylvania 2017 Pennsylvania Youth Survey



Grief and other stressful events, Statewide Sample 2017 PAYS

Grief and other stressful events State of Pennsylvania 2017 Pennsylvania Youth Survey



NOTE:
Please see the PAYS Web Tool at 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.

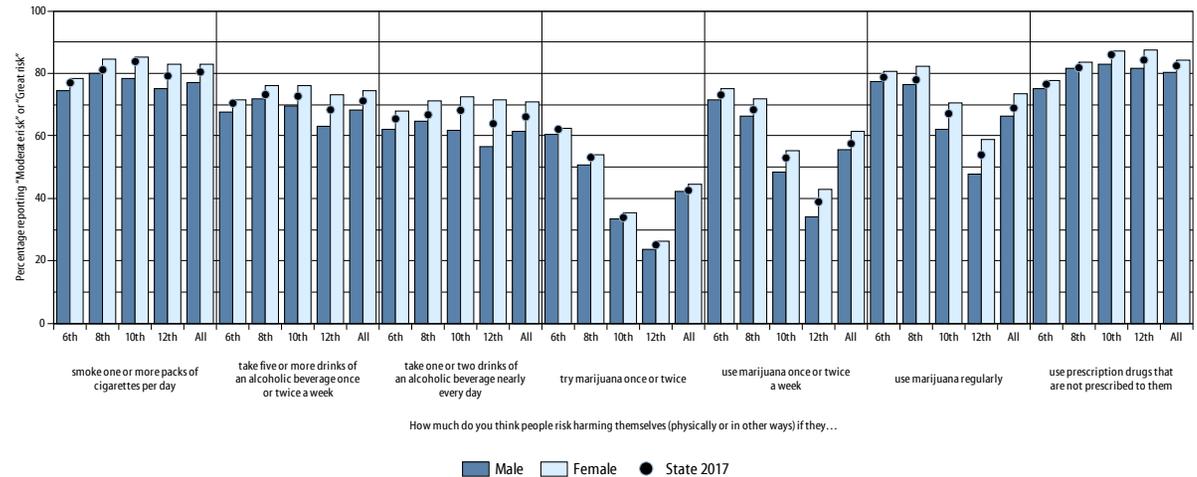
5/19/2018

5/19/2018

Systemic Factors by Gender

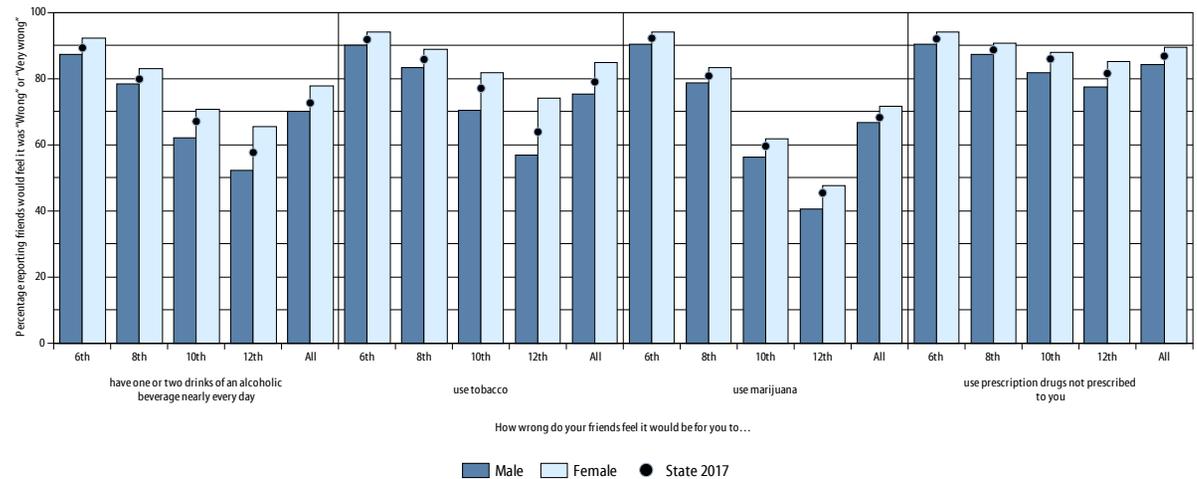
Perception of risk, Statewide Sample 2017 PAYS

Perception of risk
State of Pennsylvania 2017 Pennsylvania Youth Survey



Perception of parental disapproval, Statewide Sample 2017 PAYS

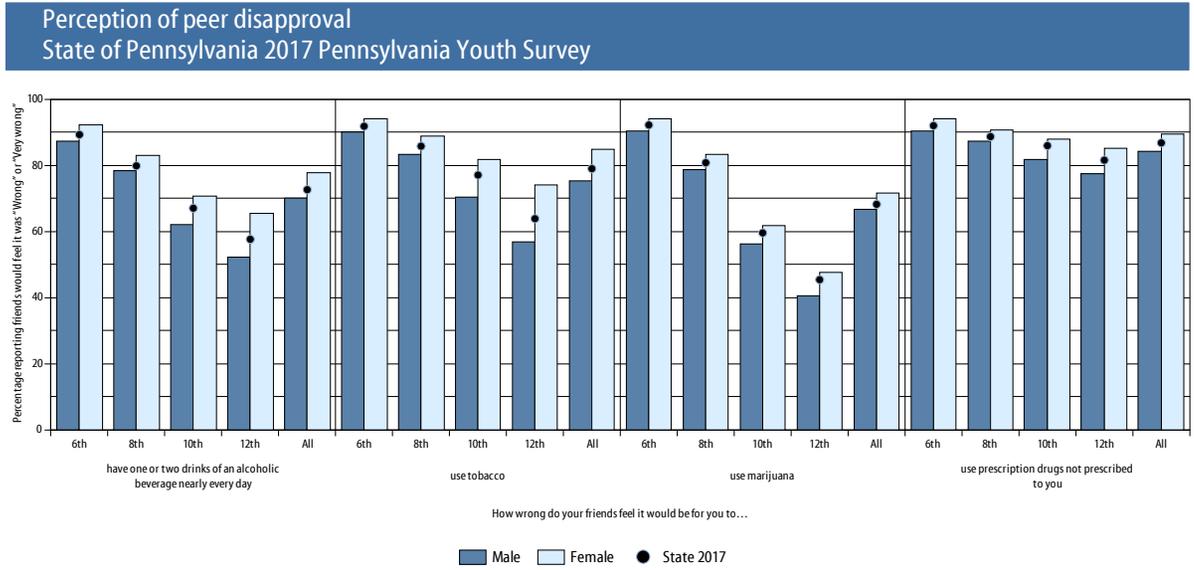
Perception of peer disapproval
State of Pennsylvania 2017 Pennsylvania Youth Survey



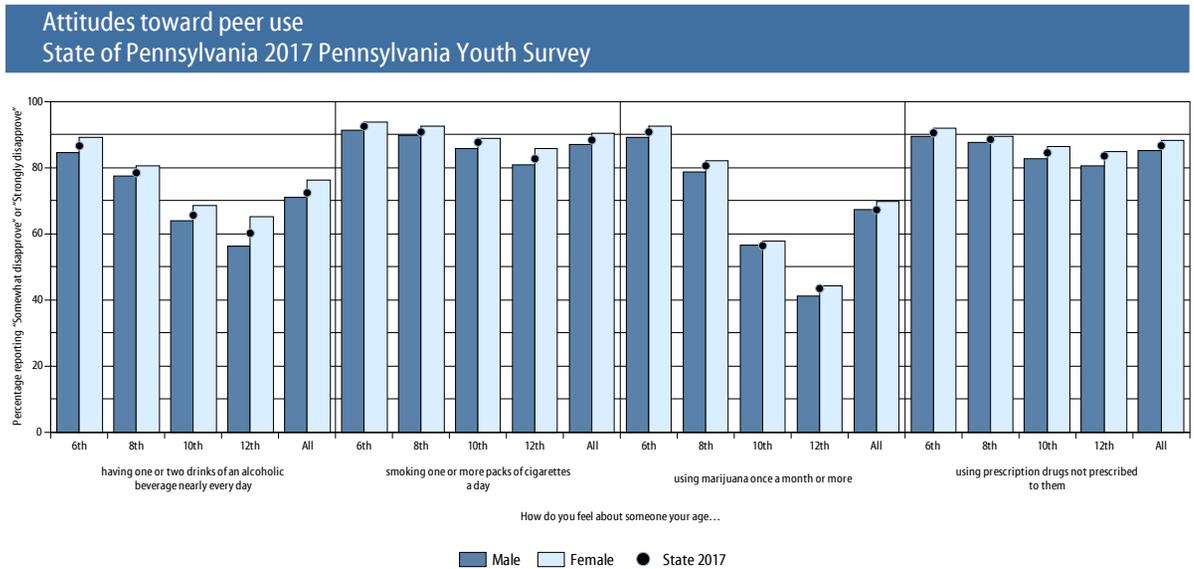
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

Perception of peer disapproval, Statewide Sample 2017 PAYS



Attitudes toward peer use, Statewide Sample 2017 PAYS

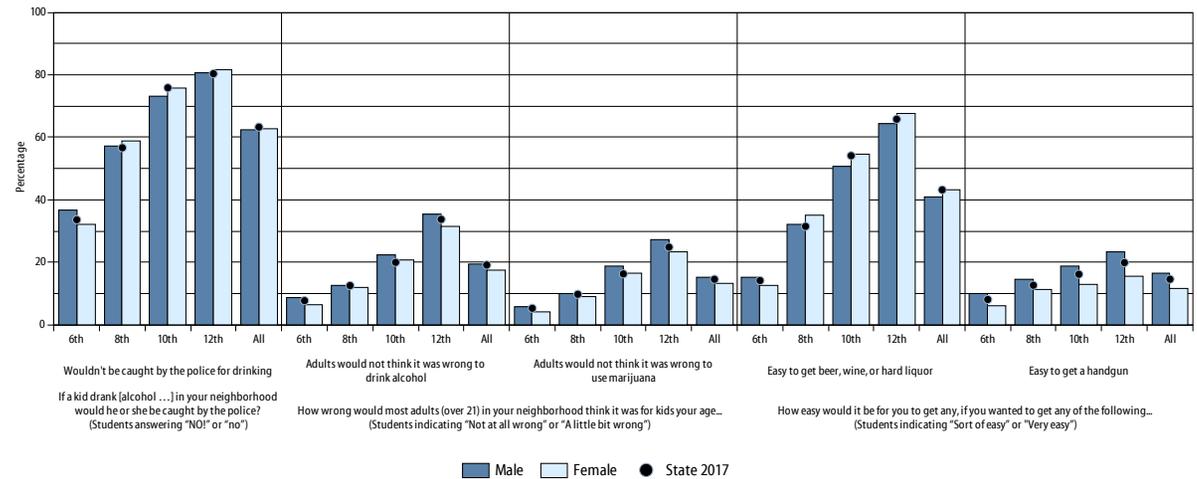


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

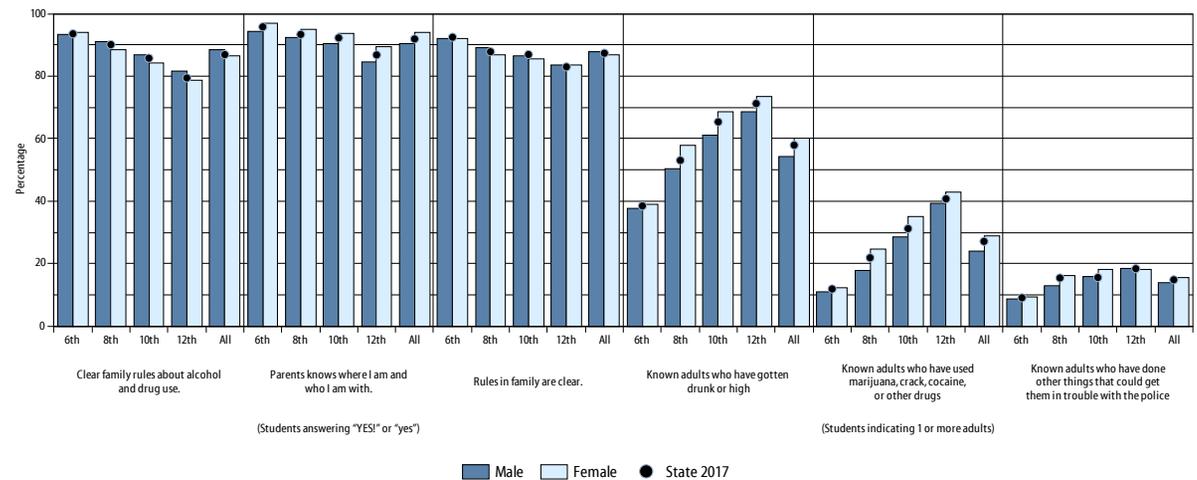
Community risk associated with availability, Statewide Sample 2017 PAYS

Community risk associated with availability
State of Pennsylvania 2017 Pennsylvania Youth Survey



Rules and antisocial behavior, Statewide Sample 2017 PAYS

Rules and antisocial behavior
State of Pennsylvania 2017 Pennsylvania Youth Survey

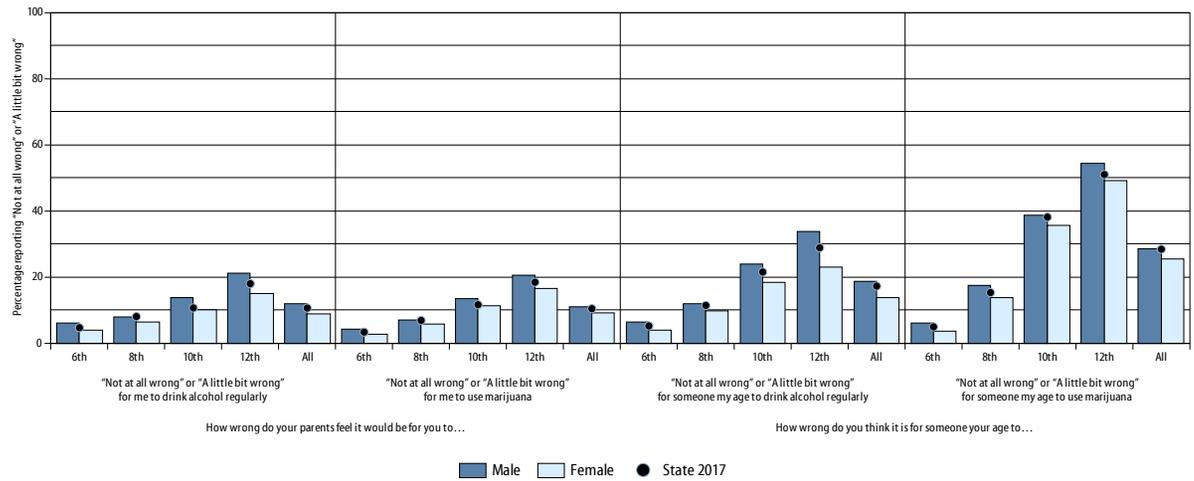


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

Attitudes favorable toward drug use, Statewide Sample 2017 PAYS

Attitudes favorable toward drug use
State of Pennsylvania 2017 Pennsylvania Youth Survey

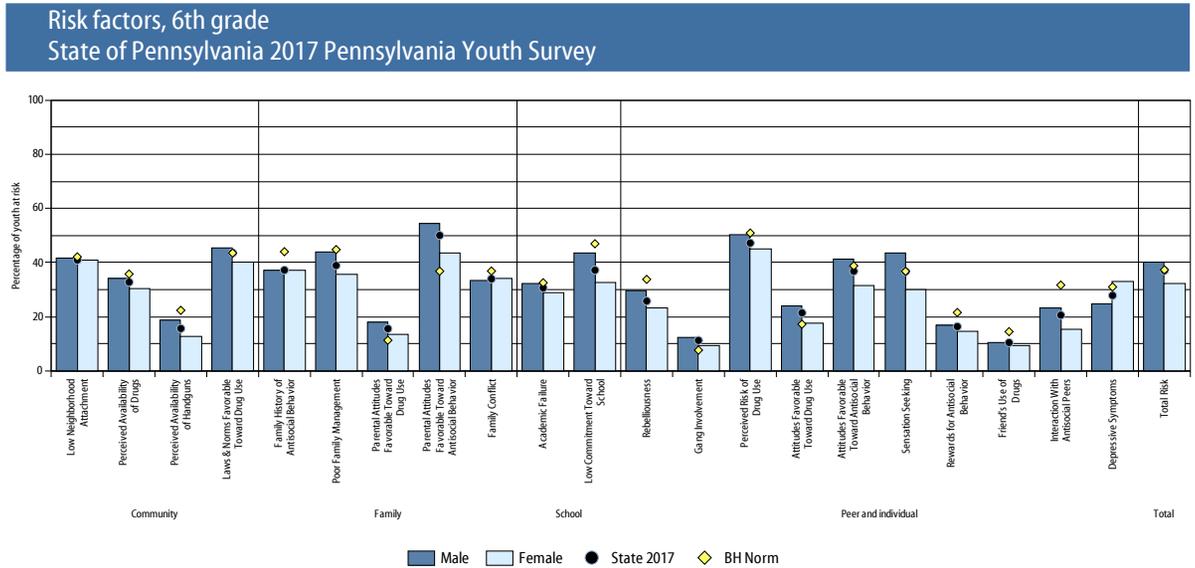


5/19/2018

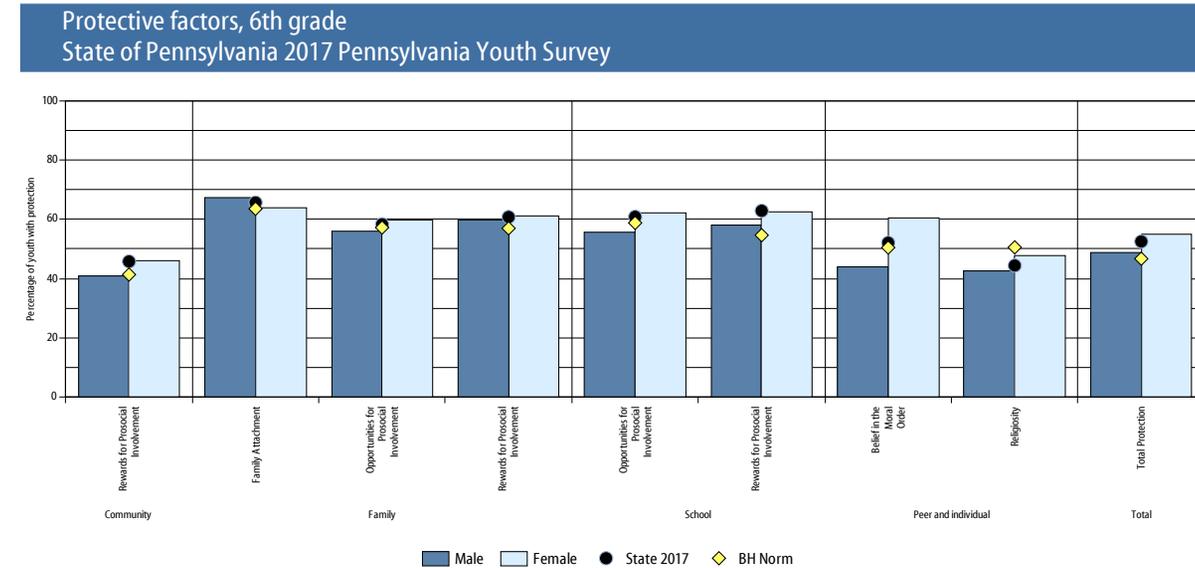
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: 6th Grade

Risk factor scales by Gender, 6th grade, Statewide Sample 2017 PAYS



Protective factor scales by Gender, 6th grade, Statewide Sample 2017 PAYS



NOTE:

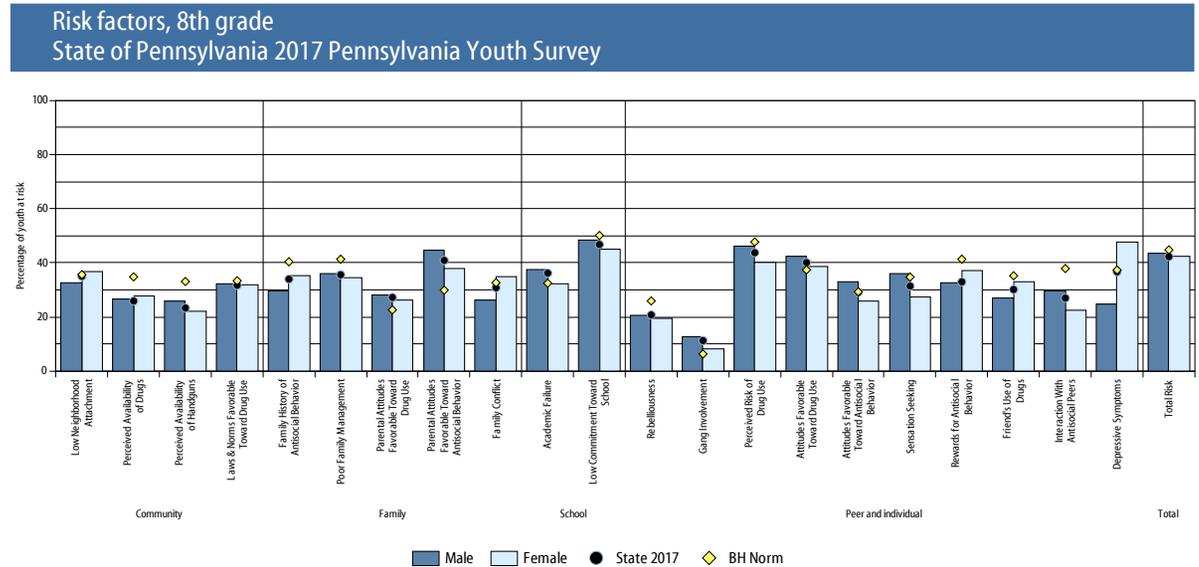
“Total Risk” is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

“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.)

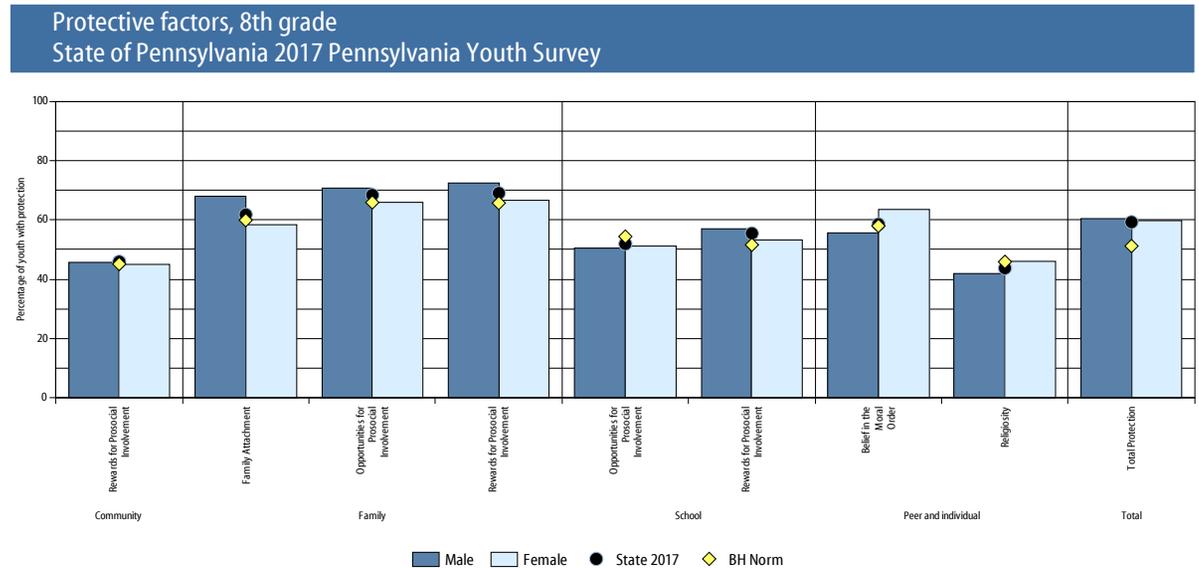
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: 8th Grade

Risk factor scales by Gender, 8th grade, Statewide Sample 2017 PAYS



Protective factor scales by Gender, 8th grade, Statewide Sample 2017 PAYS



NOTE:

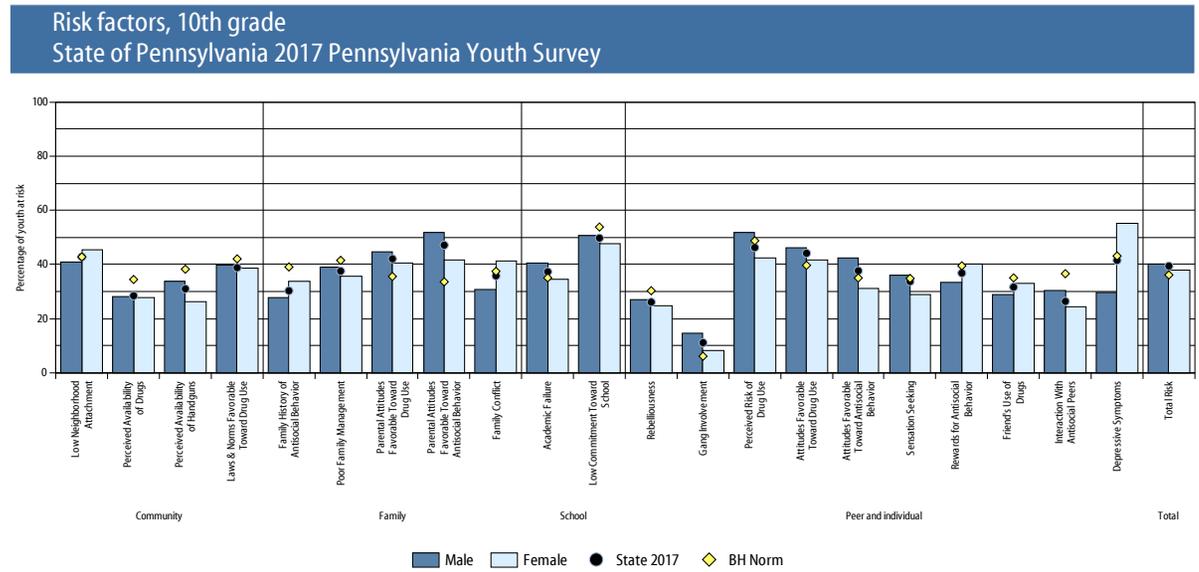
“Total Risk” is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

“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 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.

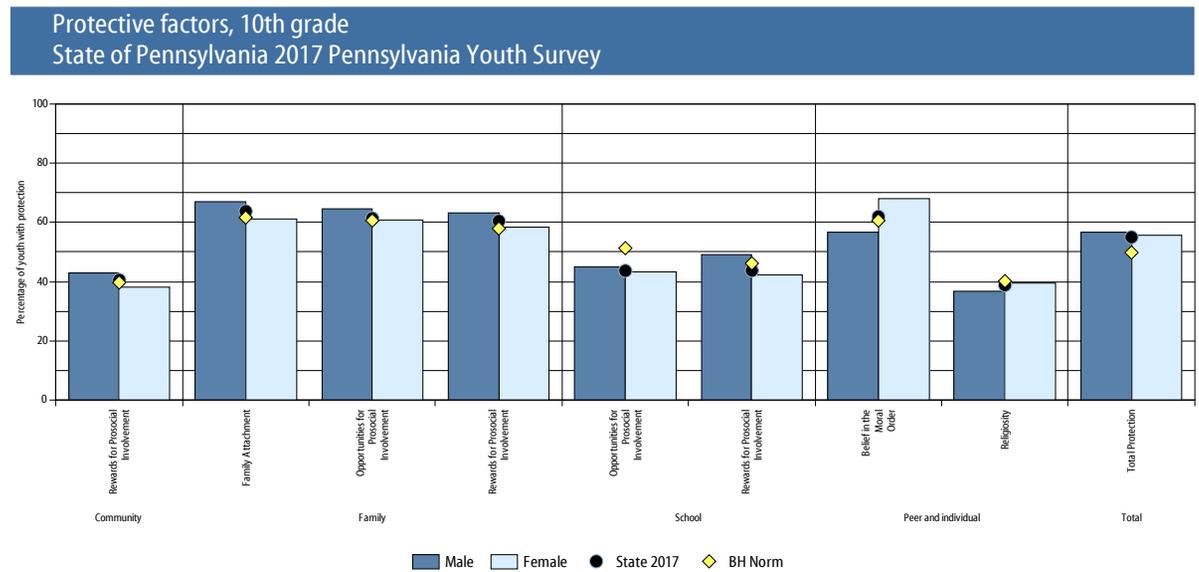
Risk and Protective Factor Scales by Gender: 10th Grade

Risk factor scales by Gender, 10th grade, Statewide Sample 2017 PAYS



1/19/2018

Protective factor scales by Gender, 10th grade, Statewide Sample 2017 PAYS



1/19/2018

NOTE:

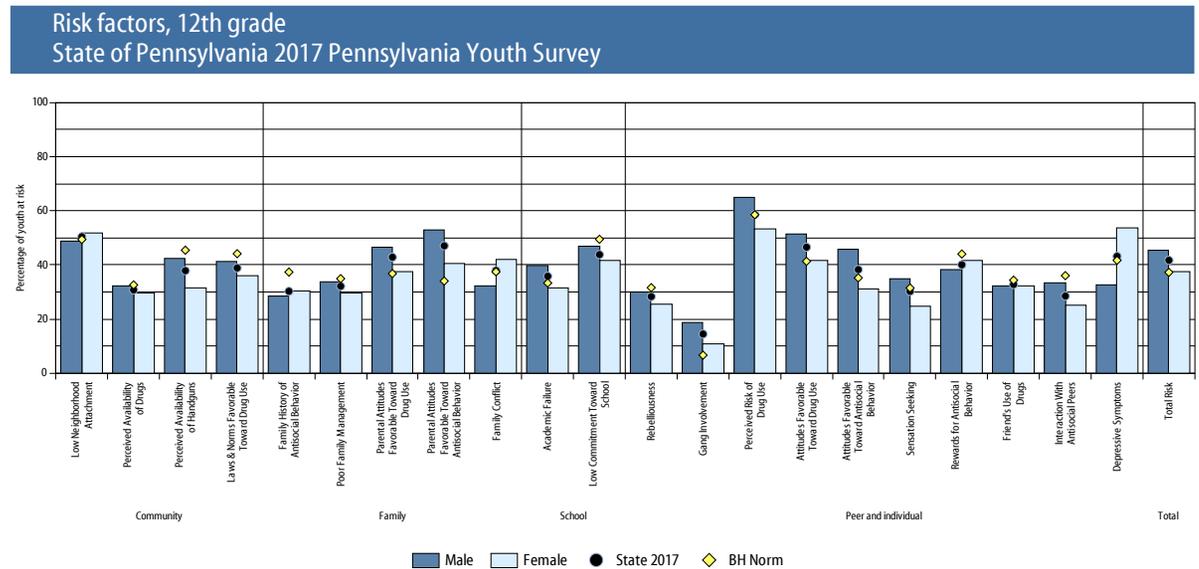
“Total Risk” is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

“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.)

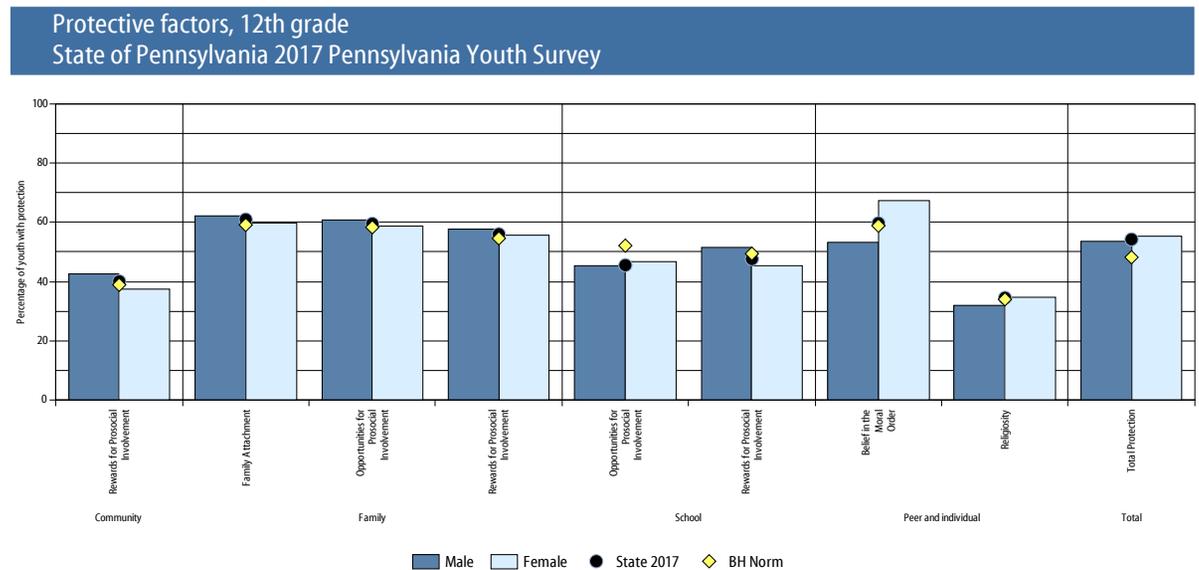
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: 12th Grade

Risk factor scales by Gender, 12th grade, Statewide Sample 2017 PAYS



Protective factor scales by Gender, 12th grade, Statewide Sample 2017 PAYS



NOTE:

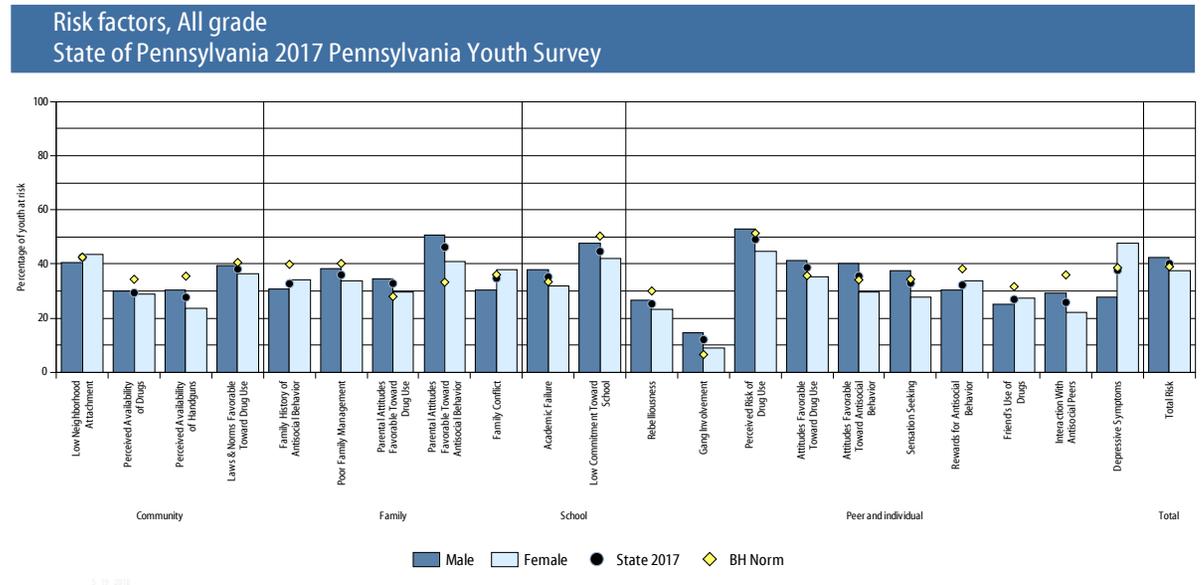
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

"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.)

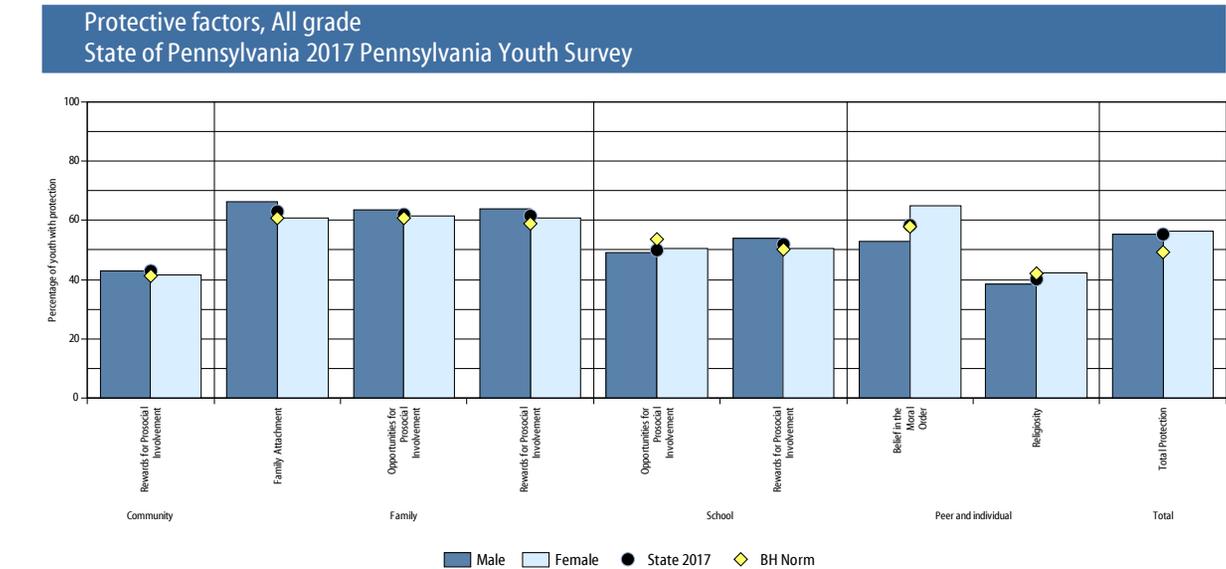
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: All Grades Combined

Risk factor scales by Gender All Grades, Statewide Sample 2017 PAYS



Protective factor scales by Gender All Grades, Statewide Sample 2017 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 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.