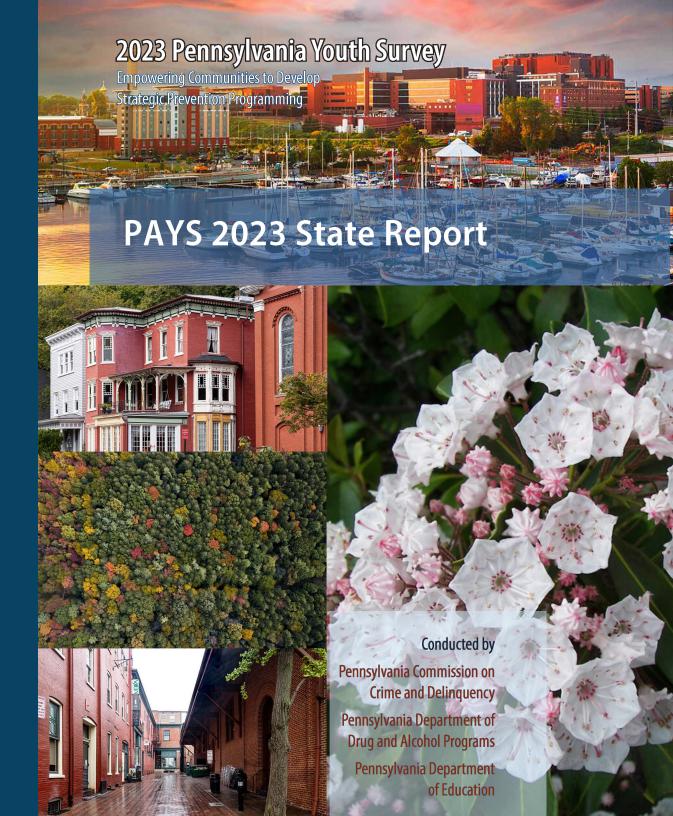
Pennsylvania Youth Survey (PAYS)



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# Pennsylvania Youth Survey

State Report 2023

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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We would like to extend our sincere appreciation to the 1,048 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 2023 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 survey administration a success.

Finally, the success of the 2023 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 2025 survey. If interested, please contact Alise Barr at PCCD at (814) 863-2568.

PAYS 2023 Acknowledgements

# 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. 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 2023 PAYS was the seventeenth biennial administration (1989-2023). Comparisons in this report were made between the results of the 2019, 2021, and 2023 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, student sleep habits, 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 PAYS has been that their responses will remain anonymous and confidential. No administered to individual student-level data can be obtained from the data set, youth 17 times and the results are reported in aggregate at the local, county, in the Fall of and State levels. odd-numbered vears.

PAYS is a primary tool in Pennsylvania's prevention approach of Fall 1989. 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

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beginning in

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 265,606 public and private school students throughout the State participated in the fall 2023 Pennsylvania Youth Survey. After odd-grade and invalid/dishonest surveys were removed, a total of 262,535 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 456 school districts and charter/private schools.

There were 1,048 schools that chose to participate in the 2023 PAYS. 2021-2022 PDE enrollment figures show that there were a total of 501,752 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 262,535 valid participants in grades 6, 8, 10, and 12 (a participation rate of 52.3%), represented evenly across the State.

For PAYS, there was nearly an equal number of males and females who took the survey in all grades (48.2% female, 49.8% male, 1.9% "other"). In terms of ethnicity, 82.9% of participants were non-Hispanic and 17.1% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (65.9%), Black/African American (11.2%), or left their race unmarked (8.0%). The other race groups accounted for 15.0% of the respondents.

See the 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 2023 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 scale in PA that was higher than the BH Norm in 2023 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (13.2 – 17.0 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 similar to the BH Norm for most scales. Two scales (School Opportunities for Prosocial Involvement and Belief in the Moral Order) in Pennsylvania showed protection scores that were lower than the BH Norm for all grades total.

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 2023 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, Pennsylvania youth in grades 10 and 12 indicated lower lifetime alcohol use rates than youth in same grades in the national sample. Pennsylvania rates were 3.3 percentage points lower than national rates in the 10th grade and 5.9 percentage points lower than national rates in the 12th grade. In regard to tobacco use, Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime cigarette use rates than youth in same grades in the national sample. Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime PED and Steroid use rates than youth in same grades in the national sample.

As with lifetime use, there are few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. In comparison to data gathered through the national MTF Survey, Pennsylvania youth in the 8th grade indicated past month alcohol use that was higher than that of youth in same grade in the national sample (0.5 percentage points higher in the 8th grade). Pennsylvania 12th graders indicated higher past-month cigarette use (4.5% for Pennsylvania 12th graders compared to 2.9% for MTF). 2023 was the fifth PAYS administration to gather past-month e-cigarette use data. For e-cigarettes/vape devices, the past-month use rate was lower in all grades compared to the MTF.

In regard to data changes from 2021 to 2023, positive decreases were seen for many substances. PAYS data also show lifetime alcohol use for all grades decreased, with the greatest decrease of 10.2 percentage points for the 10th

grade from 2021 to 2023. For all students combined, lifetime alcohol use decreased from 34.8% in 2021 to 28.9% in 2023. Since the 2021 survey, lifetime cigarette use decreased in the 8th, 10th, and 12th grades, with a decrease of 1.3 percentage points in the 8th grade, 3.2 percentage points in the 10th grade, 3.7 percentage points in the 12th grade, and 2.0 percentage points overall. Marijuana experimentation rates decreased, with the 10th grade showing a decrease of 2.4 percentage points from 2021 to 2023. Since the 2021 survey, lifetime prescription drug use rates remained similar for most substances and grades though over-the counter drug use among 6th graders increased (2.9% in 2021 and 4.1% in 2023).

Table ES-1 **Risk Factor Scales** 

		6	th		8th				10th				12	 2th		All Grades				
	I I I I I I I I I I I I I I I I I I I			State State State 2019 2021 2023 BH Norm			State State State BH Norm			State 2019	State 2021	State 2023	BH Norm	State State 2019 2021						
Community																				
Low Neighborhood Attachment	44.5	44.2	46.6	51.4	35.2	36.0	38.4	39.6	42.5	42.9	43.6	45.5	51.9	53.4	49.9	50.5	43.5	44.2	44.6	46.1
Perceived Availability of Drugs	33.5	34.3	33.4	48.0	25.5	23.1	21.8	35.3	25.4	18.5	14.7	22.8	26.8	18.6	12.6	17.9	276	23.3	20.1	29.2
Perceived Availability of Handguns	13.9	16.0	17.3	27.8	21.8	23.1	22.6	31.8	28.0	27.0	26.4	33.4	34.6	31.8	29.9	36.6	24.9	24.8	24.4	32.3
Laws & Norms Favorable Toward Drug Use	45.8	46.7	51.6	45.6	32.4	32.6	31.3	35.6	40.3	40.7	37.2	41.0	37.7	39.0	34.2	40.3	38.8	39.7	38.2	36.8
Family																				
Family History of Antisocial Behavior	37.5	33.7	39.1	30.9	30.7	27.8	28.0	30.7	28.8	24.9	22.3	27.0	27.0	23.1	21.8	24.2	30.9	27.2	27.3	27.7
Poor Family Management	43.8	47.5	54.3	61.2	34.0	38.9	39.7	44.9	35.1	35.9	34.2	35.9	29.3	27.0	22.3	24.8	35.4	37.1	37.1	41.9
Parental Attitudes Favorable Toward Drug Use	17.4	18.5	21.9	22.4	26.6	29.7	28.8	26.4	43.5	42.7	40.2	32.1	42.2	41.9	39.1	34.3	32.8	33.6	33.0	25.7
Parental Attitudes Favorable Toward Antisocial Behavior	53.3	57.9	66.4	49.4	41.7	47.2	51.0	37.8	50.4	51.8	52.3	38.0	47.7	49.4	50.7	36.1	48.2	51.5	54.7	38.9
Family Conflict	35.1	32.7	37.3	38.1	30.1	28.3	29.7	32.2	34.2	34.0	31.9	35.1	36.6	35.3	33.4	35.5	34.0	32.6	32.9	35.1
School																				
Academic Failure	34.4	38.1	37.6	42.6	38.3	43.0	38.0	54.7	38.5	44.7	37.8	44.0	36.6	40.7	35.8	40.9	37.0	41.7	37.3	43.2
Low Commitment Toward School	45.4	50.3	58.6	69.2	52.7	58.3	61.5	67.4	55.3	61.7	58.6	63.9	48.6	53.1	47.7	55.9	50.6	56.0	56.6	67.4
Peer And Individual																				
Rebelliousness	27.2	27.7	32.8	35.9	18.3	17.7	18.6	22.5	24.4	21.6	19.6	22.6	25.2	22.2	20.4	22.7	23.7	22.2	22.5	23.8
Perceived Risk of Drug Use	48.8	51.6	37.5	54.1	43.2	44.8	31.0	48.3	46.7	45.7	24.6	42.2	58.2	57.1	35.8	49.4	49.2	49.7	31.9	49.7
Attitudes Favorable Toward Drug Use	22.4	21.5	22.2	30.6	40.7	40.9	36.7	45.7	45.0	42.7	37.1	38.2	45.5	44.4	41.5	42.3	38.7	37.7	34.8	38.8
Attitudes Favorable Toward Antisocial Behavior	41.2	47.4	54.4	54.6	32.0	36.8	38.3	38.5	39.8	42.8	42.2	42.0	39.7	43.1	44.1	40.2	38.1	42.5	44.4	43.5
Sensation Seeking	39.6	46.9	64.9	36.8	30.7	34.9	43.4	34.8	33.6	31.8	35.5	34.9	29.4	26.2	27.5	31.5	33.2	34.6	41.3	34.4
Rewards for Antisocial Behavior	17.2	16.4	17.8	18.2	32.6	29.5	29.5	35.0	34.5	28.9	28.7	33.9	37.2	31.7	31.8	36.6	30.7	26.9	27.3	33.3
Friend's Use of Drugs	10.5	9.3	10.6	18.9	28.3	22.7	21.7	31.3	29.8	19.0	15.8	21.4	28.8	21.1	17.4	21.4	24.7	18.2	16.5	25.2

Table ES-2 **Protective Factor Scales** 

		61	th			81	th		10th				12th				All Grades			
	State 2019	State 2021	State 2023	BH Norm																
Community																				
Rewards for Prosocial Involvement	39.7	34.4	35.2	40.7	43.2	39.9	42.2	37.5	38.5	36.9	38.7	34.4	39.6	37.9	39.5	34.7	40.3	37.3	39.0	36.1
amily																				
Family Attachment	62.1	59.4	61.1	62.2	61.8	60.9	70.3	61.7	64.6	61.6	69.9	63.4	60.6	57.8	68.9	62.3	62.3	59.9	67.8	62.5
Opportunities for Prosocial Involvement	54.8	52.4	52.9	48.5	68.0	66.2	68.2	64.0	64.3	61.6	67.4	63.2	60.1	58.8	66.5	61.4	61.9	59.9	64.1	59.1
Rewards for Prosocial Involvement	57.4	55.1	43.3	41.2	67.4	63.7	61.5	58.3	60.9	55.1	57.2	53.4	55.5	51.5	55.6	52.2	60.3	56.3	54.7	50.8
School																				
Opportunities for Prosocial Involvement	54.2	52.0	49.2	58.6	47.0	44.5	45.0	51.5	39.3	38.0	39.1	51.6	43.3	40.8	44.8	51.6	45.7	43.6	44.3	49.3
Rewards for Prosocial Involvement	57.1	58.1	53.6	50.8	51.7	54.4	57.3	51.4	41.5	44.2	48.0	47.2	43.2	45.9	50.8	48.3	48.1	50.3	52.3	47.7
Peer And Individual																				
Religiosity	40.5	37.8	36.9	38.6	40.5	34.4	52.4	44.6	36.0	29.3	60.9	52.9	31.3	25.1	60.8	54.0	37.0	54.6	53.5	49.1
Belief In The Moral Order	45.8	41.5	39.7	39.8	62.0	54.7	37.5	38.1	62.2	60.4	32.1	32.2	61.7	60.3	27.1	28.1	58.2	31.4	33.9	36.9
Total																				
Total Protection	52.5	49.4	47.4	46.7	59.3	60.2	54.2	51.2	55.0	55.7	51.6	49.8	54.3	52.4	50.8	48.2	57.4	55.3	54.4	49.2

Table ES-3

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

		Alcohol (Li	fetime Use)			Alcohol (3	0-Day Use)		Binge Drinking					
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023		
6th	16.7	13.9	13.7	n/a	3.2	3.1	4.3	n/a	1.2	1.0	1.0	n/a		
8th	32.3	26.9	21.5	20.1	8.4	6.9	6.4	5.9	2.9	2.0	1.8	2.0		
10th	52.0	42.7	32.5	35.8	21.6	16.1	11.4	13.7	8.4	5.3	3.7	5.4		
12th	63.0	55.2	46.9	52.8	33.9	27.4	23.8	24.3	17.2	11.8	9.5	10.2		
All	41.0	34.8	28.9	n/a	16.8	13.4	11.5	n/a	7.4	5.0	4.0	n/a		

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

	Ciga	arettes (L	ifetime l	Jse)	Cig	arettes (	30-Day U	lse)	Smokele	ess Tobac	co (Lifeti	me Use)	Smokel	ess Toba	cco (30-D	ay Use)	E-Ci	garettes	(30-Day	Use)
Grade	State 2019	State 2021	State 2023	MTF 2023																
6th	2.3	2.0	1.7	n/a	0.5	0.3	0.8	n/a	1.1	0.7	0.9	n/a	0.3	0.2	0.4	n/a	3.8	2.8	2.4	n/a
8th	6.9	5.4	4.1	5.8	1.9	1.4	1.4	1.1	2.6	1.8	1.6	4.5	0.9	0.4	0.7	1.6	12.5	9.2	5.5	7.0
10th	12.2	9.6	6.4	9.4	4.0	2.9	2.9	2.3	6.4	3.9	3.2	5.5	2.1	1.3	1.3	2.3	26.5	16.2	8.4	11.9
12th	21.9	15.3	11.6	15.0	7.5	4.5	4.5	2.9	11.8	7.4	6.0	7.8	5.0	2.2	2.7	2.5	33.1	23.7	14.9	16.9
All	10.8	8.1	6.1	n/a	3.5	2.3	2.3	n/a	5.5	3.5	3.0	n/a	2.1	1.0	1.3	n/a	19.0	13.0	7.9	n/a

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

	Ma	arijuana (L	ifetime U	se)	М	arijuana (	30-Day Us	e)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	1.3	1.2	1.7	n/a	0.5	0.4	0.7	n/a
8th	7.4	5.7	5.6	11.5	4.0	2.7	2.7	4.7
10th	22.4	14.8	12.4	22.5	12.9	8.0	6.8	10.3
12th	37.5	30.4	26.2	36.5	20.8	16.8	14.6	18.4

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

	In	halants (L	ifetime Us	e)	l1	nhalants (3	30-Day Use	2)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	4.4	5.0	5.8	n/a	2.0	1.8	2.4	n/a
8th	5.7	4.4	4.0	9.0	1.7	1.4	1.2	2.6
10th	5.0	4.3	3.6	6.5	1.1	1.1	0.6	0.9
12th	4.7	3.7	2.9	6.3	0.8	0.5	0.5	1.2
All	4.9	4.3	4.0	n/a	1.4	1.2	1.2	n/a

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

		PEDs &	Steroids		Presc	ription f	Pain Reli	evers	Pres	cription	tranquil	izers	Pre	scriptior	n stimula	ints	Over-the-	2019     2021     20       2.7     2.9     4.       3.0     2.4     2.       4.9     2.8     3.		e purpose
Grade	State 2019	State 2021	State 2023	MTF 2023			State 2023	MTF 2023												
6th	0.6	0.5	1.1	n/a	2.2	3.1	3.2	n/a	0.5	0.5	0.6	n/a	0.9	0.9	1.5	n/a	2.7	2.9	4.1	n/a
8th	0.7	0.6	0.7	1.2	3.3	3.2	3.2	n/a	1.0	0.7	0.5	n/a	1.6	1.6	1.4	n/a	3.0	2.4	2.5	n/a
10th	0.8	0.8	0.6	1.2	4.9	2.8	2.9	n/a	2.5	1.1	0.8	n/a	3.4	1.9	1.7	n/a	4.9	2.8	3.3	n/a
12th	0.9	0.6	0.7	0.9	6.1	3.3	2.9	n/a	3.3	1.7	1.1	n/a	4.2	2.9	2.4	n/a	5.1	3.3	3.5	n/a
All	0.8	0.7	0.7	n/a	4.1	3.1	3.0	n/a	1.9	1.0	0.8	n/a	2.5	1.8	1.8	n/a	3.9	2.9	3.3	n/a

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

		PEDs &	Steroids		Pres	cription f	Pain Relie	vers	Pre	scription	tranquili	zers	Pre	escription	n stimulaı	nts	ı	ne-Count pose of g		
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023												
6th	0.3	0.1	0.3	n/a	1.1	1.1	1.2	n/a	0.2	0.1	0.2	n/a	0.5	0.3	0.6	n/a	1.5	1.3	2.3	n/a
8th	0.2	0.2	0.2	0.3	1.1	1.2	0.9	n/a	0.3	0.2	0.2	n/a	0.6	0.6	0.5	n/a	1.4	0.9	1.2	n/a
10th	0.2	0.3	0.2	0.4	1.2	0.7	0.9	n/a	0.7	0.2	0.1	n/a	1.1	0.5	0.4	n/a	1.4	0.8	1.2	n/a
12th	0.3	0.1	0.2	0.5	1.1	0.5	0.6	n/a	0.7	0.2	0.2	n/a	1.0	0.5	0.6	n/a	1.1	0.6	1.0	n/a
All	0.2	0.2	0.2	n/a	1.1	0.9	0.9	n/a	0.5	0.2	0.2	n/a	0.8	0.5	0.5	n/a	1.3	0.9	1.4	n/a

## Table ES-9 Other Illegal Drugs: Lifetime Use \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Her	oin		ŀ	Hallucii	nogen:	s		Ecst	tasy		S	ynthet	ic drug	JS	С	ocaine	/Crack	(*	Met	hamp	hetami	ines
Grade	State 2019		State 2023	MTF 2023	l				State 2019						State 2023		State 2019			l	State 2019		State 2023	1 1
6th	0.1	0.2	0.3	n/a	0.2	0.2	0.4	n/a	0.1	0.2	0.4	n/a	1.7	1.6	1.6	n/a	n/a	n/a	0.4	n/a	0.2	0.2	0.7	n/a
8th	0.1	0.2	0.2	0.8	0.7	0.7	0.5	2.1	0.5	0.4	0.2	0.9	1.6	1.2	1.5	n/a	n/a	n/a	0.2	1.0	0.2	0.3	0.2	0.3
10th	0.4	0.2	0.3	0.5	3.8	2.3	1.7	3.6	1.5	0.8	0.5	1.4	1.3	0.9	1.3	n/a	n/a	n/a	0.5	1.0	0.4	0.3	0.3	0.5
12th	0.3	0.4	0.1	0.2	5.9	5.5	4.8	6.6	2.1	1.6	0.9	1.6	1.4	0.7	1.4	n/a	n/a	n/a	0.7	1.3	0.4	0.6	0.3	0.6
All	0.2	0.3	0.2	n/a	2.7	2.2	1.9	n/a	1.1	0.7	0.5	n/a	1.5	1.1	1.4	n/a	n/a	n/a	0.5	n/a	0.3	0.3	0.4	n/a

## Table ES-10 Other Illegal Drugs: Past-Month Use \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Her	oin		F	Halluci	nogen	s		Ecs	tasy		S	ynthet	ic drug	js	C	ocaine	:/Crack	(*	Met	hamp	hetami	ines
Grade	State 2019		State 2023		State 2019			I	I .		State 2023				l							l		MTF 2023
6th	0.0	0.0	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.9	0.5	0.7	n/a	n/a	n/a	0.1	n/a	0.0	0.0	0.3	n/a
8th	0.0	0.0	0.1	0.3	0.2	0.2	0.2	0.5	0.2	0.0	0.1	0.3	0.6	0.4	0.5	n/a	n/a	n/a	0.0	0.3	0.1	0.1	0.1	0.0
10th	0.1	0.0	0.0	0.2	0.9	0.4	0.6	0.8	0.3	0.2	0.1	0.3	0.3	0.2	0.4	n/a	n/a	n/a	0.1	0.4	0.1	0.1	0.1	0.3
12th	0.1	0.0	0.0	0.1	1.4	1.0	1.1	1.6	0.3	0.3	0.2	0.3	0.3	0.1	0.4	n/a	n/a	n/a	0.1	0.4	0.1	0.1	0.1	0.1
All	0.0	0.0	0.1	n/a	0.7	0.4	0.5	n/a	0.2	0.1	0.1	n/a	0.5	0.3	0.5	n/a	n/a	n/a	0.1	n/a	0.1	0.1	0.1	n/a

## Summary

In the 2023 administration of PAYS, 1,072 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 scale in PA that was higher than the BH Norm in 2023 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (13.2 – 17.0 percentage points higher than the BH Norm in each grade).

#### **Protective Factor Profiles**

In general, Pennsylvania protection tended to be similar to the BH Norm for most scales. Two scales (School Opportunities f or Prosocial Involvement and Belief in the Moral Order) in Pennsylvania showed protection scores that were lower than the BH Norm for all grades total.

#### Substance Use for Pennsylvania

When looking at the Pennsylvania and MTF lifetime survey results, Pennsylvania youth in grades 10 and 12 indicated lower lifetime alcohol use rates than youth in same grades in the national sample. Pennsylvania rates were 3.3 percentage points lower than national rates in the 10th grade and 5.9 percentage points lower than national rates in the 12th grade. In regard to tobacco use, Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime cigarette use rates than youth in same grades in the national sample. Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime PED and Steroid use rates than youth in same grades in the national sample.

As with lifetime use, there are few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. In comparison to data gathered through the national MTF Survey, Pennsylvania youth in the 8th grade indicated past month alcohol use that was higher than that of youth in same grade in the national sample (0.5 percentage points higher in the 8th grade). Pennsylvania 12th graders indicated higher past-month cigarette use (4.5% for Pennsylvania 12th graders

compared to 2.9% for MTF). 2023 was the fifth PAYS administration to gather past-month e-cigarette use data. For e-cigarettes/vape devices, the past-month use rate was lower in all grades compared to the MTF.

In regard to data changes from 2021 to 2023, positive decreases were seen for many substances. PAYS data also show lifetime alcohol use for all grades decreased, with the greatest decrease of 10.2 percentage points for the 10th grade from 2021 to 2023. For all students combined, lifetime alcohol use decreased from 34.8% in 2021 to 28.9% in 2023. Since the 2021 survey, lifetime cigarette use decreased in the 8th, 10th, and 12th grades, with a decrease of 1.3 percentage points in the 8th grade, 3.2 percentage points in the 10th grade, 3.7 percentage points in the 12th grade, and 2.0 percentage points overall. Marijuana experimentation rates decreased, with the 10th grade showing a decrease of 2.4 percentage points from 2021 to 2023. Since the 2021 survey, lifetime prescription drug use rates remained similar for most substances and grades though over-the counter drug use among 6th graders increased (2.9% in 2021 and 4.1% in 2023)

#### Substance Use by Gender

The 2021 survey included a new response option of "Other" to the gender demographics question. A total of 5,003 youth (1.9% of the survey population) marked this "Other" response in 2023.

The data show that males and females are 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 male students report higher lifetime use is for smokeless tobacco use, in which a higher percentage of male students in all grades reported use of smokeless tobacco (3.3% lifetime use by males, 1.6% lifetime use by females, and 3.3% for those indicating "other").

Students that marked "other" to the gender question reported a higher lifetime use rate for alcohol (26.3% lifetime use for males, 28.9% for females, and 39.5% for those indicating "other"), cigarettes (4.9% lifetime use for males,

5.6% for females, and 11.2% for those indicating "other"), marijuana (9.4% for males, 11.6% for females, and 17.8% for those indicating "other"), inhalants (4.0% for males, 4.2% for females, and 10.0% for those indicating "other"), narcotic prescription pain relievers (2.6% for males, 3.1% for females, and 6.1% for those indicating "other"), and over-the-counter drugs to get high (3.5% for males, 3.0% for females, and 5.3% for those indicating "other").

While past-month cigarette use rates are similar for female and male students in all grades (1.9% for male, 1.8% for female), the use rate for students marking "other" was significantly higher (4.1%). Students marking "other" also reported higher rates of vaping (5.8% for male, 8.9% for female, and 11.2% for those indicating "other"), marijuana use (5.1% for male, 6.1% for female, and 8.9% for those indicating "other"), and inhalant use (1.1% for male, 1.2% for female, and 3.2% for those indicating "other").

#### Perceived Harmfulness of ATODs:

Of the eight substance use categories, students perceived the greatest risk in using prescription drugs not prescribed to them (89.3% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (89.0% perceived moderate or great risk overall). Of the eight categories, students perceived the least amount of risk in trying marijuana once or twice (55.1% of students perceived moderate or great risk) and using marijuana once or twice a week (73.2% of students perceived great or moderate risk).

#### Sources of Obtaining Alcohol

For all grades combined, 33.6% of alcohol-using youth indicated their parents provided it; 27.1% took the alcohol without permission, stole it, or found it; 24.1% indicated that friends or siblings over 21 bought it for them; 20.3% indicated friends or siblings under the age of 21 provided it; 19.1% indicated their friends' parents provided it; 16.7% gave someone money to buy it for them; 14.5% indicated other relatives provided it; 6.0% bought it at a store; 3.5% bought it at a restaurant, bar, or club; 2.3% bought it at a public event such as a concert or sporting event; and 18.0% obtained it from another source not listed.

#### Sources of Obtaining Prescription Drugs

For all grades combined, 47.2% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 37.0% indicated that a friend or family member gave them to the student, 13.9% indicated that they bought them from someone, 9.3% indicated they took them from relatives who were not living in their home, 9.3% indicated they ordered them over the Internet, and 8.3% indicated they took them from someone not related to them.

#### 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 similar to or lower than this national average. Rates of being suspended from school are 0.7 percentage points to 3.1 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 (4.3% for Pennsylvania, all grades combined; 5.3% for the BH Norm).

Increases were seen since 2021 in all grades, with antisocial behavior rates increasing up to 3.4 percentage points for a few of the measures. On the other hand, a significant decrease was seen in 12th grade students reporting being drunk or high at school with a 1.2 percentage point decrease.

Data show that more males typically engage in school suspension than females and those indicating "other" for the gender question. These tables also show that students who indicated "other" for the gender question, reported being drunk or high at school more often than males and females (3.6% for males and 4.3% for females compared to 8.1% for those indicating "other").

#### School-Related Violence and Drug Behaviors

Of all students surveyed, 18.5% indicate having been threatened at school at least once in the past year. In regard to actual attacks, 7.3% of all students indicated having been attacked at school. In the past month,1.4% of students in the state sample indicated that they brought a weapon to school at least one time.

The 12th grade saw the highest rates of past-year reports of bringing a weapon to school (1.8%), and the 10th grade had the highest rate of being offered drugs at school (12.5%). However, 6th graders indicated the highest rates of being attacked at school in the past year (10.9%), and 8th graders indicated the highest rates of being threatened at school in the past year (24.3%).

#### **Bullying and Internet Safety**

Just under one in four (26.5% of all students) indicated they had been bullied in the past year, 15.5% reported inappropriate sexual contact through technology, and 5.9% said they had stayed home from school in the past year due to worries about bullying. Rates of being bullied were highest in the 6th grade (34.3% of 6th graders reported having been bullied in the past 12 months). Students were also asked about adults at school stopping bullying when they see it or hear it. Of all students, 58.4% marked "YES!" or "yes" to this question, and 6th graders reported the highest response to this question (73.7% marked "YES!" or "yes").

#### Gang Involvement

Until 2023, PAYS gathered some basic data regarding youth gang involvement. In 2021, 2.4% of all students indicated that they had belonged to a gang at some point in their life, and 1.7% indicated their gang had a name. In 2023, the question was removed from the survey.

#### Gambling

About on quarter of students (21.7%) have gambled in their lifetime and just under one in ten (9.3%) have gambled in the past month. Past-month gambling increased 3.4 percentage points in all grades from 2021 (5.9%) to 2023 (9.3%). The individual activities most often participated in during the past year were playing the lottery (7.9% of all students, a grade-level peak of 8.6% in the 12th grade), games such as poker/card games/dice/pool/darts (7.9% of all students, a grade-level peak of 10.8% in the 12th grade), and sporting events/sports pools/fantasy sports (7.7% of all students, a grade-level peak of 9.5% in the 12th grade).

#### **Dangerous Driving Behaviors**

PAYS data show that 0.8% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 2.5% of that grade. Fewer students reported driving after smoking marijuana in the past year in 2023 (1.1% of the total survey sample population, and 3.7% of 12th grade respondents).

#### Mental Health, Suicide, Stress, Sleep, and Trauma Indicators

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

- The survey data show that 37.3% of all students indicated (via responding "YES!" or "yes" to the statement) that they had felt depressed or sad most days in the past 12 months; 24.4% of all students indicated that they sometimes thought life is not worth it; 36.0% of all students indicated that "at times I think I am no good at all"; and 23.6% indicated that they felt that they were a failure. Further 14.8% 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 students thinking "I am no good at all" in the past year; an increase for all grades combined of 2.6 percentage points (38.6% in 2021 and 36.0% in 2023). The rate of students who reported "all in all, I am inclined to think I am failure" also decreased for all grades combined from 26.2% in 2021 to 23.6% in 2023.
- In 2023, the past month overall mental health question was added. For all grades combined, 71.3% of students indicated their past month overall mental health was good.
- In terms of sleep problems, 35.7% of all students indicated that slept less an 7 hours a night on an average school night, and 64.4% indicated they felt tired or sleeping during the day "every day" or "several times" during the past two weeks.
- 34.8% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year

- The percentage of students that indicated having the stress of worrying that food at home would run out increased from 9.1% of all students in 2021 to 20.7% of students in 2023. 10.7% indicated having the stress of having to skip a meal due to a lack of money.
- 16.1% of students in all grades combined indicated that they had considered suicide in the past year.
- 12.5% 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: 10.6% of 6th graders, 12.8% of 8th graders, 12.8% of 10th graders, and 13.7% 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, 4.1% of 6th graders, 5.3% of 8th graders, 5.4% of 10th graders, 5.9% of 12th graders, and 5.2% 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 nearly four times higher than non-depressed students. Depressed students indicate use rates that are nearly about seven times higher for past-month vape use and nearly eight 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, 19.7% 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, 48.7% 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, 32.0% had considered

suicide in the past year, 24.5% had made a suicide plan in the past year, and 10.5% 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," 27.1% indicated they had used alcohol in their lifetime and 10.1% indicated they had used alcohol in the past month. In contrast, of students who marked "NO!" or "no" to that statement, 43.8% indicated they had used alcohol in their lifetime and 21.8% 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 five times higher than the "A" students' use rates, and past month cigarette use rates that are over five 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, 5.2% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (8.2%). Of youth who indicated they had worried about food sometimes, past-month marijuana use increased to 10.7%. Of youth who indicated they worried about food often, 13.7% of those youth indicated regular marijuana use.

#### Perceived Parental Acceptability and Substance Use

A large majority of students perceive parents disapprove of substance use. Of all students, 94.1% indicated their parents felt it was "Wrong" or "Very wrong" to use tobacco, 90.4% perceived parental disapproval of marijuana use, 92.9% perceived parental disapproval of having 1-2 drinks nearly every day use, and 94.5% perceived parental disapproval of prescription drug use. Relatively few students (6.0% lifetime, 2.5% 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 21.4% for lifetime use and 10.9% for 30-day use. Rates of use continue to increase as the perceived parental acceptability increases.

#### Perceived Peer Acceptability and Substance Use

When youth thought there was "No or very little chance" that they would be seen as cool if they used marijuana, only 5.7% had tried marijuana in their lifetime and only 2.7% 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 (19.6%) and just under four times higher for past-month use (10.0%). 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 2023 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 11.0% indicated having moved one or two times in the past year, and 1.9% have moved three or more times in the past year. Also, 21.6% of students indicated they had changed homes one or two times in the past three years, and 4.7% changed homes three or more times 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 Besides Prevention (CSAP) project called the Six-State Consortium. measuring risk and The goal of the Consortium was to develop a survey that protective factors, provided scientifically sound information about the levels the survey also assesses of risk and protection in a community. The survey has the current prevalence of been further refined through the Diffusion Consortium alcohol, tobacco, Project that involved seven states and was funded by and other four Federal Agencies: the National Institute of Drug drug use. 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.

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/crack, 12) methamphetamines, 13) Performance Enhancing Drugs (PEDs)/

steroids, 14) prescription pain relievers, 15) prescription tranquilizers, and 16) 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 2023 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" 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 2018 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 2016-17, contained completed questionnaires from approximately 970,070 students in grades 6, 8, 10, and 12, and included data from the 2017 PAYS. These cut-points were used to calculate the percentages of youth at-risk and youth with-protection presented in this report.

The paper version of the 2023 PAYS consisted of three main forms — a Form A with 99 questions, a Form B with 95 questions, a Form C with 104 questions, and a Spanish form with 98 questions. Each form consisted of various combinations of question groupings, with all three forms containing question group X first, with administered the survey. Form A including question groupings A, D, B, E, and C; Teachers were given a script to read and were asked to provide 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 and because some are "mark all that apply" questions, a total of 305 questions were asked of students across all four forms. The questions were printed in three test booklets that were machine scoreable.

The online version of the 2023 PAYS form included all question blocks (X, A, B, C, D, E, and F), with block X leading each online form and the other blocks rotating to imitate the paper structure. Roughly 95% of 2023 PAYS forms were completed in online format, and 5% in paper format.

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 2023 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 2023 that the survey was scheduled to be administered in the fall of 2023 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.

information on During September through November, Bach Harrison, participation. 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. Most schools administered the survey using the PAYS online format; roughly 95% of students took the survey online and 5% took the survey in paper format. 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 teachers were asked to stand at the front of

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Classroom

teachers

the class throughout the survey administration. 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 2023 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 1,048 public and private school students throughout the State participated in the Fall 2023 Pennsylvania Youth Survey. After invalid/dishonest/odd-grade surveys were removed, a total of 262,535 surveys were represented in final local-level reports.

Enrollment figures from the 2021-2022 PDE Public School Enrollment Reports web site show that for the 2021-2022 school year (the most current enrollment available through project planning reporting) the total enrollment in grades 6, 8, 10, and 12 was 501,752. The enrollment in those grades for the school districts, charter schools, and private schools that signed on to administer the 2023 PAYS was 361,092. Thus, the final participation rate for the full state eligible population was 52.3%, and the

participation rate of eligible participating schools was 72.7%. 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 29,225 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 265,606 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 262,535 valid surveys completed by students in grades 6, 8, 10, and 12.

#### **Total PAYS Project Survey Participants**

African American, and 23.0%
accounted for other groups.

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 (48.2% female, 49.8% male, 1.9% "other"). In terms of ethnicity, 82.9% of participants were non-Hispanic and 17.1% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (65.9%), Black/African American (11.2%), or left their race unmarked (8.0%). The other race groups accounted for 15.0% 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 2019, 2021, and 2023 PAYS statewide samples (the results of which are presented in this report) was 6th, 8th, 10th and 12th

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PAYS respondents were

white, 11.2% were

grade students enrolled in public schools across Pennsylvania. A singlestage 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 2023 statewide sample continued and improved upon the 2017, 2019, and 2021 statewide samples to ensure continuity. Bach Harrison worked with the 2023 sample to update it based on current school availability and grade ranges.

The schools involved in the 2019, 2021, and 2023 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 Of the 248 county and in descending order of grade enrollment before schools selected sampling. Within each stratum, schools were selected with for the sample frame, probability proportional to size, with size being the grade 183 participated in the enrollment of the school. While most selected schools 2021 Statewide 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 selfweighting 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 2023 was that there were 249 schools included in the 2023 sample frame. Of these combinations, 183 participated in the 2023 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 248 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 2019/2021/2023 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:

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Sample.

- 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: 249 schools (some with multiple grades) were included in the sample. Out of these, 183, or 73.5%, participated in the survey.
- Student Participation: There were a total of 501,752 students in the state's eligible population and 47,550 students eligible in sampled schools/grades. Out of the state sample, 29,225, or 61.5%, returned usable survey responses for the appropriate grade levels.
- Overall Participation: 73.5% \* 61.5% = 45.2%.

#### Weighting the Statewide Sample

The same weighting strategies that were used in previous PAYS administrations were applied to 2021 data to maintain consistency. A weight has been associated with each response record to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

W = W1 \* f1 \* f2 \* f3

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

#### Statewide Sample Confidence Intervals

When reviewing survey results people often ask, "What is the margin of error?" This is referred to as the "confidence interval," and it reflects the precision of a statistical estimate. For example, a confidence interval of  $\pm 3.0$  points for a drug use prevalence rate of 50.0% means that there is a 95% chance that the true score is between 47.0% and 53.0%.

Table 1-1 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. Finally,

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The same

weighting strategies

that were used in previous

PAYS administrations were

applied to 2023 data to

maintain consistency.

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 278,287 survey questionnaires completed and returned to Bach Harrison for scanning analysis. However, not all of the questionnaires contained valid information for reporting in this State Report. Of these surveys, 3,431 (1.2%) 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 three predetermined dishonesty indicators — 1) the students indicated that they had used the non-existent drug metaclorazoles (2,007 surveys); 2) the students reported an impossibly high level of multiple drug use (1,302 surveys); or 3) the students reported an age that was inconsistent with their grade or their school (1,248 surveys). 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, 9,240 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, 3,080 surveys were eliminated due to students not reporting a grade level, and 1 survey were eliminated due to students marking multiple grades.

Table 1-1
State Sample Confidence Intervals

	State En	rollment			
	of Eligible		State S	ample	Confidence
	#	%	#	%	Interval
All grades	445,886	100%	29,225	100%	<u>+</u> 0.3
6th	105,674	23.7%	8,222	28.1%	<u>+</u> 1.2
8th	111,223	24.9%	8,447	28.9%	<u>+</u> 0.6
10th	118,120	26.5%	6,712	23.0%	<u>+</u> 1.2
12th	110,869	24.9%	5,844	20.0%	<u>+</u> 1.2

A total of 15,752 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 29,476 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, 248 were eliminated because respondents were determined to be dishonest. Surveys deemed to be dishonest were eliminated because of three predetermined dishonesty indicators — 1) the students indicated that they had used the non-existent drug (183 surveys); 2) the students reported an impossibly high level of multiple drug use (116 surveys); or 3) the students reported an age that was inconsistent with their grade or their school (70 surveys). These surveys were not included in the final analyses. A total of 248 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	2019	State	2021	State	2023
	Number	Percent	Number	Percent	Number	Percent
Total Survey Respondents	280,944	100.0	246,081	100.0	262,535	100.0
Survey Respondents by Grade						
6	71,073	25.3	61,883	25.1	67,795	25.8
8	78,994	28.1	72,076	29.3	73,765	28.1
10	72,014	25.6	61,931	25.2	67,290	25.6
12	58,863	21	50,191	20.4	53,685	20.4
Survey Respondents by Gender						
Male	138,807	50.2	121,792	49.8	129,070	49.8
Female	137,444	49.8	114,733	46.9	124,928	48.2
Other	n/a	n/a	7,937	3.2	5,003	1.9
Survey Respondents by Ethnicity						
Yes, of Hispanic, Latino, or Spanish Origin	40,941	14.6	35,218	14.3	44,946	17.1
No, not of Hispanic, Latino, or Spanish origin	240,003	85.4	210,863	85.7	217,589	82.9
Survey Respondents by Race						
Black, African American	26,308	9.4	23,823	9.7	29,320	11.2
American Indian	4,321	1.5	3,446	1.4	3,968	1.5
Asian/Pacific Islander	15,858	5.6	14,769	6	18,630	7.1
White, Caucasian	196,546	70.0	172,381	70.1	172,923	65.9
Multi-racial	17,063	6.1	15,273	6.2	16,730	6.4
Race Unmarked	20,848	7.4	16,389	6.7	20,964	8.0

Figure 1-1

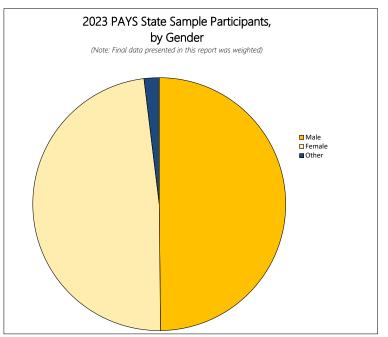


Figure 1-2

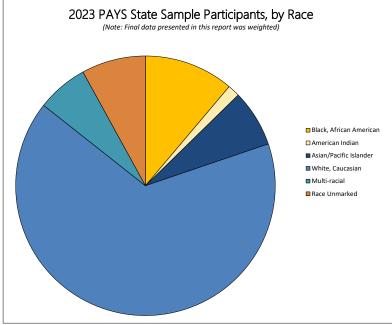
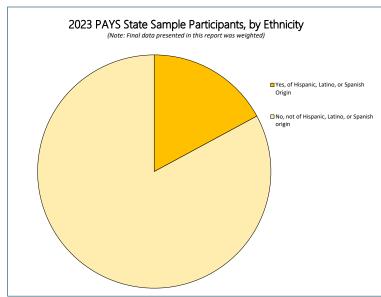


Figure 1-3



# Section 2: Risk and Protective Factors for Substance Misuse, Mental Health Concern and Other Problem Behaviors

Just

The History and Importance of Risk and Protective Factors

PAYS is based upon the Risk and Protective Factor Model. In medical research, risk factors have been found for heart disease and other heath 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 misuse, delinquency, violence, teen pregnancy, and school dropout. research discovered They have also identified a set of protective factors that the risk factors for heart help to buffer the harmful effects of risk.

place youth at risk for Dr. J. David Hawkins, Dr. Richard F. Catalano, and their problem behaviors. 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 misuse, 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. as medical

The risk and protective factors have been organized into the disease, social scientists four important areas of a young person's life – community, have defined risk factors that 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.

#### 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 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

		PR	OBLEM I	BEHAVIC	RS	
YOUTH AT RISK	Substance Misuse	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	<b>√</b>	<b>√</b>			✓	
Low Neighborhood Attachment and Community Disorganization	<b>✓</b>	<b>√</b>			<b>√</b>	

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

The more available drugs are in a community, the higher the risk that young people will misuse 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 suicide risk and homicide rates, firearm availability is included as a risk factor.

# Laws and Norms Favorable Toward Drug Use, Firearms, and Crime

(Linked to Substance Misuse, 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 Misuse, 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. Lower rates of voter participation and parental involvement in schools may 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 2023 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 (51.6% at risk in the 6th grade) while the highest risk scale score for the 8th, 10th, and 12th grades was Low Neighborhood Attachment (38.4% at risk in the 8th grade, 43.6% at risk in the 10th grade, and 49.9% 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 except Laws and Norms Favorable Toward Drug Use. Laws and Norms Favorable Toward Drugs Use was higher for Pennsylvania youth in the 6th grade. All other scale scores within the community domain are significantly lower in Pennsylvania in comparison to the BH Norm.

#### **Protective Factor Scale Results**

The 2023 PAYS collected data for one community domain protective factor scale — Community Rewards for Prosocial Involvement. Protective factor scale scores ranged from as low as 35.2% for the 6th grade up to 42.2% for the 8th grade.

#### Comparisons to 2021 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. For the Low Neighborhood Attachment scale, the scale scores changed little from 2021 to 2023. For the Perceived Availability of Drugs scale, both 10th and 12th grade saw significant decreases (a decrease of 3.8 percentage points in the 10th grade and a decrease of 6.0 percentage points in the 12th grade) since 2021. The Laws and Norms Favorable to Drug Use scale increased 4.9 percentage points for the 6th grade. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data. Protection increased from 2021 to 2023 for all grades for the Rewards for Prosocial Involvement scale.

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 2-2

Community Domain Risk and Protective Factor Scales

		6	th			8	th			10	)th			12	th			Α	II	
	State	State	State	ВН																
	2019	2021	2023	Norm																
Community Risk Factor Scales																				
Low Neighborhood Attachment	44.5	44.2	46.6	51.4	35.2	36.0	38.4	39.6	42.5	42.9	43.6	45.5	51.9	53.4	49.9	50.5	43.5	44.2	44.6	46.1
Perceived Availability of Drugs	33.5	34.3	33.4	48.0	25.5	23.1	21.8	35.3	25.4	18.5	14.7	22.8	26.8	18.6	12.6	17.9	276	23.3	20.1	29.2
Perceived Availability of Handguns	13.9	16.0	17.3	27.8	21.8	23.1	22.6	31.8	28.0	27.0	26.4	33.4	34.6	31.8	29.9	36.6	24.9	24.8	24.4	32.3
Laws & Norms Favorable Toward Drug Use	45.8	46.7	51.6	45.6	32.4	32.6	31.3	35.6	40.3	40.7	37.2	41.0	37.7	39.0	34.2	40.3	38.8	39.7	38.2	36.8
Community Protective Factor Scales																				
Rewards for Prosocial Involvement	39.7	34.4	35.2	40.7	43.2	39.9	42.2	37.5	38.5	36.9	38.7	34.4	39.6	37.9	39.5	34.7	40.3	37.3	39.0	36.1

# 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

		PR	OBLEM I	BEHAVIC	)RS	
YOUTH AT RISK	Substance Misuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
Family						
Family History of the Problem Behavior	✓	✓	<b>✓</b>	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	✓
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement In the Problem Behavior	<b>~</b>	<b>√</b>			<b>√</b>	

Family History of the Problem Behavior (Linked to Substance Misuse, 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 Misuse, 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 Misuse, 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 Misuse, 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. 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 misuse substances 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 66.4% at risk in the 6th grade, 51.0% at risk in the 8th grade, 52.3% at risk in the 10th grade, and 50.7% at risk in the 12th grade). In comparison to the BH Norm, Pennsylvania students in all grades indicated lower risk within the following scale: Poor Family Management (1.7 to 6.9 percentage points lower risk in each grade) and Family Conflict (0.8 to 3.2 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 Antisocial Behavior.

#### **Protective Factor Scale Results**

The 2023 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 all grades, protection was highest for the Family Attachment scale (61.1% with protection in the 6th

grade, 70.3% with protection in the 8th grade, 69.9% with protection in the 10th grade, and 68.9% with protection in the 12th grade). In comparison to the BH Norm, protection scale scores were higher for the 10th and 12th grades for all three scales.

#### Comparisons to 2021 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2021 survey, the scale score for Poor Family Management increased 6.8 percentage points in grade 6. Scale scores for Parental Attitudes Favorable to Antisocial Behavior increased slightly for all grades. 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

		61	th			81	th			10	th			12	th.			Α	dl	
	State	State	State	ВН																
	2019	2021	2023	Norm																
Family Risk Factor Scales																				
Family History of Antisocial Behavior	37.5	33.7	39.1	30.9	30.7	27.8	28.0	30.7	28.8	24.9	22.3	27.0	27.0	23.1	21.8	24.2	30.9	27.2	27.3	27.7
Poor Family Management	43.8	47.5	54.3	61.2	34.0	38.9	39.7	44.9	35.1	35.9	34.2	35.9	29.3	27.0	22.3	24.8	35.4	37.1	37.1	41.9
Parental Attitudes Favorable Toward Drug Use	17.4	18.5	21.9	22.4	26.6	29.7	28.8	26.4	43.5	42.7	40.2	32.1	42.2	41.9	39.1	34.3	32.8	33.6	33.0	25.7
Parental Attitudes Favorable Toward Antisocial Behavior	53.3	57.9	66.4	49.4	41.7	47.2	51.0	37.8	50.4	51.8	52.3	38.0	47.7	49.4	50.7	36.1	48.2	51.5	54.7	38.9
Family Conflict	35.1	32.7	37.3	38.1	30.1	28.3	29.7	32.2	34.2	34.0	31.9	35.1	36.6	35.3	33.4	35.5	34.0	32.6	32.9	35.1
Family Protective Factor Scales																				
Family Attachment	62.1	59.4	61.1	62.2	61.8	60.9	70.3	61.7	64.6	61.6	69.9	63.4	60.6	57.8	68.9	62.3	62.3	59.9	67.8	62.5
Opportunities for Prosocial Involvement	54.8	52.4	52.9	48.5	68.0	66.2	68.2	64.0	64.3	61.6	67.4	63.2	60.1	58.8	66.5	61.4	61.9	59.9	64.1	59.1
Rewards for Prosocial Involvement	57.4	55.1	43.3	41.2	67.4	63.7	61.5	58.3	60.9	55.1	57.2	53.4	55.5	51.5	55.6	52.2	60.3	56.3	54.7	50.8

# **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.

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

Beginning in the late elementary grades, academic failure increases the risk of drug misuse, 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 Misuse, 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.

Table 2-5

		PR	OBLEM E	BEHAVIC	ORS	
YOUTH AT RISK	Substance Misuse	Delinquency	Teen Pregnancy	School Dropout	Violence	Depression & Anxiety
School						
Academic Failure Beginning in Late Elementary School	<b>√</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Lack of Commitment to School	✓	✓	✓	✓	✓	

### 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 37.6% at risk in the 6th grade to 38.0% at risk in the 8th grade, while scale scores for Low Commitment to School ranged from 47.7% at risk in the 12th grade to 61.5% at risk in the 8th grade. In comparison to the BH Norm, more Pennsylvania youth in all grades are less at risk for the Academic Failure and Low Commitment Toward School scales.

#### **Protective Factor Scale Results**

There are also two protective factor scales for the school domain – School Opportunities for Prosocial Involvement and School Rewards for Prosocial Involvement (see Table 2-6). School Opportunities for Prosocial Involvement ranged from 39.1% with protection in the 10th grade to 49.2% with protection

in the 6th grade, and School Rewards for Prosocial Involvement ranged from 48.0% with protection in the 10th grade to 57.3% with protection in the 8th grade.

#### Comparisons to 2021 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2021 survey, the scale scores for Low Commitment to School increased 3.2 to 8.3 percentage points in grades 6 and 8; while scale scores for Academic Failure decreased 0.5 to 6.9 percentage points in the 6th, 8th, 10th, and 12th grades. Protection within the school domain continued to decrease for grade 6 in the Opportunities for Prosocial Involvement scale. 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

		61	th			81	th			10	th			12	th:			Α	.II	
	State	State	State	ВН																
	2019	2021	2023	Norm																
School Risk Factor Scales																				
Academic Failure	34.4	38.1	37.6	42.6	38.3	43.0	38.0	45.7	38.5	44.7	37.8	44.0	36.6	40.7	35.8	40.9	37.0	41.7	37.3	43.2
Low Commitment Toward School	45.4	50.3	58.6	69.2	52.7	58.3	61.5	67.4	55.3	61.7	58.6	63.9	48.6	53.1	47.7	55.9	50.6	56.0	56.6	67.4
School Protective Factor Scales																				
Opportunities for Prosocial Involvement	54.2	52.0	49.2	58.6	47.0	44.5	45.0	51.5	39.3	38.0	39.1	51.6	43.3	40.8	44.8	51.6	45.7	43.6	44.3	49.3
Rewards for Prosocial Involvement	57.1	58.1	53.6	50.8	51.7	54.4	57.3	51.4	41.5	44.2	48.0	47.2	43.2	45.9	50.8	48.3	48.1	50.3	52.3	47.7

### 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

		PR	OBLEM I	BEHAVIC	RS	
YOUTH AT RISK	Substance Misuse	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 Misuse, 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 substance misuse, 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 Misuse, 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 Misuse, Delinquency, Teen Pregnancy, and School Dropout)

During the elementary school years, children usually express anti-drug, anticrime, 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 Misuse 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 Misuse, 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 misusing substances, engaging in delinquent behavior, and/or committing violent acts.

Some young people who are exposed to multiple risk factors do not misuse substances, engage in delinquent behaviors, become teen parents or drop out of school. 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 misuse*.

### **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, 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 misuse 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 2023 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 grades 6 and 8 was Sensation Seeking (61.9% at risk in the 6th grade and 43.4% at risk in the 8th grade). The highest risk score for youth in grades 10 and 12 was Attitudes Favorable to Antisocial Behavior (42.2% at risk in the 10th grade and 44.1% 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 youth in grades 6, 8, and 10 indicated higher risk for the Sensation Seeking risk scale (25.1 percentage points higher than the BH Norm for the 6th grade, 8.6 percentage points higher than the BH Norm for the 8th grade, and 0.6 percentage points higher than the BH Norm for the 10th 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, Perceived Risk of Drug Use, Attitudes Favorable to Drug Use, 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 27.1% with protection in the 12th grade up to 39.7% with protection in the 6th grade. Protective factor scale scores for Religiosity ranged from 36.9% with protection in the 6th grade up to 60.9% with protection for this scale in the 10th grade. In comparison to the BH Norm, a greater percentage of Pennsylvania youth in grades 8, 10, and 12 indicated protection within the Religiosity scale.

#### Comparisons to 2021 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2021 survey, the scale scores for Perceived Risk of Drug Use decreased 21.3 to 13.8 percentage points in each grade. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

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

Table 2-8

Peer Domain Risk and Protective Factor Scales

		6	th			8	th			10	)th			12	th			All G	rades	
	State 2019	State 2021	State 2023	BH Norm																
Peer And Individual Risk Factor Scales																				
Rebelliousness	27.2	27.7	32.8	35.9	18.3	17.7	18.6	22.5	24.4	21.6	19.6	22.6	25.2	22.2	20.4	22.7	23.7	22.2	22.5	23.8
Gang Involvement	10.3	2.9	n/a	n/a	10.7	1.9	n/a	n/a	11.3	1.7	n/a	n/a	13.9	2.8	n/a	n/a	11.6	2.3	n/a	n/a
Perceived Risk of Drug Use	48.8	51.6	37.5	54.1	43.2	44.8	31.0	48.3	46.7	45.7	24.6	42.2	58.2	57.1	35.8	49.4	49.2	49.7	31.9	49.7
Attitudes Favorable Toward Drug Use	22.4	21.5	22.2	30.6	40.7	40.9	36.7	45.7	45.0	42.7	37.1	38.2	45.5	44.4	41.5	42.3	38.7	37.7	34.8	38.8
Attitudes Favorable Toward Antisocial Behavior	41.2	47.4	54.4	54.6	32.0	36.8	38.3	38.5	39.8	42.8	42.2	42.0	39.7	43.1	44.1	40.2	38.1	42.5	44.4	43.5
Sensation Seeking	39.6	46.9	61.9	36.8	30.7	34.9	43.4	34.8	33.6	31.8	35.5	34.9	29.4	26.2	27.5	31.5	33.2	34.6	41.3	34.4
Rewards for Antisocial Behavior	17.2	16.4	17.8	18.2	32.6	29.5	29.5	35.0	34.5	28.9	28.7	33.9	37.2	31.7	31.8	36.6	30.7	26.9	27.3	33.3
Friend's Use of Drugs	10.5	9.3	10.6	18.9	28.3	22.7	21.7	31.3	29.8	19.0	15.8	21.4	28.8	21.1	17.4	21.4	24.7	18.2	16.5	25.2
Interaction With Antisocial Peers	21.9	15.8	22.2	29.3	24.9	21.4	25.2	37.8	26.3	19.4	20.2	30.0	25.9	20.4	17.5	26.4	24.8	19.3	21.2	31.2
Depressive Symptoms	30.8	34.4	37.6	31.1	34.2	40.0	37.9	37.4	43.3	45.4	40.1	43.2	45.0	45.3	41.7	41.8	38.5	41.5	39.4	38.7
Peer And Individual Protective Factor So	cales																			
Religiosity	40.5	37.8	36.9	38.6	40.5	34.4	52.4	44.6	36.0	29.3	60.9	52.9	31.3	25.1	60.8	54.0	37.0	31.4	53.5	49.1
Belief In The Moral Order	45.8	41.5	39.7	39.8	62.0	54.7	37.5	38.1	62.2	60.4	32.1	32.2	61.7	60.3	27.1	28.1	58.2	54.6	33.9	36.9

# Risk and Protective Factor Scales: 6th Grade

Figure 2-1
Risk factor scales, 6th grade,
Statewide Sample 2023 PAYS

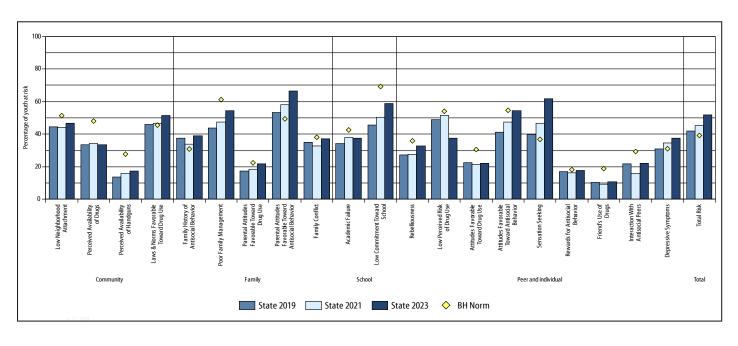
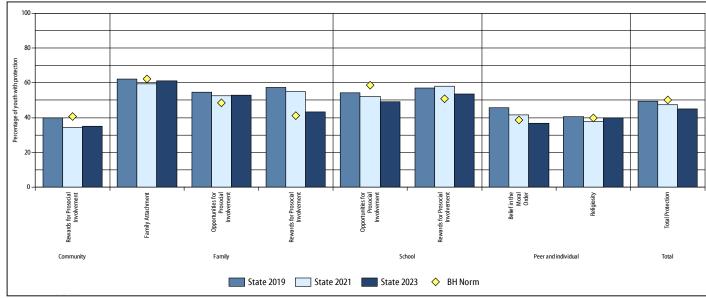


Figure 2-2

Protective factor scales, 6th
grade, Statewide Sample
2023 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

Figure 2-3
Risk factor scales, 8th grade,
Statewide Sample 2023 PAYS

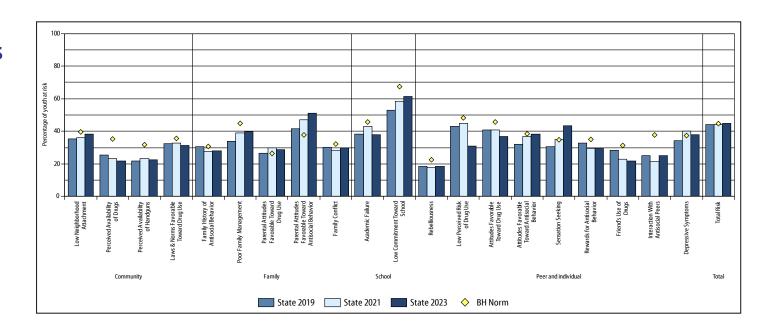
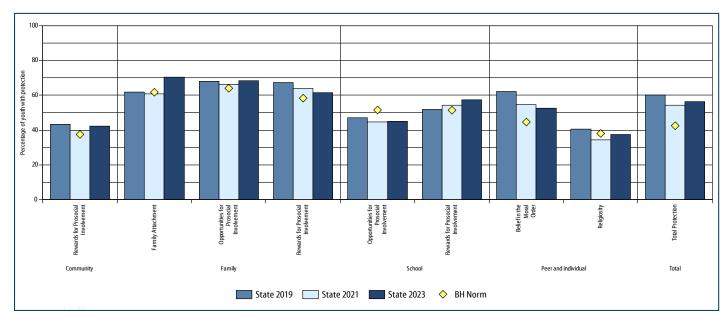


Figure 2-4

Protective factor scales, 8th
grade, Statewide Sample
2023 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

Figure 2-5
Risk factor scales, 10th grade,
Statewide Sample 2023 PAYS

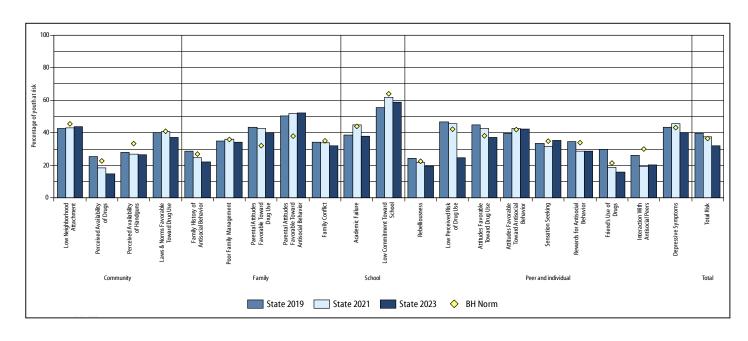
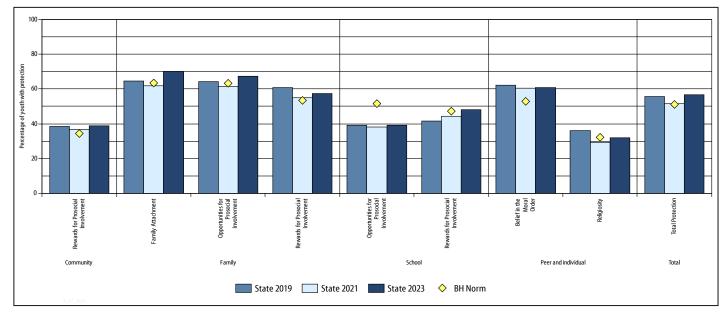


Figure 2-6

Protective factor scales, 10th
grade, Statewide Sample 2023

PAYS



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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.)

PAYS 2023

# Risk and Protective Factor Scales: 12th Grade

Figure 2-7
Risk factor scales, 12th grade,
Statewide Sample 2023 PAYS

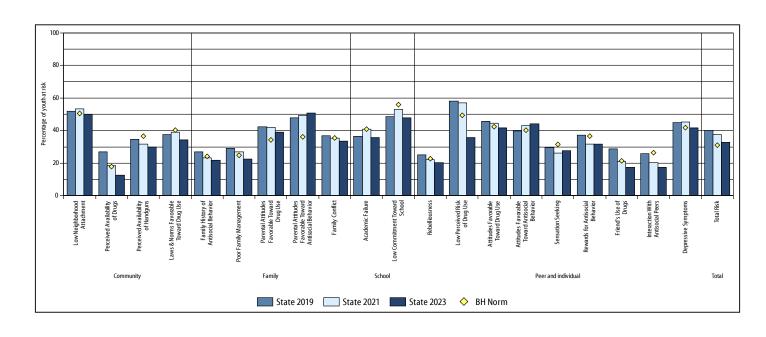
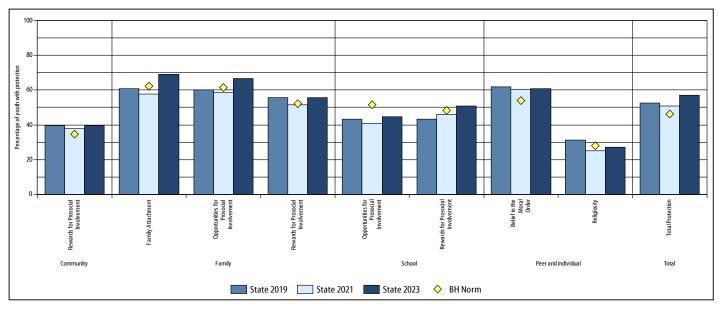


Figure 2-8

Protective factor scales, 12th
grade, Statewide Sample 2023

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.)

**PAYS 2023** 

# Risk and Protective Factor Scales: All Grades Combined

Figure 2-9

Risk factor scales, All Grades Combined, Statewide Sample 2023 PAYS

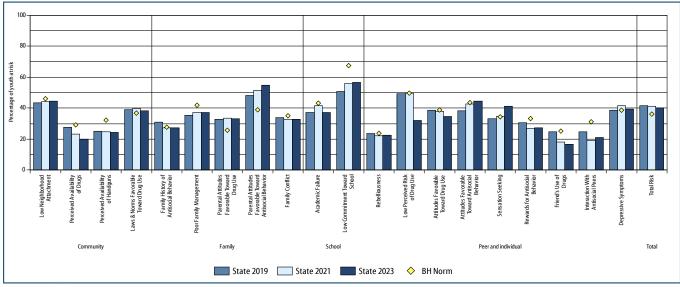
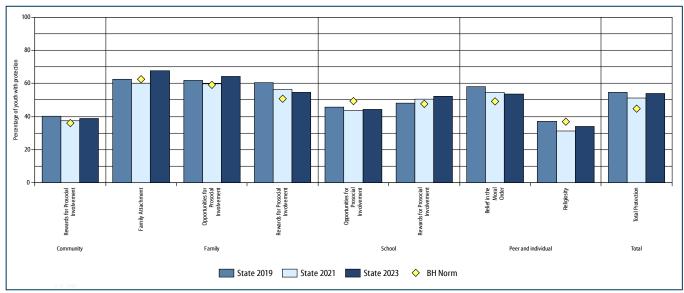


Figure 2-10

Protective factor scales, All Grades Combined, Statewide Sample 2023 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 prevalence/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 2023 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 Prevalence/Early Initiation Drug Use: Alcohol

In the 2023 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 2023 PAYS results presented in Table 3.1-1 show that 28.9% of students in grades 6, 8, 10, and 12 have used alcohol at least once in their lifetime. By grade, 13.7% of 6th graders, 21.5% of 8th graders, 32.5% of 10th graders, and 46.9% 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 grades 10 and 12 indicated lower lifetime alcohol use rates than youth in same grades in the national sample. Pennsylvania rates were 3.3 percentage points lower than national rates in the 10th grade (32.5% in Pennsylvania, compared to 35.8% in the national sample) and 5.9 percentage points lower than national rates in the 12th grade (46.9% in Pennsylvania, compared to 52.8% in the national sample.

Since the 2021 survey, lifetime alcohol use for all grades decreased, with the greatest decrease of 10.2 percentage points for the 10th grade. For all students combined, lifetime alcohol use decreased from 34.8% in 2021 to 28.9% in 2023.

#### Past Month Alcohol Use

The 2023 PAYS results presented in Table 3.1-1 and Figure 3.1-1 show that 11.5% 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, 4.3% of 6th graders, 6.4% of 8th graders, 11.4% of 10th graders, and 23.8% 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 grade indicated past month alcohol use that was higher than that of youth in same grade in the national sample (0.5 percentage points higher in the 8th grade).

Since the 2021 survey, past month alcohol use decreased significantly in the 10th grade (from 16.1% in 2021 to 11.4% in 2023).

### Binge Drinking

The 2023 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 2023 PAYS found that 4.0% of students in the 6th, 8th, 10th, and 12th grades reported binge drinking at least once in the past two weeks. By grade level, 1.0% of 6th graders, 1.8% of 8th graders, 3.7% of 10th graders, and 9.5% of 12th graders reported binge drinking.

Binge drinking rates have been gradually decreasing since 2011. For all grades combined, binge drinking has decreased since 2019 (7.4% in 2019, 5.0% in 2021, 4.0% in 2023).

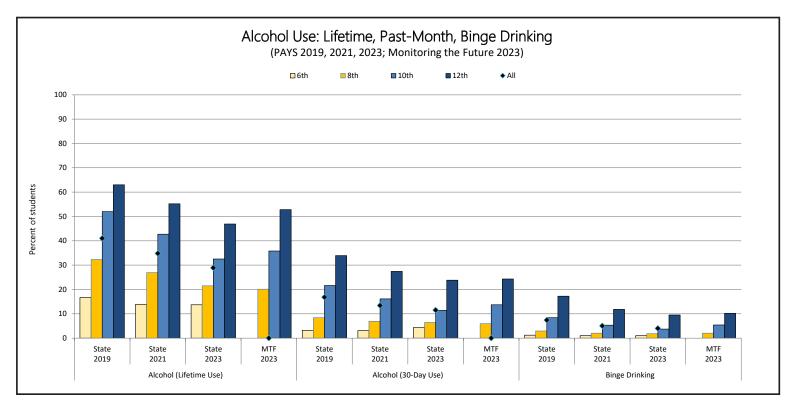
For data regarding lifetime alcohol use, 30-day alcohol use, and binge drinking by county and grade, please visit the PAYS Portal at www.pays.pa.gov or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

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Table 3.1-1 Alcohol Use: Lifetime, Past-Month, Binge Drinking

									1			
		Alcohol (Li	fetime Use)			Alcohol (3	0-Day Use)			Binge D	rinking	
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	16.7	13.9	13.7	n/a	3.2	3.1	4.3	n/a	1.2	1.0	1.0	n/a
8th	32.3	26.9	21.5	20.1	8.4	6.9	6.4	5.9	2.9	2.0	1.8	2.0
10th	52.0	42.7	32.5	35.8	21.6	16.1	11.4	13.7	8.4	5.3	3.7	5.4
12th	63.0	55.2	46.9	52.8	33.9	27.4	23.8	24.3	17.2	11.8	9.5	10.2
All	41.0	34.8	28.9	n/a	16.8	13.4	11.5	n/a	7.4	5.0	4.0	n/a

Figure 3.1-1



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

In the 2023 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 2023 PAYS results presented in Table 3.2-1 show that 6.1% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in their lifetime, and 3.0% of students in the four grades have used smokeless tobacco in their lifetime.

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

Since the 2021 survey, lifetime cigarette use decreased in the 8th, 10th, and 12th grades, with a decrease of 1.3 percentage points in the 8th grade, 3.2 percentage points in the 10th grade, 3.7 percentage points in the 12th grade, and 2.0 percentage points overall. Since the 2021 survey, smokeless tobacco lifetime use rates decreased 0.5 percentage points for all grades combined.

#### Past Month Tobacco Use

The 2023 PAYS results presented in Table 3.2-1 and Figure 3.2-1 show that 2.3% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in the past 30 days, and 1.3% of students in the same grades have used smokeless tobacco. In looking at past month cigarette use rates by grade level, 0.8% of 6th graders, 1.4% of 8th graders, 2.9% of 10th graders, and 4.5% of 12th graders in Pennsylvania have used cigarettes in the past 30 days; while 0.4% of 6th

graders, 0.7% of 8th graders, 1.3% of 10th graders, and 2.7% of 12th graders have used smokeless tobacco in the past month. The 2023 PAYS was the fifth administration to collect data on past-month e-cigarette/vape device use. The 2023 survey showed that 7.9% of students had used an e-cigarette or vape device in the past month. By grade, 2.4% of 6th graders indicated past-month use, 5.5% of 8th graders indicated past-month use, 8.4% of 10th graders indicated past-month use, and 14.9% of 12th graders indicated past-month use.

In comparison to data gathered through the national MTF Survey (see Figure 3.2-1), Pennsylvania 12th graders indicated higher past-month cigarette use (4.5% for Pennsylvania 12th graders compared to 2.9% for MTF). As for e-cigarettes/vape devices, the past-month use rate was lower in all grades compared to the MTF.

Since the 2021 survey, past month e-cigarette use decreased 3.7 percentage points in the 8th grade, 7.8 percentage points in the 10th grade, and 8.8 percentage points in the 12th grade.

### **Substances Vaped**

The 2023 PAYS results presented in Table 3.2-3 and Figure 3.2-2 show the percent of past-30 day e-cigarette users who are using vape devices for different substances. Of past-30 day vape users, most (63.6%) are using nicotine in their devices, while 34.6% have used just flavoring, 39.6% have used marijuana or hash oil, and 2.0% had used another substance in their vape device. Of those who have vaped in the past year, 13.6% were unsure of what they had inhaled.

Table 3.2-1 Tobacco Use: Lifetime and Past-Month Cigarette and Smokeless Tobacco Use

	Ciga	arettes (L	ifetime l	Jse)	Cig	arettes (	30-Day L	Jse)	Smokele	ess Tobac	cco (Lifet	ime Use)	Smokel	ess Toba	ссо (30-Е	ay Use)	E-Ci	garettes	(30-Day	Use)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023												
6th	2.3	2.0	1.7	n/a	0.5	0.3	0.8	n/a	1.1	0.7	0.9	n/a	0.3	0.2	0.4	n/a	3.8	2.8	2.4	n/a
8th	6.9	5.4	4.1	5.8	1.9	1.4	1.4	1.1	2.6	1.8	1.6	4.5	0.9	0.4	0.7	1.6	12.5	9.2	5.5	7.0
10th	12.2	9.6	6.4	9.4	4.0	2.9	2.9	2.3	6.4	3.9	3.2	5.5	2.1	1.3	1.3	2.3	26.5	16.2	8.4	11.9
12th	21.9	15.3	11.6	15.0	7.5	4.5	4.5	2.9	11.8	7.4	6.0	7.8	5.0	2.2	2.7	2.5	33.1	23.7	14.9	16.9
All	10.8	8.1	6.1	n/a	3.5	2.3	2.3	n/a	5.5	3.5	3.0	n/a	2.1	1.0	1.3	n/a	19.0	13.0	7.9	n/a

Figure 3.2-1

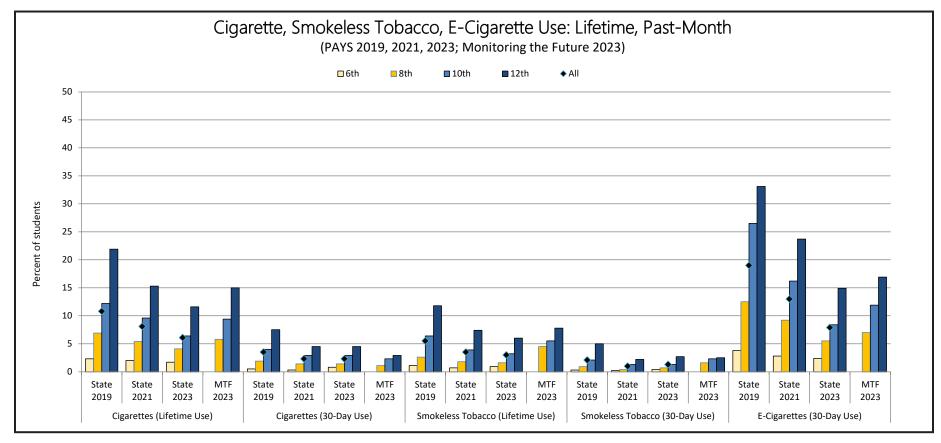
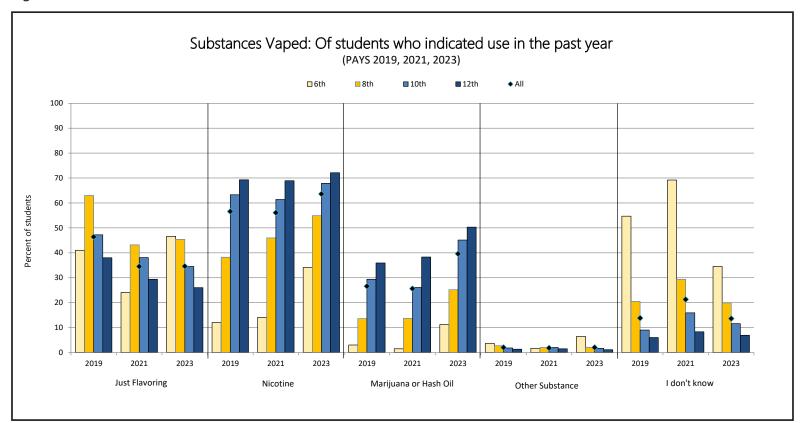


 Table 3.2-2
 Substances Vaped (of students indicating any use in the past 30 days)

Grade	Ju	ıst flavorir	ng		Nicotine		Mariju	uana or ha	ısh oil	Oth	er substa	nce	10	don't kno	w
	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023
6th	41.0	24.1	46.6	12.0	14.1	34.1	3.0	1.5	11.2	3.6	1.7	6.4	54.7	69.2	34.5
8th	63.0	43.2	45.4	38.2	46.0	54.9	13.6	13.7	25.2	2.7	2.0	2.1	20.5	29.4	19.9
10th	47.2	38.1	34.5	63.3	61.4	67.9	29.4	26.1	45.1	1.8	2.0	1.7	9.0	15.9	11.6
12th	38.0	29.4	26.0	69.3	68.9	72.1	35.9	38.3	50.3	1.3	1.5	1.1	6.0	8.3	6.9
All	46.4	34.5	34.6	56.6	56.1	63.6	26.6	25.6	39.6	2.0	1.8	2.0	13.8	21.3	13.6

Figure 3.2-2



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

In the 2023 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 2023 PAYS results presented in Table 3.3-1 show that 11.6% of students in grades 6, 8, 10, and 12 have used marijuana at least once in their lifetime. By grade, 1.7% of 6th graders, 5.6% of 8th graders, 12.4% of 10th graders, and 26.2% of 12th graders have used marijuana in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.3-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated significantly lower lifetime marijuana use rates than youth in the same grades in the national sample. Pennsylvania rates were 5.9 percentage points lower than national rates in the 8th grade (5.6% in Pennsylvania, compared to 11.5% in the national sample), 10.1 percentage points lower than national rates in the 10th grade (12.4% in Pennsylvania, compared to 22.5% in the national sample), and 10.3 percentage points lower than national rates in the 12th grade (26.2% in Pennsylvania compared to 36.5% in the national sample).

### Past Month Marijuana Use

The 2023 PAYS results presented in Table 3.3-1 and Figure 3.3-1 show that 6.3% 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, 0.7% of 6th graders, 2.7% of 8th graders, 6.8% of 10th graders, and 14.6% of 12th graders in Pennsylvania have used marijuana in the past 30 days.

As with lifetime marijuana use, in comparison to data gathered through the national MTF Survey (see Figure 3.3-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower past month marijuana use rates than youth in same grades in the national sample. Pennsylvania rates were 2.0 percentage points lower than national rates in the 8th grade (2.7% in Pennsylvania, compared to 4.7% in the national sample), 3.5 percentage points lower than national rates in the 10th grade (6.8% in Pennsylvania, compared to 10.3% in the national sample), and 3.8 percentage points lower than national rates in the 12th grade (14.6% in Pennsylvania compared to 18.4% 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.

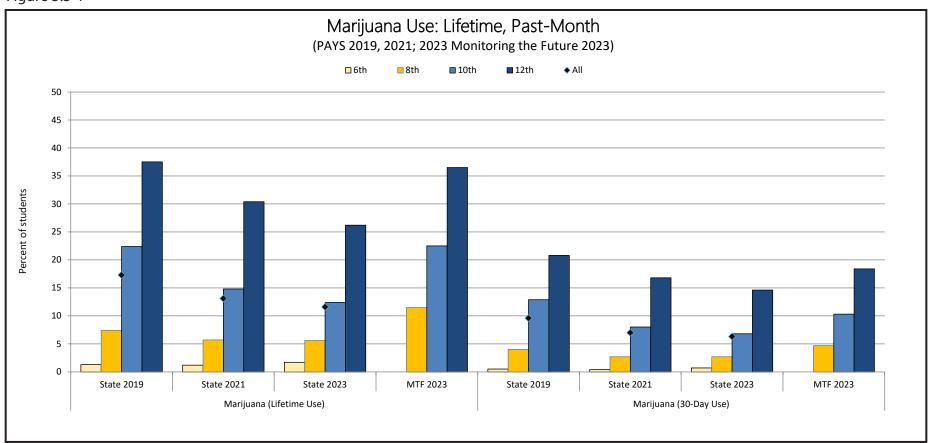
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Table 3.3-1

### **Marijuana Use: Lifetime and Past-Month**

	Ma	arijuana (L	ifetime U	se)	М	arijuana (	30-Day Us	e)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	1.3	1.2	1.7	n/a	0.5	0.4	0.7	n/a
8th	7.4	5.7	5.6	11.5	4.0	2.7	2.7	4.7
10th	22.4	14.8	12.4	22.5	12.9	8.0	6.8	10.3
12th	37.5	30.4	26.2	36.5	20.8	16.8	14.6	18.4
All	17.3	13.1	11.6	n/a	9.6	7.0	6.3	n/a

Figure 3.3-1



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

In the 2023 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 2023 PAYS results presented in Table 3.4-1 show that 4.0% of students in grades 6, 8, 10, and 12 have used inhalants at least once in their lifetime. By grade, 5.8% of 6th graders, 4.0% of 8th graders, 3.6% of 10th graders, and 2.9% 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 5.0 percentage points lower than national rates in the 8th grade (4.0% in Pennsylvania, compared to 9.0% in the national sample), 2.9 percentage points lower than national rates in the 10th grade (3.6% in Pennsylvania, compared to 6.5% in the national sample), and 3.4 percentage points lower than national rates in the 12th grade (2.9% in Pennsylvania compared to 6.3% in the national sample).

#### Past Month Inhalant Use

The 2023 PAYS results presented in Table 3.4-1 and Figure 3.4-1 show that 1.2% 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 2.4% of 6th graders, 1.2% of 8th graders, 0.6% of 10th graders, and 0.6% of 12th graders in Pennsylvania having 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.

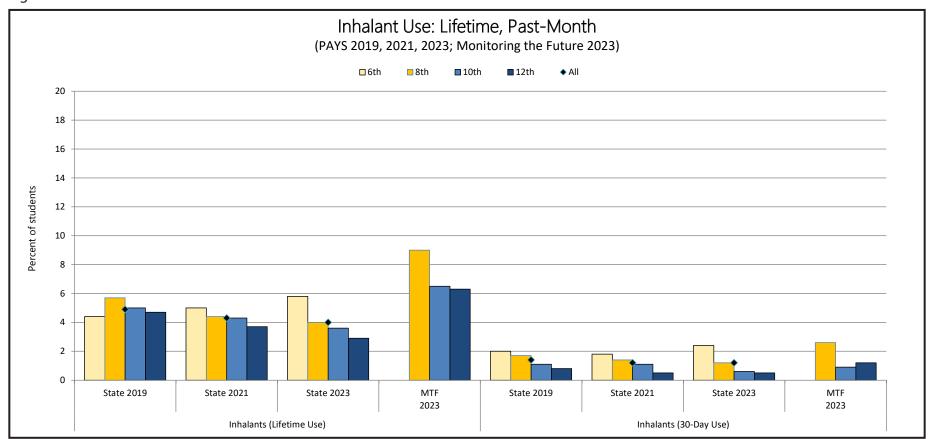
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Table 3.4-1

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

	In	halants (L	ifetime Us	e)	lı .	nhalants (3	30-Day Use	<u>=</u> )
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	4.4	5.0	5.8	n/a	2.0	1.8	2.4	n/a
8th	5.7	4.4	4.0	9.0	1.7	1.4	1.2	2.6
10th	5.0	4.3	3.6	6.5	1.1	1.1	0.6	0.9
12th	4.7	3.7	2.9	6.3	0.8	0.5	0.5	1.2
All	4.9	4.3	4.0	n/a	1.4	1.2	1.2	n/a

Figure 3.4-1



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# 3.5 Lifetime and 30-Day Prescription Drug Use

In the 2023 PAYS, Pennsylvania youth were asked to report if they had used prescription drugs such as Performance Enhancing Drugs (PEDs)/Steroids, prescription pain relievers, 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 2023 PAYS results presented in Table 3.5-1 show that 0.7% of students in grades 6, 8, 10, and 12 have used PEDs or steroids at least once in their lifetime, 3.0% have used prescription pain relievers in their lifetime, 0.8% have used prescription tranquilizers in their lifetime, 1.8% have used prescription stimulants, and 3.3% 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 PED and Steroid use rates than youth in same grades in the national sample. (Note: Comparable MTF data are not available for prescription pain relievers, prescription tranquilizers, prescription stimulants, and over-the-counter drugs.)

Since the 2021 survey, lifetime prescription drug use rates remained similar for most substances and grades though over-the counter drug use among 6th graders increased (2.9% in 2021 and 4.1% in 2023).

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

The 2023 PAYS results presented in Table 3.5-2 and Figure 3.5-2 show that 0.2% 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, 0.9% have used prescription pain relievers, 0.2% used prescription tranquilizers, 0.5% used prescription stimulants, and 1.4% have used over-the-counter drugs for non-medical purposes. For all of these substances, use varies little with increased grade level.

Pennsylvania and MTF rates for PEDs was very similar. (Note: Comparable MTF data are not available for prescription pain relievers, prescription tranquilizers, prescription stimulants, and over-the-counter drugs.)

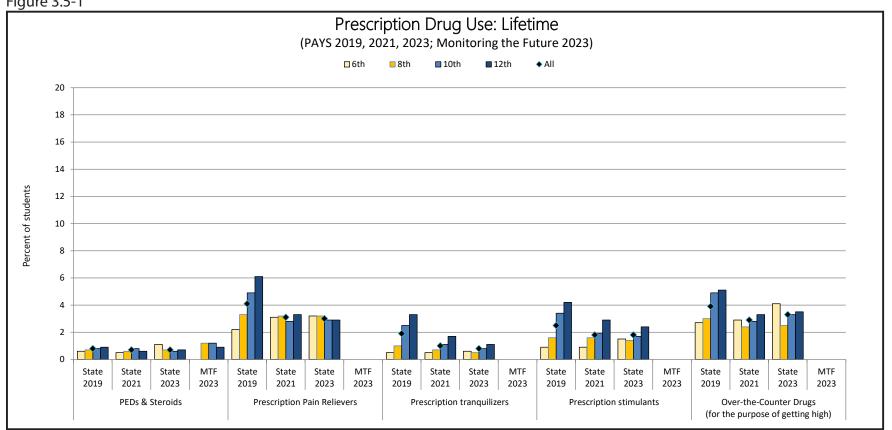
For data regarding lifetime and 30-day prescription drug use by county and grade, please refer to the PAYS Portal at www.pays.pa.gov or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

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Table 3.5-1 **Prescription Drugs: Lifetime Use** 

		PEDs &	Steroids		Preso	ription f	Pain Reli	evers	Pres	cription	tranquil	izers	Pre	scription	n stimula	nts	I		ter Drug getting	s (for the high)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023												
6th	0.6	0.5	1.1	n/a	2.2	3.1	3.2	n/a	0.5	0.5	0.6	n/a	0.9	0.9	1.5	n/a	2.7	2.9	4.1	n/a
8th	0.7	0.6	0.7	1.2	3.3	3.2	3.2	n/a	1.0	0.7	0.5	n/a	1.6	1.6	1.4	n/a	3.0	2.4	2.5	n/a
10th	0.8	0.8	0.6	1.2	4.9	2.8	2.9	n/a	2.5	1.1	0.8	n/a	3.4	1.9	1.7	n/a	4.9	2.8	3.3	n/a
12th	0.9	0.6	0.7	0.9	6.1	3.3	2.9	n/a	3.3	1.7	1.1	n/a	4.2	2.9	2.4	n/a	5.1	3.3	3.5	n/a
All	0.8	0.7	0.7	n/a	4.1	3.1	3.0	n/a	1.9	1.0	0.8	n/a	2.5	1.8	1.8	n/a	3.9	2.9	3.3	n/a

Figure 3.5-1

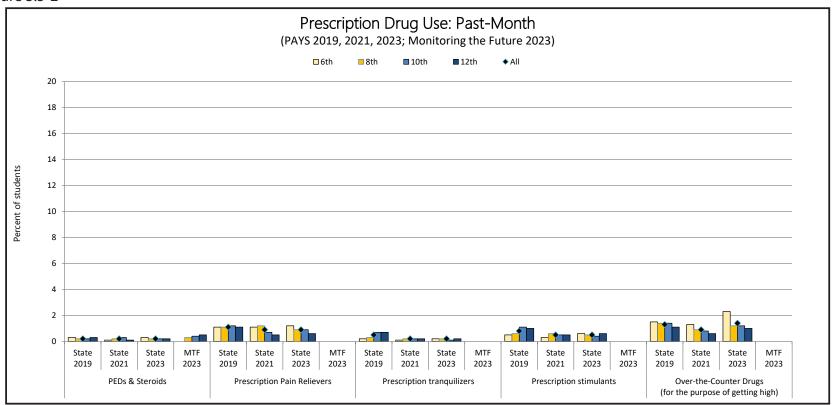


Page 3.5-2 **PAYS 2023** 

Table 3.5-2 **Prescription Drugs: Past-Month Use** 

		PEDs & :	Steroids		Presc	ription f	Pain Reli	evers	Pres	cription	tranquil	izers	Pre	scriptior	n stimula	ants	1		ter Drug getting	s (for the high)
Grade	State 2019	State 2021	State 2023	MTF 2023	State 2019	2019 2021 2023 2023				State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023	State 2019	State 2021	State 2023	MTF 2023
6th	0.3	0.1	0.3	n/a	1.1	1.1	1.2	n/a	0.2	0.1	0.2	n/a	0.5	0.3	0.6	n/a	1.5	1.3	2.3	n/a
8th	0.2	0.2	0.2	0.3	1.1	1.2	0.9	n/a	0.3	0.2	0.2	n/a	0.6	0.6	0.5	n/a	1.4	0.9	1.2	n/a
10th	0.2	0.3	0.2	0.4	1.2	0.7	0.9	n/a	0.7	0.2	0.1	n/a	1.1	0.5	0.4	n/a	1.4	0.8	1.2	n/a
12th	0.3	0.1	0.2	0.5	1.1	0.5	0.6	n/a	0.7	0.2	0.2	n/a	1.0	0.5	0.6	n/a	1.1	0.6	1.0	n/a
All	0.2	0.2	0.2	n/a	1.1	0.9	0.9	n/a	0.5	0.2	0.2	n/a	0.8	0.5	0.5	n/a	1.3	0.9	1.4	n/a

Figure 3.5-2



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# 3.6 Lifetime and 30-Day Other Illicit Drug Use

In the 2023 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 2023 PAYS results presented in Table 3.6-1 show that 0.2% of students in grades 6, 8, 10, and 12 have used heroin at least once in their lifetime, 1.9% have used hallucinogens in their lifetime, 1.4% have used synthetic drugs, 0.5% have used ecstasy in their lifetime, 0.5% have used cocaine/crack in their lifetime, and 0.4% 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 1.6 to 1.9 percentage points lower for the 8th through 12th grades, and lifetime cocaine use rates were 0.5 to 0.8 percentage points lower for the 8th through 12th grades.

Since the 2021 survey, lifetime illicit drug use rates were relatively unchanged.

### Past Month Other Illicit Drug Use

The 2023 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 - 0.5%, ecstasy - 0.1%, synthetic drugs - 0.5%, cocaine/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 in comparison to youth represented by the MTF Survey.

Since the 2021 survey, past-month illicit drug use rates were largely unchanged.

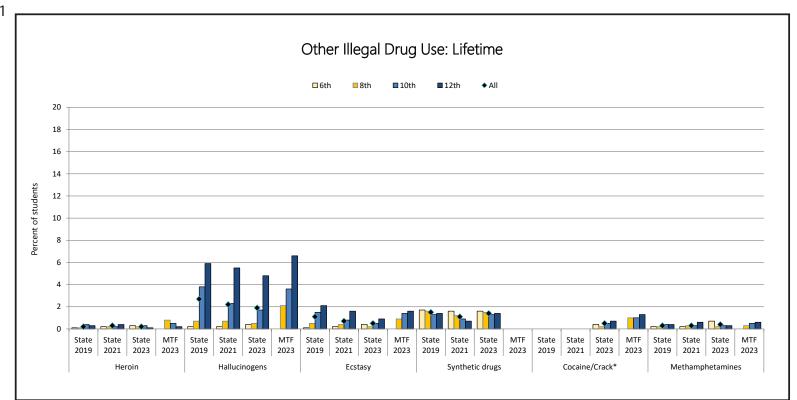
For data regarding lifetime and 30-day other illicit drug use by county and grade, please refer to the PAYS Portal at www.pays.pa.gov or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

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Table 3.6-1 Other Illegal Drugs: Lifetime Use \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Her	roin		H	lallucii	nogen	S		Ecst	tasy		Sy	ynthet	ic drug	gs	С	ocaine	/Crack	(*	Met	hamp	hetam	ines
Grade		tate State State MTF State State State 2023 2023 2019 2021 2023											State 2019		State 2023	l	State 2019			MTF 2023			State 2023	
6th	0.1	0.2	0.3	n/a	0.2	0.2	0.4	n/a	0.1	0.2	0.4	n/a	1.7	1.6	1.6	n/a	n/a	n/a	0.4	n/a	0.2	0.2	0.7	n/a
8th	0.1	0.2	0.2	0.8	0.7	0.7	0.5	2.1	0.5	0.4	0.2	0.9	1.6	1.2	1.5	n/a	n/a	n/a	0.2	1.0	0.2	0.3	0.2	0.3
10th	0.4	0.2	0.3	0.5	3.8	2.3	1.7	3.6	1.5	0.8	0.5	1.4	1.3	0.9	1.3	n/a	n/a	n/a	0.5	1.0	0.4	0.3	0.3	0.5
12th	0.3	0.4	0.1	0.2	5.9	5.5	4.8	6.6	2.1	1.6	0.9	1.6	1.4	0.7	1.4	n/a	n/a	n/a	0.7	1.3	0.4	0.6	0.3	0.6
All	0.2	0.3	0.2	n/a	2.7	2.2	1.9	n/a	1.1	0.7	0.5	n/a	1.5	1.1	1.4	n/a	n/a	n/a	0.5	n/a	0.3	0.3	0.4	n/a

Figure 3.6-1



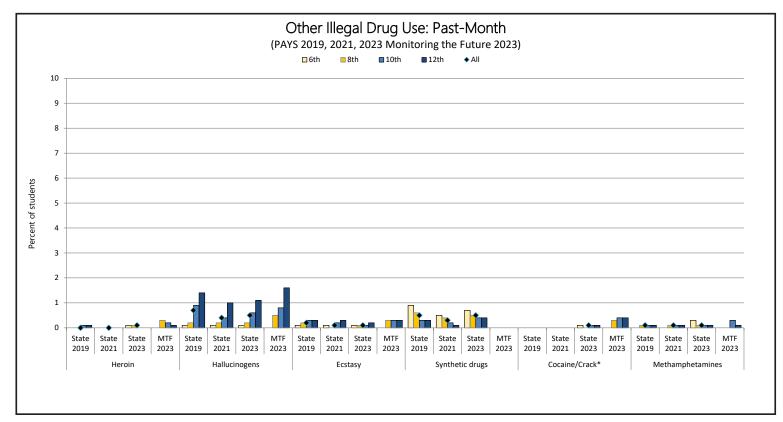
NOTE: \*Prior to 2023 cocaine and crack were asked as separate questions.

See Appendix B for changes made to substance use questions which could influence comparability of 2023 data to prior years.

Table 3.6-2 Other Illegal Drugs: Past-Month Use \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Her	oin		F	lallucii	nogen	S		Ecs	tasy		Sy	/nthet	ic dru	gs	C	ocaine	/Cracl	k*	Met	hamp	hetam	ines
Grade		te State State MTF State State 9 2021 2023 2023 2019 2021 2023																		l				MTF 2023
6th	0.0	0.0	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.9	0.5	0.7	n/a	n/a	n/a	0.1	n/a	0.0	0.0	0.3	n/a
8th	0.0	0.0	0.1	0.3	0.2	0.2	0.2	0.5	0.2	0.0	0.1	0.3	0.6	0.4	0.5	n/a	n/a	n/a	0.0	0.3	0.1	0.1	0.1	0.0
10th	0.1	0.0	0.0	0.2	0.9	0.4	0.6	0.8	0.3	0.2	0.1	0.3	0.3	0.2	0.4	n/a	n/a	n/a	0.1	0.4	0.1	0.1	0.1	0.3
12th	0.1	0.0	0.0	0.1	1.4	1.0	1.1	1.6	0.3	0.3	0.2	0.3	0.3	0.1	0.4	n/a	n/a	n/a	0.1	0.4	0.1	0.1	0.1	0.1
All	0.0	0.0	0.1	n/a	0.7	0.4	0.5	n/a	0.2	0.1	0.1	n/a	0.5	0.3	0.5	n/a	n/a	n/a	0.1	n/a	0.1	0.1	0.1	n/a

Figure 3.6-2



NOTE: \*Prior to 2023 cocaine and crack were asked as separate questions.

See Appendix B for changes made to substance use questions which could influence comparability of 2023 data to prior years.

# 3.7 Lifetime ATOD Use by Gender

Tables 3.7-1, 3.7-2, and 3.7-3 below show the percentage of lifetime ATOD use for males, for females, and students marking "other" to the gender question. Lifetime use is a measure of the experience that young people have had with the various substances. The data show that males and females are 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 male students report higher lifetime use is for smokeless tobacco use, in which a higher percentage of male students in all grades reported use of smokeless tobacco (3.3% lifetime use by males, 1.6% lifetime use by females, and 3.3% for those indicating "other").

Students that marked "other" to the gender question reported a higher lifetime use rate for alcohol (26.3% lifetime use for males, 28.9% for females, and 39.5% for those indicating "other"), cigarettes (4.9% lifetime use for males, 5.6% for females, and 11.2% for those indicating "other"), marijuana (9.4% for males, 11.6% for females, and 17.8% for those indicating "other"), inhalants (4.0% for males, 4.2% for females, and 10.0% for those indicating "other"), narcotic prescription pain relievers (2.6% for males, 3.1% for females, and 6.1% for those indicating "other"), and over-the-counter drugs to get high (3.5% for males, 3.0% for females, and 5.3% for those indicating "other").

Table 3.7-1

Lifetime Substance Use by Gender: Males \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Alcohol		C	igarette	es	Smok	eless To	bacco	٨	/larijuan	a	ı	nhalant	S	Coc	aine/Cra	ack*		Heroin	
	State 2019	State 2021	State 2023																		
6th	18.7	14.2	15.0	2.3	1.7	1.5	1.5	0.9	0.9	1.4	1.3	1.5	4.5	5.2	5.0	n/a	n/a	0.4	0.1	0.4	0.2
8th	31.2	26.3	19.6	6.5	4.4	2.8	3.5	2.2	1.5	7.3	4.8	4.1	5.2	3.5	3.9	n/a	n/a	0.3	0.1	0.2	0.2
10th	49.5	39.8	31.5	12.0	9.5	5.7	9.5	5.6	3.9	21.6	13.6	11.9	4.7	4.1	3.4	n/a	n/a	0.5	0.5	0.3	0.2
12th	60.1	51.8	43.5	23.1	15.0	11.1	18.0	10.8	8.2	36.6	28.0	23.7	5.7	3.6	3.5	n/a	n/a	1.0	0.4	0.5	0.3
All	40.0	32.4	26.3	11.0	7.3	4.9	8.1	4.6	3.3	16.8	11.3	9.4	5.0	4.0	4.0	n/a	n/a	0.5	0.3	0.3	0.2

\*Prior to 2023 cocaine and crack were asked as separate questions.

### **Lifetime Substance Use by Gender: Males**

	Hall	lucinog	jens	Metha	mphet	amine		Ecstasy	,	I	formar ncing [			ription eliever			escripti nquiliz			escripti imulan		Synt	hetic D	rugs	I	the-Co to Get	
Grade	State 2019	State 2021	State 2023		State 2021	State 2023		State 2021	State 2023	State 2019		State 2023	State 2019	State 2021		State 2019		State 2023	State 2019			State 2019	l	State 2023	State 2019	l	State 2023
6th	0.1	0.3	0.3	0.2	0.3	0.5	0.1	0.2	0.3	0.5	0.6	0.8	1.6	2.9	2.5	0.5	0.4	0.6	0.7	0.9	1.1	1.2	1.2	1.2	2.9	3.1	3.7
8th	1.0	0.6	0.6	0.2	0.2	0.2	0.6	0.3	0.2	0.5	0.5	0.7	2.7	2.5	2.4	0.9	0.4	0.5	1.6	1.3	1.3	1.3	0.9	1.0	3.1	2.1	3.1
10th	4.4	2.6	2.1	0.6	0.4	0.3	1.8	1.0	0.6	1.1	1.2	0.9	5.0	2.6	2.7	2.2	0.9	0.7	3.6	1.8	1.9	1.5	0.9	1.3	4.7	2.9	3.5
12th	7.7	6.4	5.0	0.5	0.5	0.4	2.4	1.6	1.0	1.4	0.8	1.0	6.2	3.1	2.7	3.2	1.2	1.1	4.9	2.5	2.4	1.6	0.8	1.4	6.3	3.4	3.7
All	3.3	2.3	1.8	0.4	0.4	0.3	1.2	0.7	0.5	0.9	0.8	0.8	3.9	2.8	2.6	1.7	0.7	0.7	2.7	1.6	1.6	1.4	0.9	1.2	4.3	2.8	3.5

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Table 3.7-2

Lifetime Substance Use by Gender: Females \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Alcohol		C	igarette	es	Smok	eless To	bacco	٨	/larijuan	a	ı	nhalant	s	Coc	aine/Cra	ack*		Heroin	
Grade	State 2019	State 2021	State 2023	te State State State			State 2019	State 2021	State 2023												
6th	14.8	12.0	12.8	2.2	1.8	1.6	0.7	0.4	0.6	1.2	0.9	1.4	4.4	4.7	5.4	n/a	n/a	0.3	0.1	0.1	0.1
8th	33.4	26.9	23.2	7.2	6.0	4.3	1.6	1.4	1.3	7.6	6.4	6.4	6.1	4.9	4.5	n/a	n/a	0.3	0.1	0.2	0.1
10th	54.7	45.2	36.1	12.6	9.1	6.8	3.1	1.9	2.0	23.2	15.6	15.2	5.2	3.9	3.8	n/a	n/a	0.4	0.2	0.1	0.1
12th	65.8	58.4	48.1	20.4	14.2	10.8	5.5	3.5	2.9	38.4	32.6	27.1	3.6	3.3	2.9	n/a	n/a	0.6	0.3	0.1	0.1
All	42.2	34.7	28.9	10.6	7.6	5.6	2.7	1.7	1.6	17.7	13.2	11.6	4.8	4.3	4.2	n/a	n/a	0.4	0.2	0.2	0.1

<sup>\*</sup>Prior to 2023 cocaine and crack were asked as separate questions.

### **Lifetime Substance Use by Gender: Females**

	Hall	ucinog	ens	Metha	mphet	amine		Ecstasy	,		formai ncing (			ription Reliever	' 1		escripti nquiliz			escripti imulan		Synt	hetic D	rugs		the-Co to Get	
Grade	State 2019	State 2021	State 2023	State 2019			State 2019		State 2023	State 2019		State 2023			State 2023		State 2021	State 2023	State 2019	State 2021	State 2023	l	State 2021	State 2023	State 2019	l	State 2023
6th	0.3	0.1	0.3	0.2	0.1	0.4	0.1	0.2	0.2	0.7	0.5	2.2	2.9	3.1	3.4	0.6	0.5	0.5	1.2	0.9	1.2	2.3	1.9	1.9	2.5	2.8	3.6
8th	0.5	0.8	0.6	0.1	0.4	0.2	0.3	0.4	0.2	0.8	0.8	1.4	3.9	3.6	3.6	1.2	0.8	0.7	1.6	1.7	1.6	2.0	1.4	1.6	2.8	2.4	2.7
10th	3.3	1.7	1.8	0.2	0.2	0.2	1.3	0.5	0.5	0.5	0.3	0.7	4.8	2.6	3.0	2.9	1.0	0.9	3.2	1.9	1.7	1.3	0.8	1.5	5.1	2.5	3.0
12th	4.2	4.3	3.2	0.3	0.3	0.3	1.8	1.4	0.7	0.3	0.3	0.4	6.0	3.2	2.3	3.3	1.9	1.0	3.3	2.8	1.7	1.2	0.4	1.6	3.9	3.1	2.6
All	2.1	1.7	1.4	0.2	0.3	0.3	0.9	0.6	0.4	0.6	0.5	1.2	4.4	3.2	3.1	2.0	1.0	0.8	2.3	1.8	1.6	1.7	1.2	1.6	3.6	2.7	3.0

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Table 3.7-3

# Lifetime Substance Use by Gender: Students Marking "Other" for Gender \*Prior to 2023 cocaine and crack usage were asked as separate questions

	Alcohol	Cigarettes	Smokeless Tobacco	Marijuana	Inhalants	Cocaine/Crack*	Heroin
Grade	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023
6th	26.4	5.7	2.9	4.4	12.3	2.9	1.2
8th	34.8	9.9	3.3	9.1	9.9	1.8	0.4
10th	42.1	11.6	3.2	20.7	9.8	1.3	0.6
12th	50.7	15.9	3.7	32.6	8.6	2.1	1.1
All	39.5	11.2	3.3	17.8	10.0	1.9	0.8

<sup>\*</sup>Prior to 2023 cocaine and crack were asked as separate questions.

### Lifetime Substance Use by Gender: Students Marking "Other" for Gender

	Hallucinogens	Methamphetmine	Ecstasy	Performance Enhancing Drugs	Presciption pain Releivers	Prescription Tranquilizers	Prescription Stimulants	Synthetic Drugs	Over-the-Counter Drugs to Get High
Grade	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023
6th	2.1	1.7	1.1	2.9	8.6	3.1	5.9	5.1	5.4
8th	2.1	1.3	1.2	2.8	6.4	1.8	3.8	2.9	5.0
10th	2.8	0.6	1.3	1.5	5.1	1.6	3.4	2.1	4.2
12th	7.0	0.9	1.8	1.4	5.2	2.4	4.1	3.8	6.7
All	3.6	1.1	1.4	2.1	6.1	2.1	4.1	3.3	5.3

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# 3.8 30-Day ATOD Use by Gender

Tables 3.8-1, 3.8-2, and 3.8-3 below show the percentage of 30-day ATOD use for males, for females, and students indicating "other" for the gender question.

While past-month cigarette use rates are similar for female and male students in all grades (1.9% for male, 1.8% for female), the use rate for students marking "other" was significantly higher (4.1%). Students marking "other" also reported higher rates of vaping (5.8% for male, 8.9% for female, and 11.2% for those indicating "other"), marijuana use (5.1% for male, 6.1% for female, and 8.9%

for those indicating "other"), and inhalant use (1.1% for male, 1.2% for female, and 3.2% for those indicating "other").

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 \*Prior to 2023 cocaine and crack usage were asked as separate questions

	,	Alcoho	I	C	igarette	es	Smoke	eless To	bacco	E-Ciga [	rettes/ Device:	, ,	N	larijuar	na	Ir	nhalant	S	Coca	aine/Cr	ack*		Heroin	
Grade	I I			State		ı		l .	l .			I .				I .						l	l	State
Grade	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023
6th	3.7	3.7	4.4	0.4	0.2	0.6	0.4	0.2	0.3	3.7	2.4	1.8	0.6	0.5	0.5	2.0	1.8	1.9	n/a	n/a	0.1	0.0	0.1	0.1
8th	7.6	6.1	5.5	1.5	1.1	1.0	1.1	0.5	0.6	11.1	7.1	3.6	3.9	2.4	2.0	1.5	1.1	1.2	n/a	n/a	0.1	0.0	0.0	0.1
10th	19.5	14.6	11.5	3.8	2.6	2.0	3.3	2.2	1.8	24.0	13.5	7.1	12.9	7.1	6.5	1.2	1.0	0.7	n/a	n/a	0.1	0.2	0.0	0.1
12th	32.9	24.7	21.3	8.1	5.0	4.4	8.2	3.3	4.1	31.7	20.4	12.4	21.5	15.7	13.5	1.0	0.4	0.5	n/a	n/a	0.2	0.1	0.1	0.1
All	16.0	11.7	10.0	3.5	2.1	1.9	3.3	1.5	1.6	17.7	10.5	5.8	9.8	6.1	5.1	1.4	1.1	1.1	n/a	n/a	0.1	0.1	0.1	0.1

\*Prior to 2023 cocaine and crack were asked as separate questions.

	Hall	ucinog	jens	Metha	mphet	amine	ı	Ecstasy	,		formar ncing [			ription deliever	' 1		escripti nquiliz			escripti imulan		Synt	hetic D	rugs		the-Co s to Get	
Grade	State 2019			State 2019				1 1	State 2023	State 2019		l	State 2019			State 2019				State 2021	State 2023		State 2021	State 2023	State 2019	State 2021	State 2023
6th	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.1	0.1	0.1	0.2	0.7	0.8	0.9	0.2	0.1	0.1	0.4	0.2	0.4	0.4	0.3	1.2	1.4	1.5	2.0
8th	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.3	0.8	0.9	0.8	0.3	0.2	0.1	0.5	0.4	0.4	0.5	0.2	1.0	1.4	1.5	1.4
10th	1.3	0.4	0.7	0.2	0.1	0.1	0.4	0.1	0.2	0.3	0.5	0.3	1.3	0.6	0.7	0.6	0.1	0.2	1.1	0.3	0.5	0.3	0.3	1.3	1.5	1.3	1.3
12th	2.0	1.2	1.3	0.1	0.1	0.1	0.3	0.3	0.2	0.4	0.2	0.4	1.0	0.5	0.6	0.7	0.0	0.2	1.1	0.4	0.6	0.3	0.2	1.4	1.3	1.3	1.1
All	0.9	0.5	0.5	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.3	0.9	0.7	0.7	0.5	0.1	0.2	0.8	0.3	0.5	0.4	0.2	1.2	1.4	1.4	1.4

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Table 3.8-2

Past Month Substance Use by Gender: Females \*Prior to 2023 cocaine and crack usage were asked as separate questions

		Alcoho	I	Ci	igarett	es	Smoke	eless To	bacco	٠ ١	rettes/ Device:	Vaping s	N	larijuar	na	lr	nhalant	:s	Coca	nine/Cr	ack*)		Heroin	l			
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023			State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	1	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	I	State 2021	State 2023			
6th	2.8	2.4	3.7	0.7	0.3	0.7	0.3	0.1	0.2	3.9	2.5	2.4	0.5	0.3	0.6	2.1	1.6	2.2	n/a	n/a	0.1	0.0	0.0	0.1			
8th	9.3	7.5	7.0	2.1	1.6	1.5	0.6	0.3	0.5	13.7	11.1	6.9	4.0	3.2	3.3	1.9	1.5	1.4	n/a	n/a	0.1	0.0	0.1	0.0			
10th	23.8	17.3	14.1	4.2	2.8	2.2	0.7	0.3	0.6	28.8	18.5	11.4	12.8	8.6	8.3	1.1	1.0	0.7	n/a	n/a	0.1	0.0	0.1	0.0			
12th	35.0	30.5	23.3	6.9	3.6	3.2	1.8	0.9	1.0	34.6	26.5	16.5	20.1	17.6	14.4	0.7	0.4	0.4	n/a	n/a	0.1	0.0	0.0	0.0			
All Grades	17.7	13.8	11.3	3.5	2.0	1.8	0.9	0.4	0.6	20.3	14.2	8.9	9.4	7.1	6.1	1.4	1.1	1.2	n/a	n/a	0.1	0.0	0.0	0.0			
	2023 cocaine and crack were asked as separate que:  Hallucinogens Methamph		mphet	amine		Ecstasy	,		formai ncing [		I	ription Reliever			escripti nquiliz			escripti imulan		Synt	hetic D	rugs	_	the-Co to Get			
Grade	State 2019	State 2021		State 2019		State 2023		State 2021	State 2023	State 2019		State 2023	State 2019	State 2021	State 2023		State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	0.1	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.1	0.3	0.1	0.2	1.5	1.2	1.5	0.3	0.1	0.2	0.6	0.3	0.4	1.3	0.7	0.7	1.4	1.3	1.9
8th	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	1.5	1.4	1.4	0.2	0.2	0.2	0.7	0.6	0.5	0.7	0.5	0.6	1.4	1.0	1.2
10th	0.5	0.4	0.5	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	1.2	0.5	0.9	0.8	0.3	0.2	1.1	0.4	0.5	0.4	0.2	0.5	1.6	0.9	1.1
12th	0.7	0.7	0.7	0.1	0.0	0.0	0.3	0.2	0.1	0.2	0.0	0.0	1.3	0.4	0.4	0.8	0.3	0.2	1.0	0.4	0.4	0.3	0.0	0.5	0.8	0.7	0.7
All Grades	0.4	0.3	0.4	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.1	1.4	0.9	1.1	0.5	0.2	0.2	0.9	0.5	0.5	0.6	0.4	0.6	1.3	1.0	1.3

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Table 3.8-3

Past Month Substance Use by Gender: Students Marking "Other" for Gender
\*Prior to 2023 cocaine and crack usage were asked as separate questions

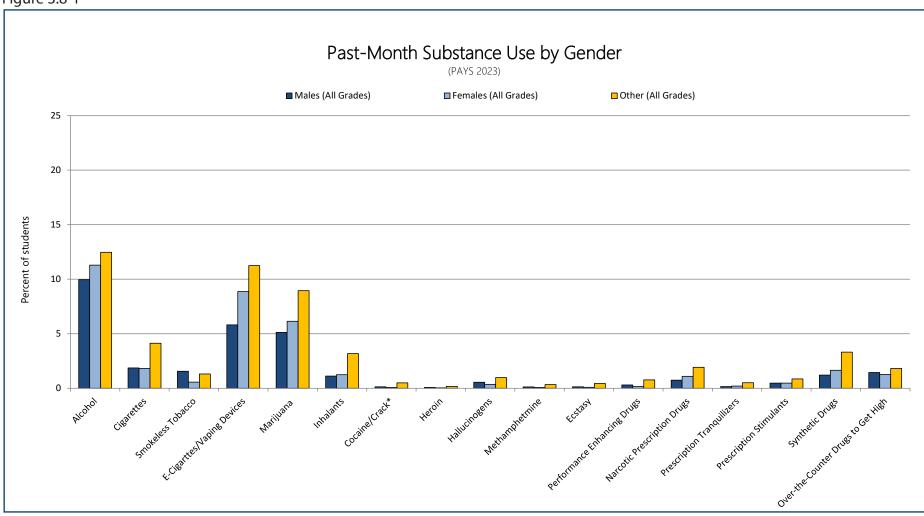
	Alcohol	Cigarettes	Smokeless Tobacco	E-Cigarttes/Vaping Devices	Marijuana	Inhalants	Cocaine/Crack*	Heroin
Grade	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023
6th	8.3	2.9	1.3	7.2	2.1	5.0	0.7	0.2
8th	10.4	4.0	1.2	8.9	3.8	3.9	0.5	0.0
10th	11.9	4.0	1.2	12.4	10.4	2.9	0.4	0.1
12th	18.3	5.3	1.5	15.2	17.4	1.5	0.6	0.3
All	12.5	4.1	1.3	11.2	8.9	3.2	0.5	0.2

*Prior to 2023 coc	aine and crack were asked a	as separate questions.

	Hallucinogens	Methamphetmine	Ecstasy	Performance Enhancing Drugs	Presciption pain Releivers	Prescription Tranquilizers	Prescription Stimulants	Synthetic Drugs	Over-the-Counter Drugs to Get High
Grade	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023
6th	1.0	1.0	0.5	1.0	3.2	0.8	1.6	1.8	2.2
8th	0.6	0.2	0.6	1.1	2.2	0.6	0.7	0.8	2.1
10th	0.6	0.1	0.4	0.4	1.4	0.1	0.8	0.7	1.4
12th	1.7	0.2	0.3	0.6	1.4	0.7	0.6	1.2	1.8
All	1.0	0.3	0.4	0.8	1.9	0.5	0.9	1.1	1.8

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Figure 3.8-1



NOTE:

\*Prior to 2023 cocaine and crack were asked as separate questions.

See Appendix B for changes made to substance use questions which could influence comparability of 2023 data to prior years.

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#### 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, used marijuana regularly, used 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 eight substance use categories, students perceived the greatest risk in using prescription drugs not prescribed to them (89.3% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (89.0% perceived moderate or great risk overall). Of the eight categories, students perceived the least amount of risk in trying marijuana once or twice (55.1% of students perceived moderate or great risk) and using marijuana once or twice a week (73.2% of students perceived great or moderate risk).

Perceptions of risk for most categories tended to peak in the 6th, 8th, or 10th grades. Sixth graders indicated the highest perceived risk of trying marijuana once or twice and using marijuana once or twice a week. Eighth graders indicated the highest perceived risk of using marijuana regularly; while 10th graders indicated the highest perceived risk of smoking regularly, binge drinking, drinking regularly, and using prescription drugs. In general, all questions regarding perceived risks associated with marijuana use decreased as students advanced in grade level. For example, 82.7% of 6th graders perceived moderate or great risk in using marijuana once or twice a week. By the 12th grade, only 58.6% of students perceived a risk in this regular weekly use.

In comparing the 2021 and 2023 survey data, perceived harmfulness of all substances increased in every grade. The perceived harmfulness of using marijuana once or twice a week increased 18.5 percentage points from 2021 to 2023 for students in the 10th grade.

Table 3.9-1

Perceived Risks of Using Substances (% Marking "moderate risk" or "great risk")

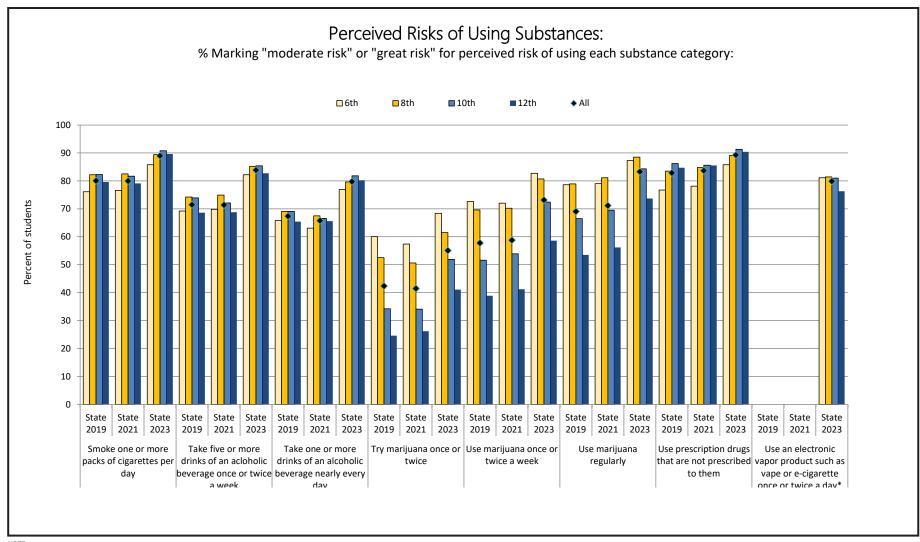
\*Use of electronic vapor product such as a vape or e-cigarette was added in 2023

	Smok packs o	e one or of cigaret day	tes per	drinks beverag	five or n of an alc ge once o a week	oholic	Take one of an alc near		everage	Irv ma	rijuana o twice	once or		rijuana d ice a we		Use mai	ijuana re	egularly	that are	scription not pre to them	scribed	produc or e-ci	electroni et such a garette c vice a da	s vape once or
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	2019 2021 2		State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	76.1	76.6	85.8	69.2	69.8	82.2	65.8	63.1	76.9	60.0	57.4	68.4	72.6	72.0	82.7	78.6	79.0	87.3	76.7	78.1	85.8	n/a	n/a	81.1
8th	82.2	82.5	89.4	74.2	74.9	85.2	69.1	67.5	79.6	52.5	50.6	61.5	69.6	70.2	80.7	78.9	81.1	88.5	83.5	84.8	89.1	n/a	n/a	81.4
10th	82.3	81.7	90.8	73.9	72.1	85.4	69.1	66.6	81.8	34.2	34.1	51.9	51.6	53.9	72.4	66.5	69.5	84.3	86.2	85.6	91.3	n/a	n/a	81.0
12th	79.6	79.1	89.6	68.6	68.8	82.7	65.4	65.6	80.2	24.6	26.2	41.1	38.9	41.2	58.6	53.5	56.2	73.7	84.7	85.5	90.4	n/a	n/a	76.3
All	80.1	80.0	89.0	71.5	71.4	83.9	67.4	65.8	79.8	42.4	41.5	55.1	57.8	58.8	73.2	69.1	71.2	83.3	82.9	83.7	89.3	n/a	n/a	79.9

\*Use of an electronic vapor product such as a vape or e-cigarettew as added in 2023

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Figure 3.9-1



NOTF:

\*Use of an electronic vapor product such as a vape or e-cigarette was added in 2023

See Appendix B for changes made to substance use questions which could influence comparability of 2023 data to prior years.

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## 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. 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, 33.6% of alcohol-using youth indicated their parents provided it; 27.1% took the alcohol without permission, stole it, or found

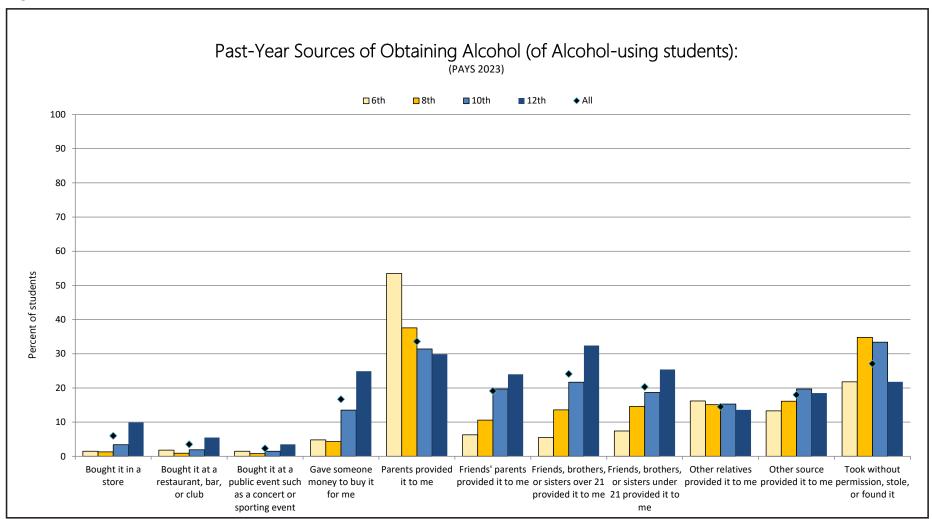
it; 24.1% indicated that friends or siblings over 21 bought it for them; 20.3% indicated friends or siblings under the age of 21 provided it; 19.1% indicated their friends' parents provided it; 16.7% gave someone money to buy it for them; 14.5% indicated other relatives provided it; 6.0% bought it at a store; 3.5% bought it at a restaurant, bar, or club; 2.3% bought it at a public event such as a concert or sporting event; and 18.0% 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	l	ght it store		resta	ight it nurant, or club	, bar,	pul such or	ight it blic ev as a co sporti event	ent oncert ng	l	e some ey to k for me	Juy It	Paren it	ts pro	vided e	Frien pro	ds' pa vided me		bro siste	riend others ers ove vided me	, or er 21	bro sist 21 p	riends others ers un provide to me	or der ed it		er relat vided i me			ier sou vided me		pe	k with rmission, or fou	on,
	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023
6th	5.5	1.8	1.5	4.3	1.8	1.8	2.7	0.6	1.5	7.4	1.8	4.8	36.3	50.9	53.5	4.3	8.8	6.3	7.4	7.6	5.5	5.1	3.5	7.4	19.1	25.7	16.2	18.4	11.7	13.3	27.7	22.8	21.8
8th	3.0	2.3	1.3	2.3	1.1	0.9	2.7	1.3	0.8	10.1	8.1	4.3	29.0	35.6	37.6	13.7	12.3	10.6	14.7	14.4	13.6	13.3	14.6	14.6	16.1	19.7	15.1	22.1	16.5	16.1	40.4	41.3	34.8
10th	3.4	3.2	3.4	1.9	0.9	1.9	2.3	1.8	1.5	23.8	17.0	13.5	22.7	30.6	31.4	18.4	16.6	19.7	21.4	21	21.7	16.9	20.6	18.7	13.6	15.8	15.3	23.5	20.1	19.7	41.1	37.3	33.4
12th	5.5	9.4	9.9	3.4	4.3	5.5	3.9	3.6	3.5	38.1	31.8	24.9	25.4	30.3	29.9	20.8	26.4	24.0	31.5	37	32.4	17.4	25.8	25.4	13.3	14.8	13.6	24.8	21.8	18.5	26.9	24.8	21.8
All	4.3	6.0	6.0	2.7	2.6	3.5	3.1	2.5	2.3	26.7	22.0	16.7	25.7	32.2	33.6	17.9	20.3	19.1	23.8	27	24.1	15.9	21.3	20.3	14.2	16.5	14.5	23.6	20	18.0	34.3	31.3	27.1

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Figure 3.10-1



PAYS 2023 Page 3.10-2

## 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, 47.2% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 37.0% indicated that a friend or family member gave them to the student, 13.9% indicated that they bought them from someone, 9.3% indicated they took them from relatives who were not living in their home, 9.3% indicated they ordered them over the Internet, and 8.3% indicated they took them from someone not related to them.

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.

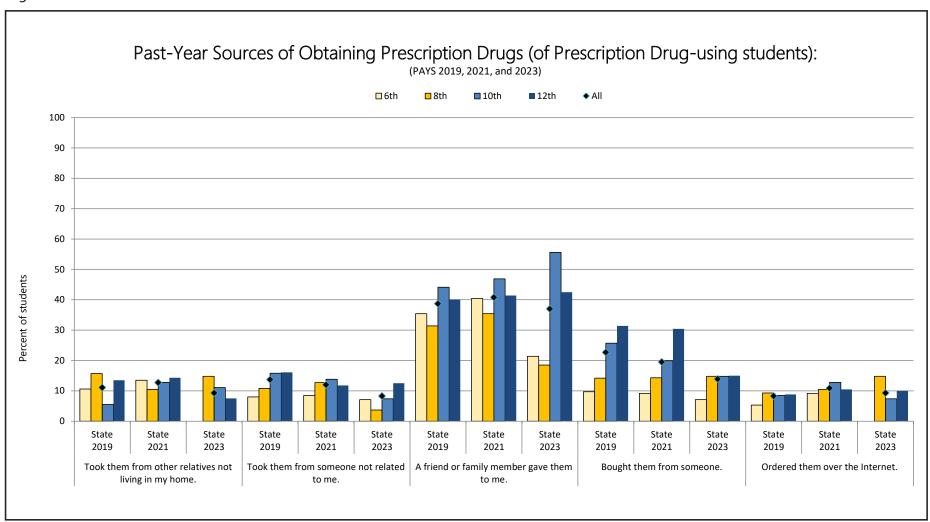
Table 3.11-1

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

Grade	ı	nem from a living in m	,	1	n from othe ving in my	er relatives home.		n from son lated to m			or family re them to		Bought th	nem from s	someone.	Ordere	ed them ov Internet.	ver the
	State 2019	State         State         State           2021         2023         2019           53.2         71.4         10.6		State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	
6th	45.1	53.2	71.4	10.6	13.5	0.0	8.0	8.5	7.1	35.4	40.4	21.4	9.7	9.2	7.1	5.3	9.2	0.0
8th	51.5	60.3	59.3	15.7	10.5	14.8	10.8	12.7	3.7	31.4	35.4	18.5	14.2	14.3	14.8	9.3	10.5	14.8
10th	34.2	39.3	51.9	5.5	12.8	11.1	15.8	13.8	7.4	44.1	46.9	55.6	25.7	19.9	14.8	8.5	12.8	7.4
12th	39.4	39.2	27.5	13.5	14.3	7.5	16.1	11.8	12.5	40.1	41.4	42.5	31.4	30.4	15.0	8.8	10.5	10.0
All	41.4	47.8	47.2	11.1	12.7	9.3	13.7	12.0	8.3	38.7	40.8	37.0	22.7	19.5	13.9	8.3	10.9	9.3

PAYS 2023 Page 3.11-1

Figure 3.11-1



PAYS 2023 Page 3.11-2

# Section 4: Antisocial Behavior and School Climate and Safety Measures

The charts and tables that follow present the rates of a variety of antisocial behaviors (ASB) and school climate and 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 18 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 Climate and 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.

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#### 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, 9.4% reported being suspended from school in the past year; while 8.2% of 8th grade students reported attacking someone with the intent of seriously harming them in the past year. Under one in ten (7.8%) 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 similar to or lower than this national average. Rates of being suspended from school are 0.7 percentage points to 3.1 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 (4.3% for Pennsylvania, all grades combined; 5.3% for the BH Norm).

Increases were seen since 2021 in all grades, with antisocial behavior rates increasing up to 3.4 percentage points for a few of the measures in Table 4.1-1. On the other hand, a significant decrease was seen in 12th grade students reporting being drunk or high at school with a 1.2 percentage point decrease.

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

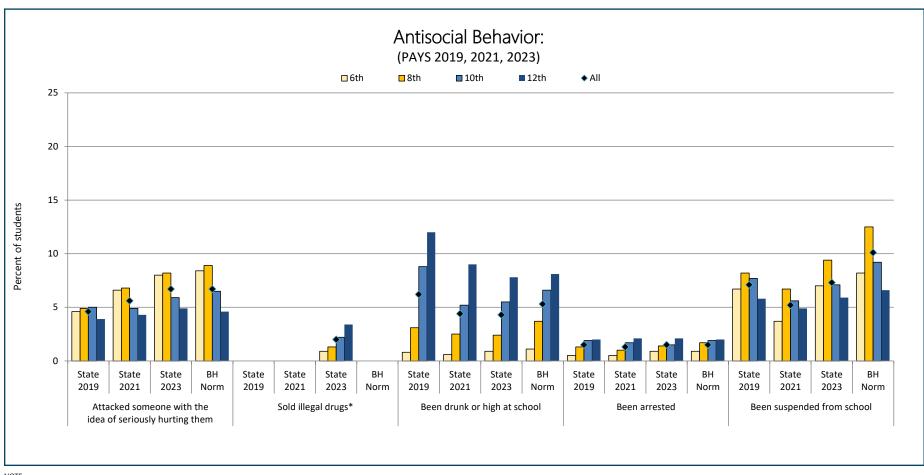
#### Other Antisocial Behaviors (Past year)

\*Question on selling substances was revised in 2023 and is not comparable to prior years

		ked som seriousl			S	old illeg	al drugs	*	Been o	drunk or	high at	school		Been a	rrested		Been s	suspende	ed from	school
Grade	State 2019	State 2021	State 2023	BH Norm	State 2019	State 2021	State 2023	BH Norm	State 2019	State 2021	State 2023	BH Norm	State 2019	State 2021	State 2023	"BH Norm"	State 2019	State 2021	State 2023	BH Norm
6th	4.6	6.6	8.0	8.4	n/a	n/a	0.9	n/a	0.8	0.6	0.9	1.1	0.5	0.5	0.9	0.9	6.7	3.7	7.0	8.2
8th	4.9	6.8	8.2	8.9	n/a	n/a	1.3	n/a	3.1	2.5	2.4	3.7	1.3	1.0	1.4	1.7	8.2	6.7	9.4	12.5
10th	5.0	4.9	5.9	6.5	n/a	n/a	2.2	n/a	8.8	5.2	5.5	6.6	1.9	1.7	1.5	1.9	7.7	5.6	7.1	9.2
12th	3.9	4.3	4.9	4.6	n/a	n/a	3.4	n/a	12.0	9.0	7.8	8.1	2.0	2.1	2.1	2.0	5.8	4.9	5.9	6.6
All	4.6	5.6	6.7	6.7	n/a	n/a	2.0	n/a	6.2	4.4	4.3	5.3	1.5	1.3	1.5	1.5	7.1	5.2	7.3	10.1

PAYS 2023 Page 4.1-1

Figure 4.1-1



NOTE:

\*Question on selling substances was revised in 2023 and is not comparable to prior years

PAYS 2023 Page 4.1-2

## 4.2 Antisocial Behavior Outcomes by Gender

Table 4.2-1, Table 4.2-2, and Figure 4.2-3 in this section display a selection of antisocial behavior measures from the 2023 PAYS questionnaire by both grade and gender.

Although the data gathered from the 2023 PAYS indicate that student substance use rates are typically quite similar among all genders, 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 more males typically engage in school suspension than females and those indicating "other" for the gender question. These tables also show that students who indicated "other" for the gender question, reported being drunk or high at school more often than males and females (3.6% for males and 4.3% for females compared to 8.1% for those indicating "other").

Table 4.2-1

Antisocial Behavior by Gender: Males

	Bin	ge Drink	king	Schoo	ol Suspe	nsion	Illega	al Drug S	Sales	Rep	orted Aı	rest	with	ked Som the Inte ming Th	nt of	Drur	nk or Hig School	gh at		Vehicle Orinking			e Vehicle ing Mari	
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023									
6th	1.3	1.0	1.1	8.2	5.0	9.1	0.2	0.3	0.7	0.6	0.5	0.8	5.5	7.0	9.6	0.7	0.6	0.7	0.4	0.1	0.2	0.2	0.1	0.1
8th	2.8	1.6	1.2	10.1	9.4	12.7	1.2	1.1	1.4	1.7	1.1	1.7	5.8	8.2	9.2	2.6	2.0	1.9	0.8	0.3	0.3	0.6	0.2	0.2
10th	8.2	5.2	3.7	9.7	7.5	10.0	4.4	1.7	2.9	2.4	2.3	2.2	6.3	6.2	7.8	8.4	4.5	4.9	1.6	0.8	0.7	1.8	0.8	0.7
12th	18.4	10.8	9.0	7.1	6.2	7.9	6.0	3.4	4.4	2.7	2.8	2.7	5.3	5.3	6.2	12.7	8.9	7.8	5.4	2.6	2.4	11.5	6.0	4.0
All	7.7	4.4	3.4	8.8	7.2	10.1	3.0	1.6	2.2	1.9	1.7	1.8	5.7	6.8	8.3	6.1	3.9	3.6	2.1	0.9	0.8	3.5	1.6	1.0

Table 4.2-2

Antisocial Behavior by Gender: Females

	Bing	ge Drink	ing	Schoo	ol Suspe	nsion	Illega	al Drug S	Sales	Rep	orted Aı	rest	with	ked Som the Inte	nt of	Drui	nk or Hig School	gh at		Vehicle Drinking			e Vehicle ing Mari	
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023									
6th	1.1	0.8	1.0	5.1	2.3	4.0	0.3	0.1	0.6	0.4	0.4	0.4	3.9	5.2	6.1	0.8	0.4	0.6	0.2	0.0	0.1	0.2	0.0	0.0
8th	3.1	2.5	1.9	6.0	4.3	7.4	0.7	0.5	1.5	1.0	0.8	0.9	4.1	5.3	6.7	3.6	2.9	3.3	0.4	0.2	0.2	0.4	0.2	0.2
10th	8.4	5.3	4.6	5.6	4.0	6.2	2.3	1.2	2.1	1.4	1.2	1.1	3.7	3.4	4.9	9.2	5.6	6.5	0.8	0.3	0.3	1.0	0.4	0.4
12th	15.8	12.9	8.6	4.5	3.3	4.7	3.1	2.3	2.4	1.2	1.3	1.2	2.5	3.0	3.3	11.2	8.7	7.2	2.6	2.4	1.4	8.2	5.8	3.2
All Grades	7.1	5.1	3.7	5.3	3.5	5.7	1.6	1.0	1.6	1.0	0.9	0.9	3.5	4.3	5.4	6.2	4.3	4.3	1.0	0.7	0.4	2.5	1.5	0.8

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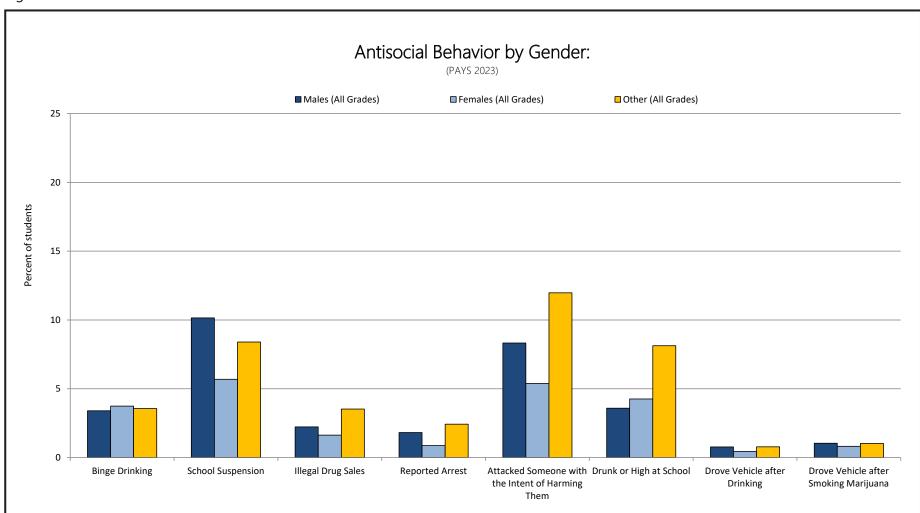
Table 4.2-3

Antisocial Behavior by Gender: Students Marking "Other" for Gender

	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 Smoking Marijuana
Grade	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023	State 2023
6th	2.3	9.2	2.6	1.5	16.4	3.2	0.9	0.1
8th	2.9	11.0	3.0	2.8	16.5	5.5	0.5	0.4
10th	3.1	7.7	3.0	2.1	9.1	9.1	0.5	0.4
12th	5.6	6.1	5.2	3.0	7.6	13.0	1.3	3.1
All	3.6	8.4	3.5	2.4	12.0	8.1	0.8	1.0

PAYS 2023 Page 4.2-2

Figure 4.2-1



PAYS 2023 Page 4.2-3

#### 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 8.9% of students in all grades have been offered drugs at least one time in the past 12 months. Of all students surveyed, 18.5% indicate having been threatened at school at least once in the past year. In regard to actual attacks, 7.3% of all students indicated having been attacked at school. In the past month, 1.4% of students in the state sample indicated that they brought a weapon to school at least one time.

The 12th grade saw the highest rates of past-year reports of bringing a weapon to school (1.8%), and the 10th grade had the highest rate of being offered drugs at school (12.5%). However, 6th graders indicated the highest rates of being attacked at school in the past year (10.9%), and 8th graders indicated the highest rates of being threatened at school in the past year (24.3%).

Since the 2021 survey, reports of being threatened at school increased 1.8 percentage points for all grades (from 16.7% in 2021 to 18.5% in 2023). The 10th grade rate of being attacked at school increased from 2021 to 2023 (from 4.5% in 2021 to 5.7% in 2023).

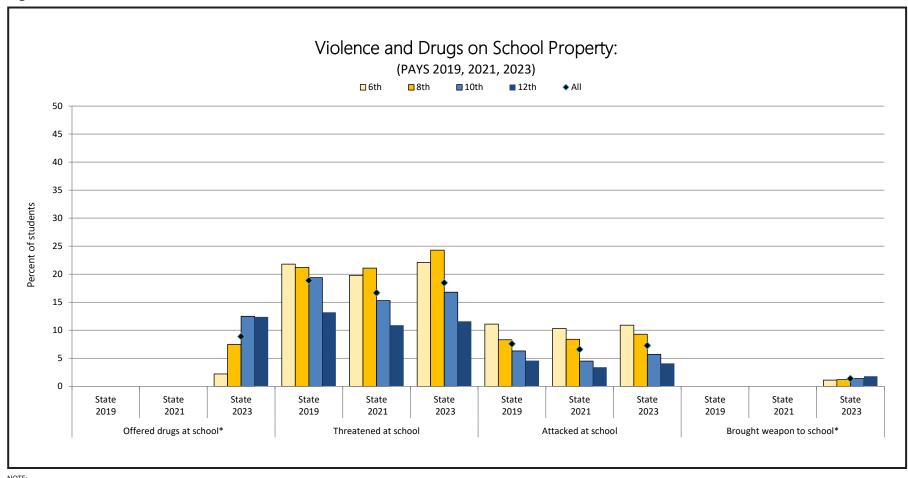
Table 4.3-1
Violence and Drugs on School Property

\*Offered substances at school and brought weapon to school questions were revised in 2023 and are not comparable to prior years.

	Offer	ed drugs at sch	nool*	Thr	eatened at sch	ool	At	ttacked at scho	ool	Broug	ht weapon to s	chool*
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	n/a	n/a	2.2	21.8	19.8	22.1	11.1	10.3	10.9	n/a	n/a	1.1
8th	n/a	n/a	7.5	21.2	21.1	24.3	8.3	8.4	9.3	n/a	n/a	1.2
10th	n/a	n/a	12.5	19.4	15.3	16.8	6.3	4.5	5.7	n/a	n/a	1.4
12th	n/a	n/a	12.4	13.2	10.9	11.6	4.6	3.4	4.1	n/a	n/a	1.8
All	n/a	n/a	8.9	18.9	16.7	18.5	7.6	6.6	7.3	n/a	n/a	1.4

PAYS 2023 Page 4.3-1

Figure 4.3-1



NOTE:

\*Offered substances at school and brought weapon to school questions were revised in 2023 and are not comparable to prior years.

**PAYS 2023** Page 4.3-2

### 4.4 Bullying and Internet Safety

The growing awareness that bullying has serious consequences for both schools and students continues to be an area of interest for prevention in schools. 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. 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 2023 questionnaire. Just under one in four (26.5% of all students) indicated they had been bullied in the past year, 15.5% reported inappropriate sexual contact through technology, and 5.9% said they had stayed home from school in the past year due to worries about bullying. Rates of being bullied were highest in the 6th grade (34.3% of 6th graders reported having been bullied in the past 12 months).

Students were also asked about adults at school stopping bullying when they see it or hear it. Of all students, 58.4% marked "YES!" or "yes" to this question, and 6th graders reported the highest response to this question (73.7% marked "YES!" or "yes").

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

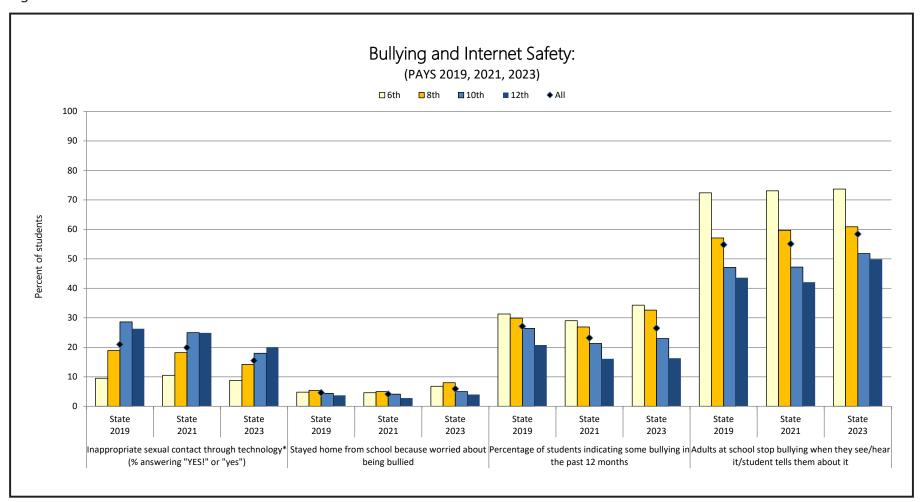
	Inappropria technology (9	te sexual cont 6 answering "`		,	me from school d about being		_	f students ind in the past 12	3		ool stop bullyi tudent tells th	ng when they nem about it
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	9.5	10.5	8.8	4.8	4.6	6.8	31.3	29.0	34.3	72.4	73.1	73.7
8th	18.9	18.2	14.2	5.4	5.0	8.0	29.9	26.9	32.6	57.1	59.7	60.9
10th	28.6	25.0	18.0	4.4	4.1	5.0	26.4	21.3	23.0	47.1	47.2	51.8
12th	26.3	24.9	20.0	3.7	2.8	4.0	20.8	16.1	16.3	43.6	42.1	49.9
All	21.0	19.9	15.5	4.6	4.1	5.9	27.1	23.2	26.5	54.8	55.1	58.4

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

Grade	No (not bu	llied in the past 1	12 months)	Yes, ve	ry rarely / now ar	nd then		es per month / se reek / almost dail	
Grade	State	State	State	State	State	State	State	State	State
	2019	2021	2023	2019	2021	2023	2019	2021	2023
6th	68.7	71.0	65.7	24.8	22.8	25.7	6.5	6.2	8.6
8th	70.1	73.1	67.4	22.9	20.3	24.0	7.0	6.6	8.6
10th	73.6	78.7	77.0	21.1	17.2	17.7	5.3	4.1	5.3
12th	79.2	83.9	83.7	16.8	12.7	12.5	4.0	3.5	3.8
All	72.9	76.8	73.8	21.4	18.2	19.7	5.7	5.0	6.8

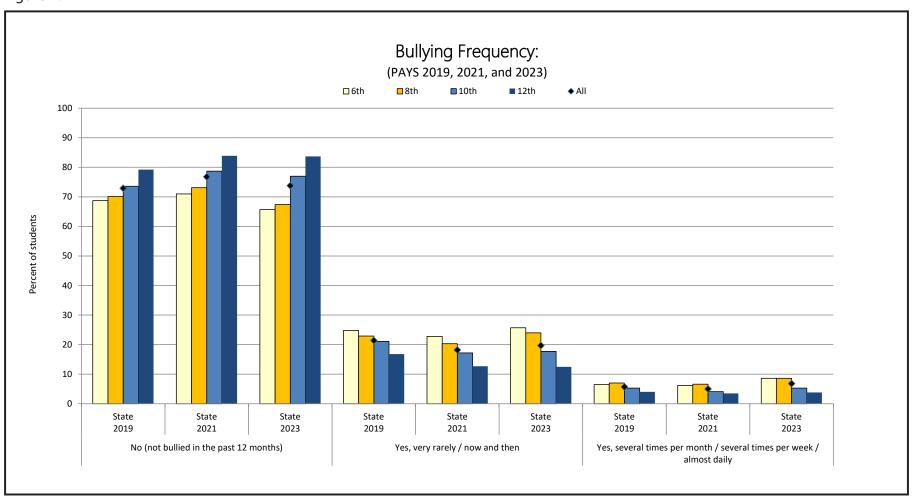
PAYS 2023 Page 4.4-1

Figure 4.4-1



PAYS 2023 Page 4.4-2

Figure 4.4-2



PAYS 2023 Page 4.4-3

### 4.5 Additional Bullying Data

Additional bullying data were gathered through the 2023 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 Figure 4.5-1), and their perception of why they were bullied (Table 4.5-2 and Figure 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 74.6% of students report not being bullied in the past year, 21.6% reported being bullied on school property (25.5% of 6th graders, 27.6% of 8th graders, 17.9% of 10th graders, and 12.2% of 12th graders).

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

The next highest locations were online (10.3%) experienced bullying here), while going to or from school (4.8%), at a school-sponsored event (3.4%), and in the community (3.2%).

Of students reporting they were bullied in the past year, the perceived reasons for being bullied were looks (i.e., clothing, hairstyle, etc.) (51.2%), size (height, weight, etc) (39.4%), social standing (17.7%), social conflict (13.2%), sexual orientation (10.6%), gender (9.7%), grades or school achievement (11.6%), family socioeconomic standing (8.8%), skin color (8.1%), religion (5.0%), country that family is from (4.3%), and country of birth (3.1%). A large number of students also reported that they "don't know why" they are bullied (32.1%) and that they were bullied for "some other reason" 34.4%).

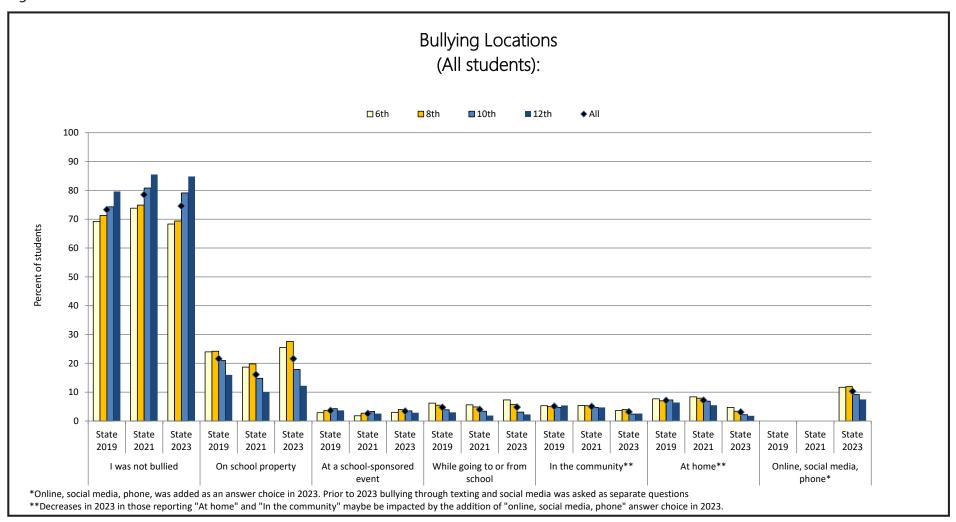
	l wa	s not bul	lied	On so	chool pro	perty	At a sc	hool-spor	nsored	While (	going to o	or from	In the	e commui	nity**	,	At home*	*	Onlin	e, social n phone*	nedia,
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023															
6th	69.2	73.8	68.3	24.0	18.7	25.5	2.9	1.8	3.0	6.2	5.6	7.3	5.3	5.4	3.6	7.7	8.4	4.7	n/a	n/a	11.7
8th	71.3	74.9	69.4	24.2	19.8	27.6	3.7	2.7	4.0	5.5	4.9	5.8	5.0	5.3	4.0	7.0	7.9	3.4	n/a	n/a	11.9
10th	74.3	80.8	79.1	21.0	14.8	17.9	4.3	3.3	3.5	3.9	3.4	3.1	4.7	4.7	2.4	7.3	6.9	2.2	n/a	n/a	9.2
12th	79.6	85.5	84.8	16.0	10.1	12.2	3.7	2.6	2.9	3.0	1.9	2.3	5.4	4.7	2.6	6.4	5.5	1.8	n/a	n/a	7.5
All	73.3	78.5	74.6	21.6	16.1	21.6	3.6	2.6	3.4	4.7	4.0	4.8	5.1	5.0	3.2	7.1	7.2	3.1	n/a	n/a	10.3

Table 4.5-2

#### **Perceived Reasons for Being Bullied** (of students indicating they had been bullied in the past year)

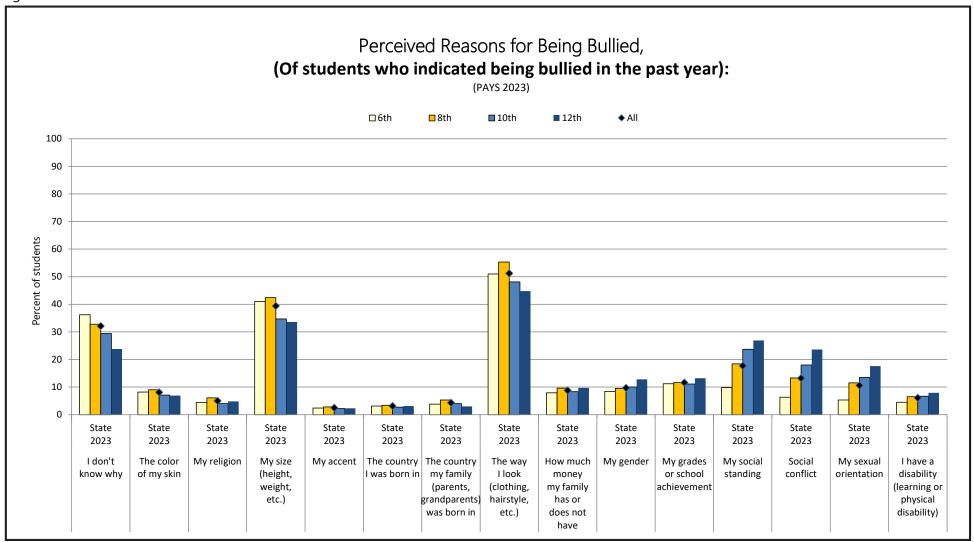
Grade			on't why			colo y ski		Му	relig	gion	(	My si heig veig etc.	ht, ht,	M	у асс		The I wa			my	cou fami from	ily is	(c	he wa I look othir airsty etc.)	ig,	my h do	w mu noney fami as or es no nave	/ ily ot	Му	gen			grac scho evem	ol		/ soc			Socia onflic			y sex enta	cual tion	di (lea	have isabil arnin hysic sabili	ity g or al		me o easc	
	State 2019	e Sta 9 20:	ate Sta 21 20	ite Sta 23 20	ate St 19 2	tate S 021 2	tate 023	State 2019	State 2021	State 2023	State 3 2019	Stat 202	e State 1 2023	e State 3 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State S 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State :	State 2019	State 2021	State 2023	State 2019	Stat 202	State	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	38.3	3   34	1.0 36	.2 6	.6	5.6	8.2	3.4	5.6	4.4	33.9	39.4	41.0	2.7	2.5	2.4	2.7	3.2	3.1	2.8	2.7	3.8	37.5	45.5	51.0	9.5	8.2	7.9	4.9	12.3	8.4	10.4	12.2	11.2	7.6	11.7	9.8	6.8	9.1	6.3	5.5	11.4	5.3	4.0	5.3	4.5	39.3	40.6	38.3
8th	33.3	3 32	2.5 32	.8 7	.1 6	5.3	9.0	4.8	4.9	6.1	35.8	43.3	3 42.4	3.2	2.7	2.8	2.5	1.9	3.4	3.9	2.8	5.3	42.5	52.0	55.3	10.4	9.4	9.6	5.3	13.0	9.5	11.6	12.2	11.6	15.7	19.6	18.4	10.6	12.2	13.3	11.3	19.0	11.5	6.1	6.6	6.5	39.5	36.6	32.4
10th	27.7	7 28	3.9 29	.4 9	.4	7.7	7.1	6.7	6.9	4.0	33.2	39.9	34.7	4.1	3.4	2.2	2.9	2.9	2.7	4.6	2.2	4.0	39.9	49.3	48.1	11.9	7.4	8.3	6.5	14.0	10.0	12.4	12.9	11.1	20.8	25.0	23.7	16.6	21.2	18.0	13.0	22.3	13.5	6.1	6.0	6.7	36.6	33.8	32.7
12th	28.3	3 28	3.5 23	.8 8.	.5 7	7.1	6.9	6.7	5.1	4.8	28.6	34.9	33.6	4.5	3.5	2.3	3.5	2.3	3.1	4.2	3.8	3.0	34.2	41.9	44.8	10.2	10.8	9.7	6.9	12.0	12.8	12.6	11.5	13.2	21.2	23.7	26.9	20.3	20.4	23.6	12.0	19.2	17.6	7.0	9.3	7.9	33.7	35.0	32.2
All	32.5	31	.5 32	.1 7.	.8 6	5.5	8.1	5.2	5.5	5.0	33.5	40.2	2 39.4	3.5	2.9	2.5	2.8	2.5	3.1	3.8	2.8	4.3	39.1	48.0	51.2	10.5	8.9	8.8	5.7	12.9	9.7	11.6	12.2	11.6	15.6	19.2	17.7	12.6	14.5	13.2	10.2	17.6	10.6	5.7	6.5	6.1	37.8	36.9	34.4

Figure 4.5-1



PAYS 2023 Page 4.5-2

Figure 4.5-2



PAYS 2023 Page 4.5-3

### 4.6 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 on quarter of students (21.7%) have gambled in their lifetime and just under one in ten (9.3%) have gambled in the past month. Past-month gambling increased 3.4 percentage points in all grades from 2021 (5.9%) to 2023 (9.3%).

The individual activities most often participated in during the past year were playing the lottery (7.9% of all students, a grade-level peak of 8.6% in the 12th grade), games such as poker/card games/dice/pool/darts (7.9% of all students, a grade-level peak of 10.8% in the 12th grade), and sporting events/sports pools/fantasy sports (7.7% of all students, a grade-level peak of 9.5% in the 12th grade).

In response to the question "Have you ever felt the need to bet more and more money?" 3.1% 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?" 1.6% of students responded affirmatively.

Figure 4.6-1

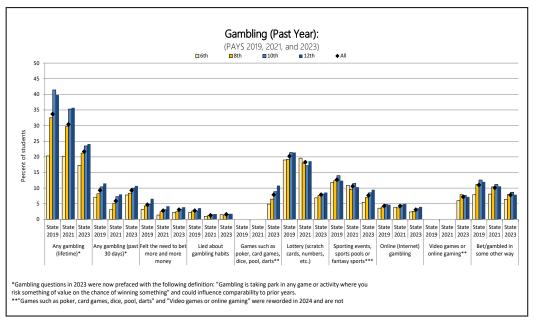


Table 4.6-1

**Gambling in the Past Year** \*"Games such as poker, card games, dice, pool, darts" and "Video games or online gaming" were reworded in 2023 and were not comparable to questions asked in prior years. \*\*"Fantasy sports" was added to the question wording for "sports events, sports pools or fantasy sports" in 2023

	1 1	gamb ifetime	_	•	gamb t 30 da	_	bet	the ned more are mod	and		ed abo oling h	out nabits	poker,	nes suc card g pool, d	games,		ery (scr s, num etc.)		spor	ting ev ts poo sy spor	ls or		e (Inte	,	1	o game e gam			gamble e other	
	1		I .						I .			I .	l		I .												l	State 2019		l 1
6		20.2			3.1	7.8	3.2	1.4	2.3	2.2	1.0	1.5	n/a	n/a	4.9	19.0				10.9		3.6	3.9	2.4	n/a	n/a	6.0	7.9	8.1	6.4
8		29.7	21.2		5.1	8.4	4.3	2.5	2.5	2.7	1.2	1.4	n/a	n/a	6.5	19.2			12.4		7.0	4.0	3.7	2.6	n/a	n/a			10.4	
10	41.4	35.3	23.5	10.4	7.3	10.0	4.9	3.1	3.3	2.7	1.5	1.6	n/a	n/a	8.9	21.4	17.2	8.1	14.0	11.5	8.5	4.8	4.6	3.4	n/a	n/a	7.7	12.6	11.2	8.7
12	39.8	35.7	24.1	11.5	8.0	10.7	6.6	4.2	3.9	3.6	1.7	1.8	n/a	n/a	10.8	21.4	18.6	8.6	12.4	10.3	9.5	4.7	5.0	4.0	n/a	n/a	7.2	12.0	10.6	7.9
All	33.7	30.4	21.7	9.3	5.9	9.3	4.7	2.8	3.1	2.8	1.3	1.6	n/a	n/a	7.9	20.2	18.3	7.9	12.7	10.6	7.7	4.3	4.3	3.1	n/a	n/a	7.2	11.0	10.1	7.8

PAYS 2023 Page 4.6-1

## 4.7 Dangerous Driving Behaviors

Table 4.7-1 and Figure 4.7-1 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.

PAYS data show that 0.8% of students statewide reported driving after consuming alcohol (past year), though the rate within the 12th grade population was significantly higher at 2.5% of that grade. Fewer students reported driving after smoking marijuana in the past year in 2023 (1.1% of the total survey sample population, and 3.7% of 12th grade respondents).

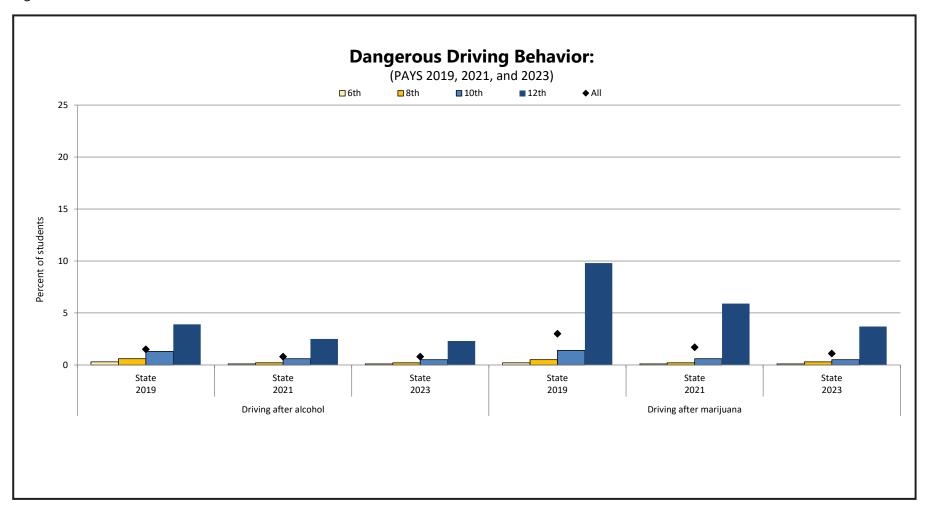
Five years of data are available for driving after drinking and driving after smoking marijuana. 2023 PAYS data show that the percent of Pennsylvania students reporting driving after drinking has decreased 1.6 percentage points since 2015 (rate of 2.4% in 2015, 2.2% in 2017, 1.5% in 2019, 0.8% in 2021, and 0.8% in 2023) and the percent of students reporting driving after consuming marijuana has decreased 2.4 percentage points (rate of 3.5% in 2015, and 3.5% in 2017, 3.0% in 2019, 1.7% in 2021, and 1.1% in 2023). 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 1.4 percentage points since 2019, and the 12th grade rate of driving after smoking marijuana is down 1.9 percentage points since 2019.

Table 4.7-1 **Dangerous Driving Behavior: Driving After Consuming Alcohol Or Marijuana** 

		Driving after alcohol		ı	Oriving after marijuana	3
	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	0.3	0.1	0.1	0.2	0.1	0.1
8th	0.6	0.2	0.2	0.5	0.2	0.3
10th	1.3	0.6	0.5	1.4	0.6	0.5
12th	3.9	2.5	2.3	9.8	5.9	3.7
All	1.5	0.8	0.8	3.0	1.7	1.1

PAYS 2023 Page 4.7-1

Figure 4.7-1



PAYS 2023 Page 4.7-2

# Section 5: Social and Emotional Health

This fifth section, **Social and Emotional Health**, provides information on student social and emotional health 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 second 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.

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#### 5.1 Mental Health, Stress, Trauma, Sleep, and Suicide Risk

The PAYS questionnaire has gathered data on depressive symptoms in past survey administrations. Additionally, the 2023 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 included in the 2021 PAYS and the results will be reported in this subsection.

In addition to depressive symptoms questions, the percentage of participants who indicated having experienced sleep problems and/or 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 37.3% of all students indicated (via responding "YES!" or "yes" to the statement) that they had felt depressed or sad most days in the past 12 months; 24.4% of all students indicated that they sometimes thought life is not worth it; 36.0% of all students indicated that "at times I think I am no good at all"; and 23.6% indicated that they felt that they were a failure. Further 14.8% 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 students thinking "I am no good at all" in the past year; an increase for all grades combined of 2.6 percentage points (38.6% in 2021 and 36.0% in 2023). The rate of students who reported "all in all, I am inclined to think I am failure" also decreased for all grades combined from 26.2% in 2021 to 23.6% in 2023.
- In 2023, the past month overall mental health question was added. For all grades combined, 71.3% of students indicated their past month overall mental health was good.
- In terms of sleep problems, 35.7% of all students indicated that slept less an 7 hours a night on an average school night, and 64.4% indicated they felt tired or sleeping during the day "every day" or "several times" during the past two weeks.
- 34.8% of students (all surveyed grades combined) indicated that they
  had experienced the death of a close family member or friend in the
  past year
- The percentage of students that indicated having the stress of worrying that food at home would run out increased from 9.1% of all students in 2021 to 20.7% of students in 2023. 10.7% indicated having the stress of having to skip a meal due to a lack of money.
- 16.1% of students in all grades combined indicated that they had considered suicide in the past year.
- 12.5% 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: 10.6% of 6th graders, 12.8% of 8th graders, 12.8% of 10th graders, and 13.7% 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, 4.1% of 6th graders, 5.3% of 8th graders, 5.4% of 10th graders, 5.9% of 12th graders, and 5.2% 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.

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Table 5.1-1 **Symptoms of Depression** (Percent of students marking 1 or more times) \*Past month overall mental health question was added to survey in 2023

	1	epressed ays in the months			nes I think not worth			es I think I good at a			l, I am inc hat I am a		Past	-year Self-H	larm		nth overal alth is goo	
	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	32.8	34.0	37.4	19.8	21.9	24.0	30.6	34.2	37.4	18.1	21.5	22.8	12.7	15.4	14.7	n/a	n/a	81.5
8th	33.9	38.2	36.0	23.0	27.5	23.7	32.9	37.1	35.0	21.5	25.3	23.4	14.9	20.1	16.5	n/a	n/a	73.3
10th	41.9	43.8	37.6	27.6	30.9	24.3	40.1	41.6	34.9	26.7	29.4	23.7	16.9	19.5	15.1	n/a	n/a	67.5
12th	43.1	43.7	38.3	29.4	30.7	25.7	41.2	41.0	37.0	27.0	28.0	24.4	13.2	15.1	13.0	n/a	n/a	64.3
All	38.0	40.1	37.3	25.0	27.9	24.4	36.3	38.6	36.0	23.4	26.2	23.6	14.4	17.6	14.8	n/a	n/a	71.3

Table 5.1-2 **Suicide Risk** (Percent of students marking 1 or more times) \*The question regarding suicide attempts was revised in 2023 from a question on how many times attempted suicide to a yes/no question on if attempted suicide. The 2023 data should be interpreted with caution when comparing to prior years.

	2 weeks in		for at least at stopped vities		ısidered suic	cide	PI.	anned suicio	de	Atte	empted suic	ide*	Needed n	nedical trea attempt**	tment for
	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	18.8	24.2	25.3	10.4	12.2	12.9	8.0	9.9	10.6	6.8	7.8	4.1	24.1	29.0	28.7
8th	21.9	29.4	26.8	15.3	18.8	16.8	12.1	15.2	12.8	9.3	11.2	5.3	27.9	26.0	27.9
10th	29.4	35.0	27.8	18.9	21.4	16.4	15.8	17.1	12.8	11.2	12.2	5.4	24.5	25.7	27.3
12th	30.6	34.7	29.0	19.9	21.3	17.9	15.4	16.2	13.7	11.4	12.2	5.9	26.2	25.2	34.4
All	25.2	31.0	27.3	16.2	18.6	16.1	12.9	14.7	12.5	9.7	10.9	5.2	25.8	26.3	29.7

Table 5.1-3 Sleep Habits, Trauma, and Stress \*Food insecurity questions were reworded in 2023 which could influence comparability of 2023 data to

prior years

	than 7	rage, sleep hours a ni chool nigh	ight on	day "ev	or sleepy ery day" or luring the weeks		l	friend/far year)	nily (past	1		ning out of imes in the *	family f		ecause of ne or more st year*
	State	State	State	State	State	State	State	State	State	State	State	State	State	State	State
	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023	2019	2021	2023
6th	18.0	19.5	20.2	43.6	46.4	50.9	40.5	40.1	41.1	12.1	9.9	27.4	4.8	4.0	11.8
8th	29.7	31.7	30.7	59.8	59.3	60.1	38.6	38.1	36.9	11.6	8.8	20.9	5.3	4.5	10.2
10th	46.6	46.2	40.6	75.5	75.0	69.8	40.4	38.1	32.5	11.6	8.5	17.2	6.8	5.0	9.6
12th	56.7	54.2	48.7	78.7	78.4	74.3	36.9	35.4	29.7	11.5	9.3	18.4	7.7	6.2	11.6
All	37.9	38.3	35.7	64.7	65.3	64.4	39.1	37.9	34.8	11.7	9.1	20.7	6.2	5.0	10.7

Figure 5.1-1

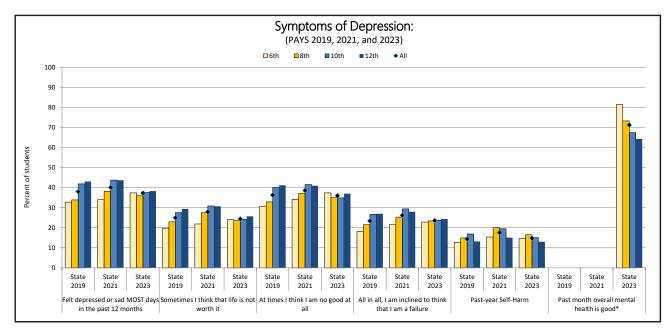


Figure 5.1-2

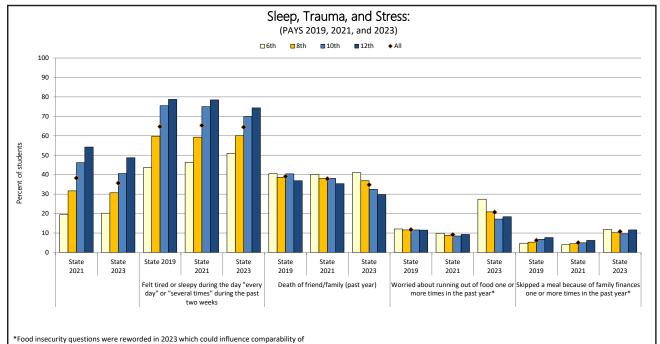
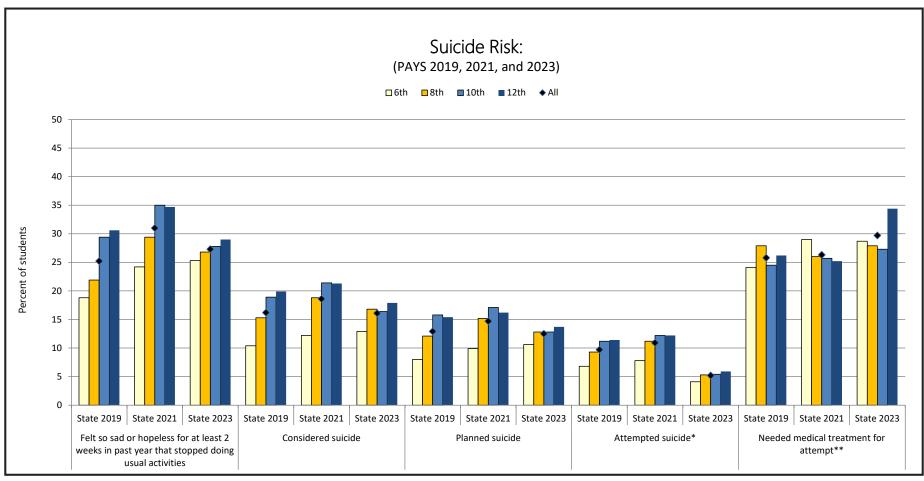


Figure 5.1-3



NOTE:

\*The question regarding suicide attempts was revised in 2023 from a question about how many times attempted suicide to a yes/no question on if attempted suicide. The 2023 data should be interpreted with caution when comparing to prior years.

\*\*In the 2023 survey, skip logic ensured that only participants who marked that they had actually attempted suicide were given this question, the past data was recalculated to match.

PAYS 2023 Page 5.1-4

#### 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.

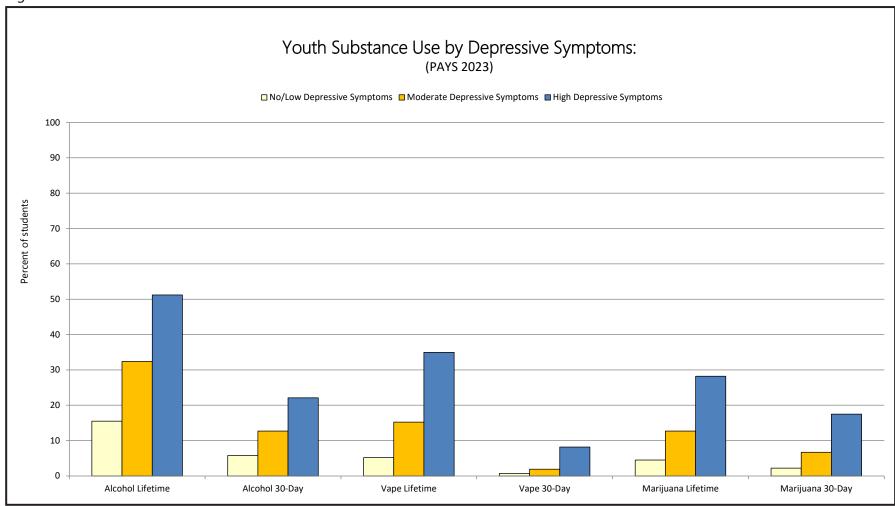
The results in Table 5.2-1 and Figure 5.2-1 show a strong link between youth who report depressive symptoms and ATOD use. When compared to the non-depressed group, the youth with high depressive symptoms indicate 30-day alcohol use rates that are nearly four times higher than non-depressed students. Depressed students indicate use rates that are nearly about seven times higher for past-month vape use and nearly eight 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	24.8	69.8	5.4
Alcohol Lifetime	15.5	32.4	51.2
Alcohol 30-Day	5.8	12.7	22.1
Vape Lifetime	5.2	15.2	34.9
Vape 30-Day	0.7	1.9	8.2
Marijuana Lifetime	4.5	12.7	28.2
Marijuana 30-Day	2.2	6.7	17.5

PAYS 2023 Page 5.2-1

Figure 5.2-1



PAYS 2023 Page 5.2-2

#### 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, 19.7% 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, 48.7% 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, 32.0% had considered suicide in the past year, 24.5% had made a suicide plan in the past year, and 10.5% had attempted suicide in the past year.

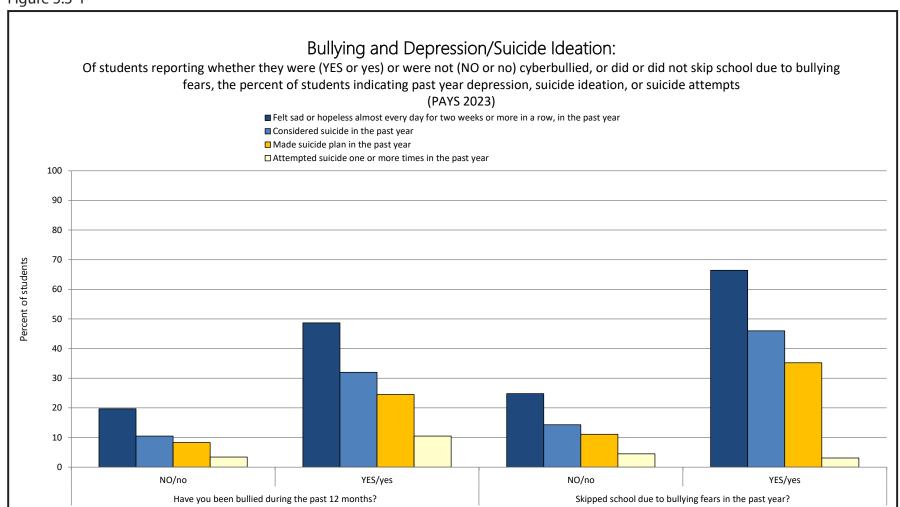
The same relationships exist for students who indicated they had skipped school due to bullying fears in the past year. Of those students, 66.4% had felt so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities, 46.0% had considered suicide, 35.2% had made a suicide plan, and 17.5% had attempted suicide.

Table 5.3-1 **Bullying and Depression/Suicide Ideation** 

	l '	ed during the past 12 oths?	Skipped school due t past	o bullying fears in the 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	19.7	48.7	24.8	66.4
Considered suicide in the past year	10.5	32.0	14.3	46.0
Made suicide plan in the past year	8.3	24.5	11.1	35.2
Attempted suicide one or more times in the past year	3.4	10.5	4.5	17.5

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Figure 5.3-1



PAYS 2023 Page 5.3-2

# 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.

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### 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.

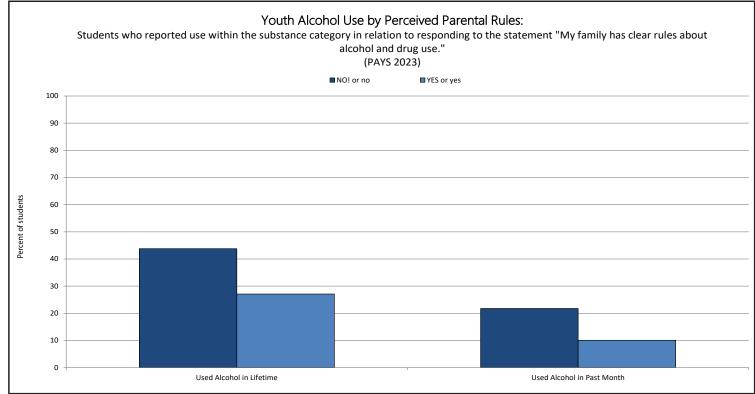
Of the students marking "YES!" or "yes" to the statement "My family has clear rules about alcohol and drug use," 27.1% indicated they had used alcohol in their lifetime and 10.1% indicated they had used alcohol in the past month. In contrast, of students who marked "NO!" or "no" to that statement, 43.8% indicated they had used alcohol in their lifetime and 21.8% 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** (Percent 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	43.8	21.8
YES or yes	27.1	10.1





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# 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 five times higher than the "A" students' use rates, and past month cigarette use rates that are over five times higher than the use rate of "A" students. Similar and more dramatic differences can be seen for individual drugs.

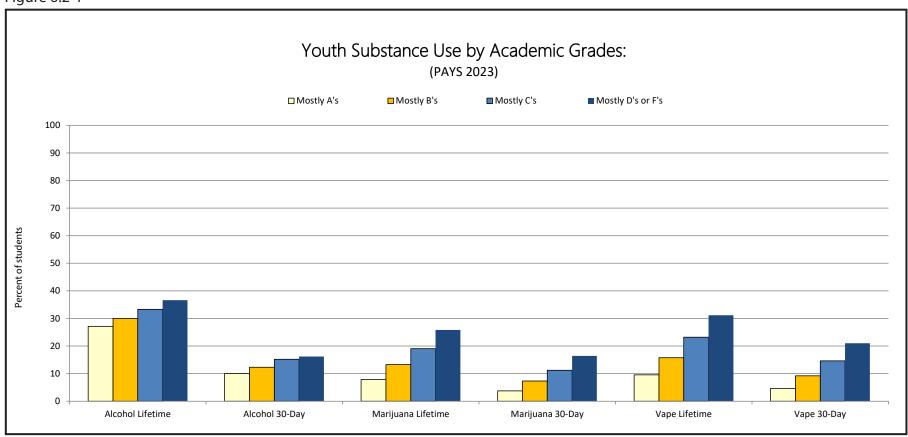
The data suggest that the youth getting A's are more invested in the education process and could be more bonded to school. The challenge of prevention programs is to develop methods of keeping all youth interested in learning and feeling attached to school. A survey of 1,000 youth on probation in Utah 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	27.2	30.0	33.3	36.6
Alcohol 30-Day	10.0	12.3	15.2	16.2
Marijuana Lifetime	7.9	13.3	19.1	25.8
Marijuana 30-Day	3.7	7.3	11.2	16.4
Vape Lifetime	9.6	15.8	23.2	31.2
Vape 30-Day	4.7	9.2	14.7	21.0

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Figure 6.2-1



PAYS 2023 Page 6.2-2

# 6.3 Family Financial Stress and Substance Use

The 2023 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, 5.2% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (8.2%). Of youth who indicated they had worried about food sometimes, past-month marijuana use increased to 10.7%. Of youth who indicated they worried about food often, 13.7% of those youth indicated regular marijuana use. Such a trend can be seen for each substance category in Table/Figure 6.3-1.

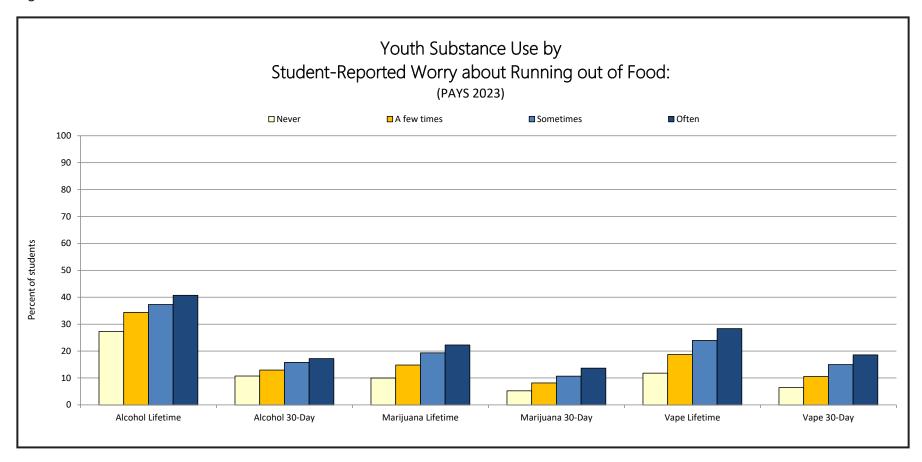
Table 6.3-1

**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	A few times	Sometimes	Often
Alcohol Lifetime	27.3	34.4	37.3	40.7
Alcohol 30-Day	10.7	12.9	15.8	17.2
Marijuana Lifetime	10.0	14.8	19.4	22.3
Marijuana 30-Day	5.2	8.2	10.7	13.7
Vape Lifetime	11.8	18.7	24.0	28.4
Vape 30-Day	6.4	10.6	15.0	18.6

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Figure 6.3-1



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### 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 parents disapprove of substance use. Of all students, 94.1% indicated their parents felt it was "Wrong" or "Very wrong" to use tobacco, 90.4% perceived parental disapproval of marijuana use, 92.9% perceived parental disapproval of having 1-2 drinks nearly every day use, and 94.5% 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 (6.0% lifetime, 2.5% 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 21.4% for lifetime use and 10.9% 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** (Percent Marking parents would feel it was "wrong" or "very wrong")

	Tobacco			Marijuana			Alcohol			Prescription drugs		
Grade	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	96.0	96.2	94.4	96.1	96.4	94.7	92.3	90.0	94.2	92.9	91.6	94.3
8th	96.0	95.9	94.9	93.6	93.5	93.9	93.1	90.6	94.0	94.5	93.4	95.1
10th	94.9	95.2	94.5	87.3	88.5	89.9	88.5	88.4	92.8	94.2	93.8	94.9
12th	91.2	91.8	92.5	80.1	79.3	83.6	82.5	82.9	90.9	94.2	93.4	93.6
All	94.5	94.7	94.1	89.1	89.2	90.4	89.0	88.0	92.9	94.0	93.1	94.5

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 use marijuana?")

	Marijuana Lifetime Use	Marijuana Past 30-Day Use		
	Has used in lifetime	Has used in lifetime		
Not Wrong at All	30.5	23.4		
A Little Bit Wrong	48.8	32.6		
Wrong	21.4	10.9		
Very wrong	6.0	2.5		

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Figure 6.4-1

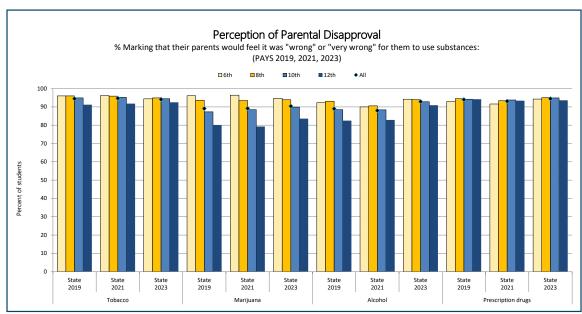
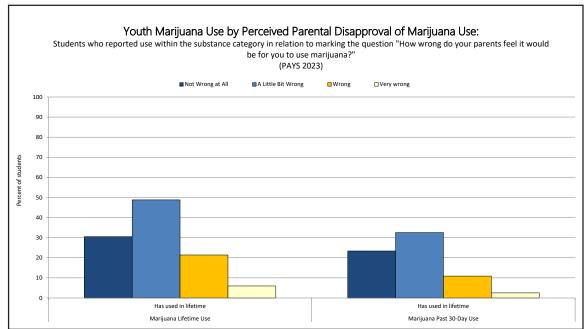


Figure 6.4-2



PAYS 2023 Page 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 5.7% had tried marijuana in their lifetime and only 2.7% 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 (19.6%) and just under four times higher for past-month use (10.0%). 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.

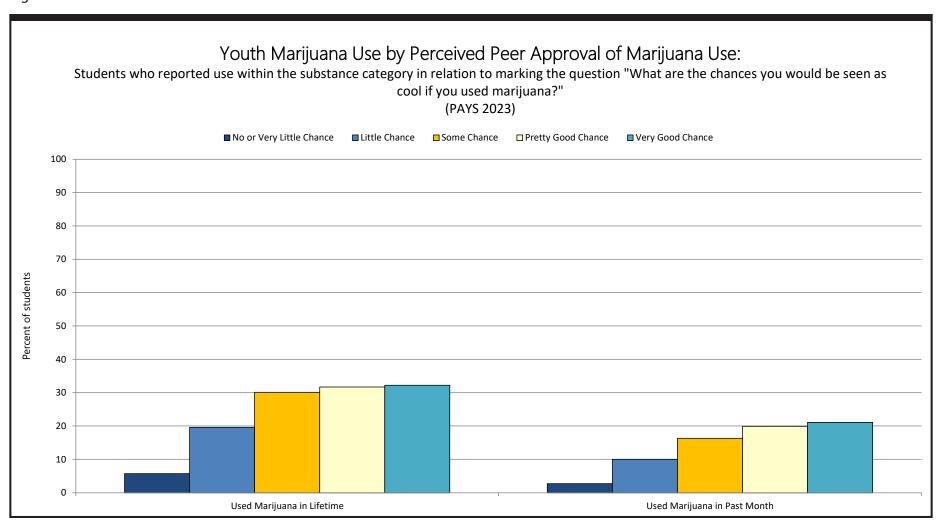
Table 6.5-1

**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 used marijuana?")

	Used Marijuana in Lifetime	Used Marijuana in Past Month
No or Very Little Chance	5.7	2.7
Little Chance	19.6	10.0
Some Chance	30.1	16.3
Pretty Good Chance	31.7	19.9
Very Good Chance	32.2	21.1

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Figure 6.5-1



PAYS 2023 Page 6.5-2

### 6.6 Transitions/Mobility and Substance Use

The 2023 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 transition are also less cohesive and stable.

The 2023 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 11.0% indicated having moved one or two times in the past year, and 1.9% have moved three or more times in the past year. Also, 21.6% of students indicated they had changed homes one or two times in the past three years, and 4.7% 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, 10.2% of them had used marijuana in their lifetime, and 5.3% had used in the past month; whereas of the students who indicated they had moved 3 or more times in past three years, 19.3% had used marijuana in their lifetime, and 10.6% 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** 

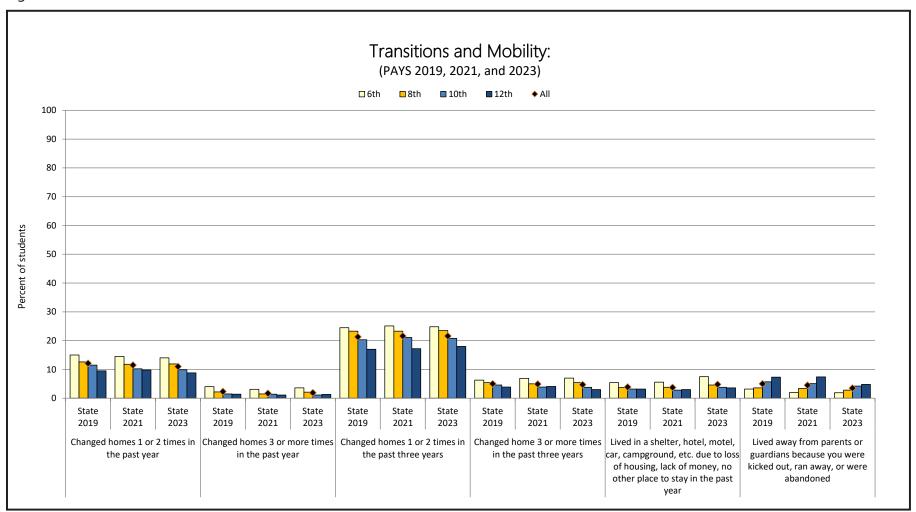
Grade	l in t	homes 1 o		, ,	d homes 3 in the pas		Changed in the	homes 1 opast three		s Changed home 3 or more times in the past three years		motel, ca due to lo of money	n a shelter r, campgross of hous y, no other n the past	ound, etc. sing, lack r place to	guardian: kicked ou	s because	arents or you were y, or were d	
	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023	State 2019	State 2021	State 2023
6th	15.0	14.5	14.0	4.0	3.1	3.6	24.5	25.1	24.8	6.3	6.9	7.0	5.4	5.6	7.5	3.2	2.0	1.9
8th	12.6	11.8	11.9	2.2	1.5	2.1	23.3	23.3	23.5	5.4	5.0	5.4	3.7	3.8	4.6	3.6	3.4	2.8
10th	11.5	10.2	9.9	1.5	1.4	1.1	20.3	21.1	20.8	4.6	3.9	3.8	3.2	2.8	3.8	5.7	5.1	4.2
12th	9.5	9.8	8.8	1.4	1.1	1.3	17.0	17.2	18.0	3.9	4.1	3.0	3.2	3.0	3.6	7.3	7.4	4.8
All	12.1	11.5	11.0	2.3	1.7	1.9	21.3	21.6	21.6	5.0	4.9	4.7	3.9	3.7	4.8	5.0	4.5	3.5

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	28.3	30.5	34.6	35.0
Alcohol 30-Day	11.2	11.5	13.7	14.6
Marijuana Lifetime	10.2	12.5	17.1	19.3
Marijuana 30-Day	5.3	7.0	10.6	10.6
Cigarettes Lifetime	11.8	15.4	22.3	26.8
Cigarettes 30-Day	6.5	8.4	14.5	15.9

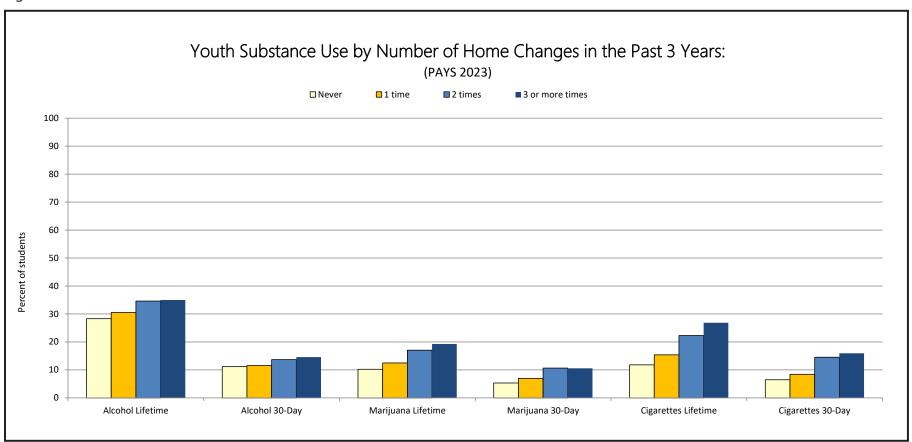
PAYS 2023 Page 6.6-1

Figure 6.6-1



PAYS 2023 Page 6.6-2

Figure 6.6-2



PAYS 2023 Page 6.6-3

#### 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.

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

Family Domain Risk Factors	Risk Factor	Associated Scales		
	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	Protective Factor	Associated Scales		
	School Opportunities for Prosocial Involvement	School Opportunities for Prosocial Involvement		
	School Rewards for Prosocial Involvement	School Rewards for Prosocial Involvement		
School Domain Risk Factors	Risk Factor	Associated Scales		
	Academic Failure Beginning in Late Elementary School	Academic Failure		
	Lack of Commitment to School	Low School Commitment		

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	647	0.1
		11	76811	17.2
		12	28178	6.3
		13	81508	18.3
		14	29311	6.6
		15	85921	19.3
		16	32827	7.4
		17	83993	18.8
		18	25338	5.7
		19 or older	1352	0.3
x2	What grade are you in?	6th	105674	23.7
		8th	111223	24.9
		10th	118120	26.5
		12th	110869	24.9
			355623	83.2
х3	Are you of Hispanic, Latino, or Spanish origin? No, not of Hispanic, Latino, or Spanish origin	Yes, Mexican, Mexican Am., Chicano	15988	3.7
		Yes, Puerto Rican	27074	6.3
		Yes, Cuban	1748	0.4
		Yes, another Hispanic, Latino, or Spanish origin	27191	6.4

Q	uestion	Response		%
x4a	What is your race?	White, Caucasian	320337	78.0
X4d	what is your race?		62685	15.3
		Black, African American	62685	15.3
		American Indian or Alaska Native	14785	3.6
		Asian Indian, Japanese, Native	44796	10.9
		Hawaiian, Chinese, Korean, Guamanian or Chamorro, Filipino,		
		Vietnamese, Samoan, Other Asian, Other Pacific Islander		
		Other Facilic Islander		
X	5 Are you?	Female	213186	48.5
		Male	218237	49.6
x6a	Think of where you live most of the time. Which of the following people live there with	Mother(s)	398953	90.9
	you?	Father(s)	323112	73.6
		Stepparent(s)	54632	12.5
		Foster Parent(s)	2675	0.6
		Grandparent(s)	45543	10.4
		Other Adult(s)	19687	4.5
			301934	68.8
		Sibling(s)		
		Other children	13049	3.0
	What is the learning or the first of the fir	For all tale	202720	00.7
х7	What is the language you use most often at home?	English	392739	89.7
		Spanish	24171	5.5
		Another language	20804	4.8

	Question	Response		%
x8a	Have you ever: Had beer, wine, or hard liquor?	Never	309081	71.1
		Once or twice	76849	17.7
		Once in awhile but not regularly	39642	9.1
		Regularly in the past	4626	1.1
		Regularly now	4339	1.0
x8	b Have you ever: Used marijuana (pot, hash,	Never	381998	88.4
	cannabis, weed, THC)?	Once or twice	20650	4.8
		Once in awhile but not regularly	13421	3.1
		Regularly in the past	6459	1.5
		Regularly now	9653	2.2
x8c	Have you ever: Sniffed glue, breathed the	Never	415382	96.0
	contents of an aerosol spray can, or inhaled other gases or sprays in order to get high?	Once or twice	12443	2.9
			3053	0.7
		Once in awhile but not regularly	1154	0.7
		Regularly in the past	798	0.3
		Regularly now	730	0.2
x8d	Have you ever: Used cocaine or crack?	Never	429938	99.5
, cu	nate you even osed assume or order.	Once or twice	1256	0.3
		Once in awhile but not regularly	163	0.0
		Regularly in the past	290	0.1
		Regularly now	276	0.1
		o ,		
x8e	Have you ever: Used heroin?	Never	429723	99.8
		Once or twice	434	0.1
		Once in awhile but not regularly	135	0.0
		Regularly in the past	141	0.0
		Regularly now	147	0.0

	Question	Response		%
x8f	Have you ever: Used hallucinogens (acid, LSD, shrooms)?	Never	421346	98.1
	,	Once or twice	5657	1.3
		Once in awhile but not regularly	1593	0.4
		Regularly in the past	543	0.1
		Regularly now	330	0.1
Х	8g Have you ever: Used methamphetamine (meth, crystal meth, speed)?	Never	427389	99.6
	crystal meth, speedy:	Once or twice	852	0.2
		Once in awhile but not regularly	247	0.1
		Regularly in the past	201	0.0
		Regularly now	213	0.0
x8h	Have you ever: Used Ecstasy or Molly?	Never	424848	99.5
		Once or twice	1448	0.3
		Once in awhile but not regularly	341	0.1
		Regularly in the past	204	0.0
		Regularly now	170	0.0
x8i	Have you ever: Used metaclorazoles (such as Magenta Zip, Czoles)?	Never	427675	100.0
x8j	Have you ever: Taken performance enhancing	Never	427453	99.3
,	drugs (such as steroids, human growth			
	hormone) without a doctor telling you to take them?	Once or twice	1952	0.5
		Once in awhile but not regularly	468	0.1
		Regularly in the past	387	0.1
		Regularly now	419	0.1
		negularly flow	413	0.1
x8k	Have you over Used prescription pain relievers	Novor	416795	97.0
XOK	Have you ever: Used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Co-	Never	410/95	97.0
	deine) without a doctor telling you to take them?			
		Once or twice	7904	1.8
		Once in awhile but not regularly	3283	0.8
		Regularly in the past	1162	0.3

	Question	Response		%
		Regularly now	653	0.2
x8I	Have you ever: Used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax)	Never	424134	99.2
	without a doctor telling you to take them?	Once or twice	2291	0.5
		Once in awhile but not regularly	482	0.1
		Regularly in the past	344	0.1
		Regularly now	111	0.0
x8r	n Have you ever: Used prescription stimulants (such as Ritalin or Adderall) without a doctor	Never	421162	98.2
	telling you to take them?	Once or twice	4592	1.1
		Once in awhile but not regularly	1634	0.4
		Regularly in the past	737	0.2
		Regularly now	612	0.1
x8n	Have you ever: Used synthetic drugs (man-made		423580	98.6
	drugs such as K2, Spice, Fake Weed, Bath Salts)?	Once or twice	3859	0.9
		Once in awhile but not regularly	1586	0.4
		Regularly in the past	425	0.1
		Regularly now	327	0.1
x80	Have you ever: Used over-the-counter medicine (cough syrup, cold medicine, etc.) in order to	Never	415295	96.7
	get high?	Once or twice	6346	1.5
		Once in awhile but not regularly	5209	1.2
		Regularly in the past	1750	0.4
		Regularly now	942	0.2
х8р	Have you ever: Smoked cigarettes?	Never	403254	93.9
		Once or twice	17142	4.0
		Once in awhile but not regularly	4654	1.1
		Regularly in the past	2889	0.7

	Question	Response	1299	%
		negatarry now	1233	0.5
x80	q Have you ever: Used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing	Never	419628	97.0
	tobacco)?	Once or twice	7729	1.8
		Once in awhile but not regularly	2605	0.6
		Regularly in the past	1164	0.3
		Regularly now	1260	0.3
x8r	Have you ever: Used an electronic vapor product	t Never	371473	86.1
	as such as e-cigarettes, vapes, mods, e-cigs, e-hookahs, or vape pens?	Once or twice	28667	6.6
	Once in awhile but not regularly	11886	2.8	
		Regularly in the past	7916	1.8
		Regularly now	11620	2.7
x9a	How often have you, in the past 30 days: Had	Never	382797	88.5
	beer, wine, or hard liquor?	Once or twice	41856	9.7
		Once in twice per week	6836	1.6
		About once a day	473	0.1
		More than once a day	786	0.2
x9b	How often have you, in the past 30 days: Used	Never	404003	93.7
	marijuana (pot, hash, cannabis, weed, THC)?	Once or twice	13478	3.1
		Once in twice per week	5532	1.3
		About once a day	3060	0.7
		More than once a day	5016	1.2
x9	c How often have you, in the past 30 days: Sniffed glue, breathed the contents of an aerosol spray	Never	427422	98.8
	can, or inhaled other gases or sprays in order to			
	get high?	Once or twice	4121	1.0
		Once in twice per week	599	0.1
		About once a day	166	0.0

	Question	Response		%
		More than once a day	184	0.0
x9d	How often have you, in the past 30 days: Used cocaine or crack?	Never	431442	99.9
	cocame or crack?	Once or twice	199	0.0
		Once in twice per week	43	0.0
		About once a day	75	0.0
		More than once a day	43	0.0
x9e	How often have you, in the past 30 days: Used	Never	430272	99.9
	heroin?	Once or twice	96	0.0
		Once in twice per week	43	0.0
		About once a day	50	0.0
		More than once a day	45	0.0
x9f	How often have you, in the past 30 days: Used	Never	426900	99.5
	hallucinogens (acid, LSD, shrooms)?	Once or twice	1965	0.5
		Once in twice per week	271	0.1
		About once a day	27	0.0
		More than once a day	49	0.0
X	9g How often have you, in the past 30 days: Used	Never	428275	99.9
	methamphetamine (meth, crystal meth, speed)?	Once or twice	369	0.1
		Once in twice per week	84	0.0
		About once a day	51	0.0
		More than once a day	24	0.0
x9h	How often have you, in the past 30 days: Used	Never	426301	99.9
	Ecstasy or Molly?	Once or twice	413	0.1
		Once in twice per week	77	0.0
		About once a day	19	0.0
		More than once a day	53	0.0

(	Question	Response		%
x9i	How often have you, in the past 30 days: Used metaclorazoles (such as Magenta Zip, Czoles)?	Never	427688	100.0
х9ј	How often have you, in the past 30 days: Used performance enhancing drugs (such as steroids, human growth hormone) without a doctor	Never	429510	99.8
	telling you to take them?	Once or twice	529	0.1
		Once in twice per week	220	0.1
		About once a day	105	0.0
		More than once a day	127	0.0
x9k	How often have you, in the past 30 days: Used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Codeine) without a	Never	425624	99.1
	doctor telling you to take them?	Once or twice	3014	0.7
		Once in twice per week	666	0.2
		About once a day	142	0.0
		More than once a day	113	0.0
x9l	How often have you, in the past 30 days: Used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor	Never	426558	99.8
	telling you to take them?	Once or twice	602	0.1
		Once in twice per week	100	0.0
		About once a day	47	0.0
		More than once a day	12	0.0
х9і	m How often have you, in the past 30 days: Used prescription stimulants (such as Ritalin or Adderall) without a doctor telling you to take	Never	426428	99.5
	them?	Once or twice	1586	0.4
		Once in twice per week	371	0.1
		About once a day	231	0.1

	Question	Response		%
		More than once a day	26	0.0
x9n	How often have you, in the past 30 days: Used synthetic drugs (man-made drugs such as K2,	Never	427375	99.5
	Spice, Fake Weed, Bath Salts)?	Once or twice	1549	0.4
		Once in twice per week	443	0.1
		About once a day	150	0.0
		More than once a day	93	0.0
x90	How often have you, in the past 30 days: Used over-the-counter medicine (cough syrup, cold	Never	423216	98.6
	medicine, etc.) in order to get high?	Once or twice	4498	1.0
		Once in twice per week	1014	0.2
		About once a day	352	0.1
		More than once a day	180	0.0
х9р	How often have you, in the past 30 days: Used	Never	420053	98.0
	smoked cigarettes?	Once or twice	6404	1.5
		Once in twice per week	1074	0.3
		About once a day	339	0.1
		More than once a day	866	0.2
x9q	How often have you, in the past 30 days: Used smokeless tobacco (chew, snuff, plug, dipping	Never	426593	98.7
	tobacco, or chewing tobacco)?	Once or twice	3440	0.8
		Once in twice per week	844	0.2
		About once a day	299	0.1
		More than once a day	866	0.2
x9r	How often have you, in the past 30 days: Used an electronic vapor product as such as e-cigarettes, vapes, mods, e-cigs, e-hookahs, or	Never	396534	92.1
	vape pens?	Once or twice	16164	3.8
		Once in twice per week	5016	1.2
		About once a day	2441	0.6
		More than once a day	10380	2.4

(	Question	Response		%
x10	If you used an electronic vapor product such as e-cigarettes, vapes, mods, e-cigs, e-hookahs, or vape pens during the past 12 months, with which		381194	88.7
	substances did you use it?	Just flavoring	16248	3.8
		Nicotine	31653	7.4
		Marijuana or THC	20047	4.7
		Other substance	860	0.2
		I don't know	6096	1.4
x11	If you used an electronic vapor product such as a vape or e-cigarette in the past year, how did	Did not use electronic vapor product	381698	89.2
	you usually get it?	A friend gave it to me for free	19858	4.6
		A family member gave it to me for free	4633	1.1
		I bought it from someone under	5312	1.2
		I bought it from someone over 21	4583	1.1
		I bought it from a store	8451	2.0
		I bought it on the Internet	1740	0.4
		I gave someone money to buy it for me	8293	1.9
		I took it from someone	5666	1.3
		Other source not listed here	11002	2.6
x12	Think back over the last two weeks. How many times have you had five or more alcoholic drinks	None	414772	96.0
	in a row?	Once	10069	2.3
		Twice	4093	0.9
		3-5 times	2070	0.5
		6-9 times	485	0.1
		10 or more times	711	0.2
x13a	How do you feel about someone your age: Having one or two drinks of an alcoholic bever-	Strongly disapprove	312296	72.8
	age (beer, wine, hard liquor) nearly every day?	Somewhat disapprove	46678	10.9
		Neither approve or disapprove	47872	11.2
		Approve	7654	1.8
		Don't know/ Can't say	14581	3.4

	Question	Response		%
x13b	How do you feel about someone your age: Using marijuana once a month or more?	Strongly disapprove	286957	68.1
	osing manyadia once a moner or more.	Somewhat disapprove	43162	10.2
		Neither approve or disapprove	56516	13.4
		Approve	20874	5.0
		Don't know/ Can't say	13771	3.3
x14a	How willing are you to try ALCOHOL (beer, wine, coolers, hard liquor such as vodka, whiskey, gin, or rum) before you are 21? This is not a question about surrent or past use.		219128	51.1
	about current or past use.	I probably wouldn't try it	75526	17.6
		I'm not sure whether or not I	71726	16.7
		would try it I would like to try it	47608	11.1
		I would try it any chance I got	14817	3.5
x14b	hash, cannabis, weed, THC) before you are 21?	I would never try it	312803	73.4
	This is not a question about current or past use.	I probably wouldn't try it	42399	9.9
		I'm not sure whether or not I	35761	8.4
		would try it I would like to try it	22054	5.2
		I would try it any chance I got	13344	3.1
a1	days of school have you missed because you skipped or cut?	None	305349	75.1
		1 day	46713	11.5
		2 days	22631	5.6
		3 days	13087	3.2
		4 to 5 days	11527	2.8
		6 to 10 days	4612	1.1
		11 or more days	2635	0.6
a2	How important do you think the things you are learning in school are going to be for your later	Very important	82810	20.4
	life?	Quite important	91306	22.5
		Fairly important	117331	28.9
		Slightly important	86972	21.4
		Not at all important	27563	6.8

	Question	Response		%
a3	How interesting are most of your courses	Very interesting and stimulating	41900	10.5
	to you?	Quite interesting	99465	24.9
		Fairly interesting	147624	36.9
		Slightly Dull	74721	18.7
		Very Dull	36064	9.0
		,		
a4	Putting them all together, what were	Mostly A's	216306	53.7
	your grades like last year?	Mostly B's	125970	31.3
	Mostly C's	44607	11.1	
		Mostly D's	10842	2.7
		Mostly E's or F's	4884	1.2
a5	How often do you feel that the school work	Never	43730	10.9
you are assigned is meaningful and in	you are assigned is meaningful and important?	Seldom	64927	16.1
		Sometimes	165636	41.2
		Often	83071	20.6
		Almost Always	45005	11.2
a6a	. , ,	Never	47990	11.9
	how often did you: Enjoy being in school?	Seldom	53131	13.1
		Sometimes	157629	39.0
		Often	100968	25.0
		Almost Always	44787	11.1
a6b	Now thinking back over the past year in school, how often did you: Hate being in school?	Never	40408	10.0
	now often did you. Hate being in school?	Seldom	74280	18.4
		Sometimes	136760	33.9
		Often	90668	22.5
		Almost Always	61374	15.2

	Question	Response		%
a6c	Now thinking back over the past year in school, how often did you: Try to do best work in	Never	9382	2.3
	school?	Seldom	14947	3.7
		Sometimes	61299	15.2
		Often	127185	31.5
		Almost Always	190707	47.3
a7	Are most of your school grades better than the	NO!	25804	6.6
	grades of most students in your class?	no	106547	27.2
		yes	194217	49.6
		YES!	65070	16.6
a8	Teachers ask me to work on special classroom projects	NO!	74824	19.2
		no	198017	50.9
		yes	93188	23.9
		YES!	23253	6.0
a9	There are lots of chances for students in my	NO!	23298	6.0
	school to talk one-on-one with a teacher	no	64419	16.6
		yes	207255	53.3
		YES!	93923	24.2
a10	I have lots of chances to be part of class discus-	NO!	16618	4.3
	sions or activities	no	38541	9.9
		yes	219541	56.4
		YES!	114397	29.4
a11	In my school, students have lots of chances to	NO!	46071	11.9
	help decide things like class activities and rules	no	129414	33.4
		yes	168633	43.5
		YES!	43329	11.2

(	Question	Response		%
a1	2 There are lots of chances for students in my school to get involved in sports, clubs, and other	NO!	12637	3.3
	school activities outside of class	no	19135	4.9
		yes	169023	43.5
		YES!	187684	48.3
a13	job and lets me know about it	NO!	30383	7.8
		no	97191	25.0
		yes	196741	50.6
		YES!	64668	16.6
a14	I feel safe at my school	NO!	27748	7.1
		no	56222	14.5
		yes	211259	54.4
		YES!	92927	23.9
a15	The school lets my parents/caregivers know when I have done something well	NO!	55307	14.3
		no	146552	37.9
		yes	139162	36.0
		YES!	45209	11.7
a16	My teachers praise me when I work hard in school	NO!	41024	10.7
	3611001	no	135030	35.1
		yes	165281	43.0
		YES!	42909	11.2
a1	7 My neighbors notice when I am doing a	NO!	141287	36.6
	good job and let me know	no	162589	42.2
		yes	62484	16.2
		YES!	19256	5.0

	Question	Response		%
a18	There are people in my neighborhood who are	NO!	118896	31.0
	proud of me when I do something well	no	135964	35.4
		yes	100626	26.2
		YES!	28423	7.4
a19	There are people in my neighborhood who	NO!	100530	26.1
	encourage me to do my best	no	122195	31.8
		yes	122214	31.8
		YES!	39823	10.4
a20	I like my neighborhood	NO!	28536	7.4
		no	52651	13.6
		yes	209037	54.0
		YES!	96597	25.0
a2	1 I'd like to get out of my neighborhood	NO!	131425	34.2
		no	147522	38.4
		yes	71505	18.6
		YES!	34112	8.9
a22	If I had to move, I would miss the neighborhood	NO!	38716	10.0
	I now live in	no	81338	21.0
		yes	149418	38.6
		YES!	117399	30.3
a23a	How wrong do your friends feel it would be for	Not Wrong at All	39831	10.3
	YOU to: Have one or two drinks of an alcoholic beverage nearly every day?	A Little Dis Weens	41.55.4	10.0
		A Little Bit Wrong	41654	10.8
		Wrong	87930	22.7
		Very wrong	217631	56.2
-22	Name and the second field of the second field	Nist Massac at All	40422	10.4
a23b	How wrong do your friends feel it would be for YOU to: Use tobacco?	_	40123	10.4
		A Little Bit Wrong	31836	8.3
		Wrong	75391	19.5
		Very wrong	238507	61.8

C	Question	Response		%
		•		
a23c	How wrong do your friends feel it would be for	Not Wrong at All	56429	14.7
	YOU to: Use marijuana?	A Little Bit Wrong	40452	10.5
		Wrong	61829	16.1
		Very wrong	226410	58.8
a23d	How wrong do your friends feel it would be for YOU to: Use prescription drugs not prescribed	Not Wrong at All	32944	8.6
	to you?	A Little Bit Wrong	19987	5.2
		Wrong	67547	17.6
		Very wrong	264082	68.7
a23	e How wrong do your friends feel it would be for YOU to: Use an electronic vapor product such as	Not Wrong at All	54370	14.2
	vape or e-cigarette?	A Little Bit Wrong	42851	11.2
		Wrong	69557	18.1
		Very wrong	217178	56.6
a24a How easy would it be for you to get any, if you wanted to get any of the following: Beer, wine, or hard liquor (for example, vodka, whiskey, gin,		Very hard	183332	47.8
	or rum)?	Sort of hard	76925	20.0
		Sort of easy	69945	18.2
		Very easy	53572	14.0
a24l	b How easy would it be for you to get any, if you	Very hard	241442	63.1
	wanted to get any of the following: Cigarettes?	Sort of hard	63996	16.7
		Sort of easy	41005	10.7
		Very easy	36017	9.4
a24	c How easy would it be for you to get any, if you	Very hard	289137	75.6
	wanted to get any of the following: A handgun?	Sort of hard	47784	12.5
		Sort of easy	23595	6.2
		Very easy	21710	5.7

Question	Response		%
a24d How easy would it be for you to get any, if you wanted to get any of the following: A drug like	Very hard	327265	85.7
cocaine, LSD, heroin, or amphetamines?	Sort of hard	30382	8.0
	Sort of easy	11812	3.1
,	Very easy	12438	3.3
a24e How easy would it be for you to get any, if you	Very hard	259383	68.0
wanted to get any of the following: Marijuana?	Sort of hard	42366	11.1
	Sort of easy	36699	9.6
	Very easy	43076	11.3
a24f How easy would it be for you to get any, if you	Very hard	250276	65.7
wanted to get any of the following: Prescription drugs not prescribed to you?	Sort of hard	58134	15.3
	Sort of easy	37370	9.8
	Very easy	35138	9.2
	very easy	33136	3.2
a25 If a kid drank some beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum) in your neighborhood, would he or she be caught	NO!	59195	15.5
by the police?	no	172983	45.4
	yes	103699	27.2
	YES!	45105	11.8
a26 If a kid smoked marijuana in your neighborhood,	NO!	59833	15.8
would he or she be caught by the police?	no	153082	40.3
	yes	111188	29.3
	YES!	55716	14.7
a27a How wrong would most adults (over 21) in your neighborhood think it was for kids your age: To	Not Wrong at All	23109	6.0
drink alcohol?	A Little Bit Wrong	54104	14.1
	Wrong	110134	28.8
	Very wrong	195394	51.1

Question	Response		%
a27b How wrong would most adults (over 21) in your neighborhood think it was for kids your	Not Wrong at All	19760	5.2
age: To smoke cigarettes?	A Little Bit Wrong	29553	7.7
	Wrong	95550	25.0
	Very wrong	236635	62.0
a27c How wrong would most adults (over 21) in your neighborhood think it was for kids your	Not Wrong at All	21795	5.7
age: To use marijuana?	A Little Bit Wrong	32859	8.6
	Wrong	81557	21.4
	Very wrong	244464	64.2
b1 My parents/caregivers ask me what I think before most family decisions affecting me are	NO!	43023	11.1
made	no	80458	20.7
	yes	174763	44.9
	YES!	91081	23.4
b2 If I had a personal problem, I could ask my	NO!	30792	7.9
parents/caregivers for help	no	41786	10.7
	yes	161786	41.2
	YES!	157866	40.2
b3 My parents/caregivers give me lots of chances to do fun things with them	NO!	21828	5.6
to do full things with them	no	43117	11.0
	yes	163505	41.8
	YES!	162650	41.6
b4 My parents/caregivers notice when I am doing a good job and let me know	Never or Almost Never	32032	8.1
about it	Sometimes	113550	28.7
	Often	127204	32.1
	All the time	123414	31.1

Question	Response		%
b5 How often do your parents/caregivers tell you they're proud of you for something you've	Never or Almost Never	41323	10.4
done?	Sometimes	109632	27.7
	Often	122501	30.9
	All the time	122768	31.0
b6 Do you feel very close to your parents/	NO!	15504	4.0
caregivers?	no	35171	9.0
	yes	136961	34.9
	YES!	204652	52.2
b7 Do you share your thoughts and feelings with	NO!	35134	9.0
your parents/caregivers?	no	88722	22.7
	yes	149106	38.1
	YES!	117905	30.2
b8 Do you enjoy spending time with your parents/ caregivers?	NO!	11409	2.9
	no	19425	5.0
	yes	166025	42.5
	YES!	193813	49.6
b9 When I am not at home, one of my parents/ caregivers knows where I am and who	NO!	10496	2.7
I am with.	no	15951	4.1
	yes	147587	37.7
	YES!	217045	55.5
b10 If you skipped school, would you be caught by	NO!	13466	3.5
your parents/caregivers?	no	24009	6.2
	yes	132987	34.2
	YES!	218614	56.2
b11 My parents/caregivers ask if I've gotten my	NO!	23807	6.1
homework done.	no	57441	14.7
	yes	138226	35.4
	YES!	170828	43.8

Question	Response		%
b12 Would your parents/caregivers know if you did	NO!	12060	3.1
not come home on time?	no	32526	8.4
	yes	154183	39.6
	YES!	190615	49.0
b13 The rules in my family are clear.	NO!	12704	3.3
	no	40047	10.3
	yes	173416	44.6
	YES!	162260	41.8
b14 If you carried a handgun without your parents/ caregivers' permission, would you be caught by	NO!	16777	4.3
them?	no	26932	7.0
	yes	94362	24.4
	YES!	249186	64.3
b15 People in my family often insult or yell at each	NO!	109085	28.2
other.	no	159685	41.2
	yes	79088	20.4
	YES!	39648	10.2
b16 We argue about the same things in my family	NO!	98383	25.5
over and over.	no	139560	36.1
	yes	103708	26.9
	YES!	44410	11.5
b17 People in my family have serious arguments.	NO!	134622	34.9
	no	145845	37.9
	yes	70418	18.3
	YES!	34423	8.9

(	Question	Response		%
b20a	Drank beer, wine or hard liquor (for example,	I don't have any	90050	23.5
	vodka, whiskey or gin)?	None	218293	56.9
		1	45458	11.8
		2	18120	4.7
		3 or 4	7949	2.1
		5 or more	3930	1.0
b20b	. , , , ,	I don't have any	93968	24.5
	Smoked cigarettes?	None	251526	65.7
		1	24585	6.4
		2	7702	2.0
		3 or 4	3143	0.8
		5 or more	2138	0.6
b20c How many of your brothers or sisters ever:		I don't have any	93677	24.5
	Smoked marijuana?	None	238450	62.3
		1	32146	8.4
		2	11183	2.9
		3 or 4	4593	1.2
		5 or more	2569	0.7
b20d		I don't have any	97066	25.4
	Took a handgun to school?	None	281971	73.8
		1	1123	0.3
		2	753	0.2
		3 or 4	374	0.1
		5 or more	718	0.2

	Question	Response		%
		-		
b20e	b20e How many of your brothers or sisters ever: Been suspended or expelled from school?	I don't have any	87500	22.9
	seem suspended on expended monitoring	None	237221	62.2
		1	40937	10.7
		2	10042	2.6
		3 or 4	3599	0.9
		5 or more	2151	0.6
b21	Has anyone in your family ever had a severe	Yes	104530	27.3
	alcohol or drug problem?	no	277748	72.7
b22	My family has clear rules about alcohol and	NO!	12302	3.2
	drug use.	no	35100	9.2
		yes	129310	33.8
		YES!	205411	53.8
b23a	How wrong do your parents/caregivers feel it	Not Wrong at All	19512	5.1
	would be for you to: Pick a fight with someone?	A Little Bit Wrong	77499	20.2
		Wrong	142029	37.1
		Very wrong	144030	37.6
b23b	How wrong do your parents/caregivers feel it	Not Wrong at All	13361	3.5
	would be for you to: Steal anything worth more than \$5			
		A Little Bit Wrong	25089	6.6
		Wrong	110547	28.9
		Very wrong	233004	61.0
b23c	How wrong do your parents/caregivers feel it would be for you to: Draw graffiti, or write thing	Not Wrong at All	14710	3.9
	or draw pictures on buildings or other property			
	(without the owner's permission)?	A Little Bit Wrong	24055	6.3
		Wrong	94802	24.8
		Very wrong	248004	65.0

Q	Question	Response		%
b23d	How wrong do your parents/caregivers feel it would be for you to: Drink beer, wine or hard liquor (for example, vodka, whiskey, gin, or rum)	Not Wrong at All	14677	3.8
	regularly?	A Little Bit Wrong	23806	6.2
		Wrong	71984	18.9
		Very wrong	271256	71.1
b23e	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	Not Wrong at All	14281	3.7
	day?	A Little Bit Wrong	12738	3.3
		Wrong	58193	15.2
		Very wrong	296642	77.7
b23f		Not Wrong at All	13185	3.5
	would be for you to: Smoke cigarettes?	A Little Bit Wrong	9500	2.5
		Wrong	55033	14.4
		Very wrong	304413	79.7
b23g	How wrong do your parents/caregivers feel it would be for you to: Smoke marijuana	Not Wrong at All	17767	4.7
	would be for you to. Smoke mangana	A Little Bit Wrong	18977	5.0
		Wrong	54307	14.2
		Very wrong	290340	76.1
b23h	How wrong do your parents/caregivers feel it would be for you to: Use prescription drugs not prescribed to you?	Not Wrong at All	13010	3.4
	presented to you.	A Little Bit Wrong	8009	2.1
	Wrong	48478	12.7	
		Very wrong	310945	81.7

(	Question	Response		%
b24a	How often in the past year have you: Worried that food at home would run out before your	Never	302984	79.3
	family got money to buy more?	A few times	47868	12.5
		Sometimes	18228	4.8
		Often	12999	3.4
b24b	How often in the past year have you: Skipped a meal because your family didn't have enough	Never	340332	89.3
	money to buy food?	A few times	22449	5.9
		Sometimes	10968	2.9
		Often	7481	2.0
c1	I like to see how much I can get away with.	Very false	222540	57.8
		Somewhat false	95755	24.9
		Somewhat true	53822	14.0
		Very true	12895	3.3
c2	I ignore the rules that get in my way.	Very false	242095	63.1
		Somewhat false	91928	24.0
		Somewhat true	40550	10.6
		Very true	9148	2.4
c3	I do the opposite of what people tell me, just to	Very false	251891	65.7
	get them mad.	Somewhat false	83473	21.8
		Somewhat true	36811	9.6
		Very true	11202	2.9
c4	My overall mental health in the past month has	NO!	38719	10.1
	been good.	no	71483	18.6
		yes	161661	42.1
		YES!	111932	29.2
or sad MOST days, even if	In the past 12 months, have you felt depressed or sad MOST days, even if you felt OK some-	NO!	123060	32.1
	times?	no	117442	30.6
		yes	99869	26.0
		YES!	43258	11.3

	Question	Response		%
c6	Sometimes I think that life is not worth it.	NO!	185182	48.4
		no	103979	27.2
		yes	67804	17.7
		YES!	25728	6.7
c7	At times, I think I am no good at all.	NO!	142873	37.5
		no	101090	26.5
		yes	100860	26.5
		YES!	36426	9.6
c8	All in all, I am inclined to think that I am a	NO!	176556	46.4
	failure.	no	114307	30.0
		yes	60944	16.0
		YES!	28935	7.6
(	9a If you have felt sad, lonely or worried in the	No one	102519	27.9
	past month who did you talk to?	Parent/caregiver	134482	36.6
		Other family member	60567	16.5
		Friend	163083	44.3
		Teacher or another adult at school	30126	8.2
		(e g coach, counselor, nurse) Doctor or therapist	36273	9.9
		Religious or spiritual leader	7046	1.9
		(e g Rabbi, Pastor, Imam, Priest or	7040	1.5
		Nun, Bishop) Other adult in the community	7448	2.0
		I have not felt this way in the past	72830	19.8
		30 days	72030	15.0
c10	How often do you attend religious services or	Never	134899	35.6
C10	activities?	Rarely	115699	30.5
		•		
		1-2 times a month	51829	13.7
		Once a week or more	76536	20.2

	Question	Response		%
c11a	How many times have you: Done what feels	Never	150320	41.3
	good no matter what?	I've done it, but not in the past	48776	13.4
		year Less than once a month	43416	11.9
		About once a month	34217	9.4
		2 or 3 times a month	37150	10.2
		Once a week or more	49928	13.7
c11b	How many times have you: Done something dangerous because someone dared you	Never	231914	61.6
	to do it?	I've done it, but not in the past	73681	19.6
		year Less than once a month	36745	9.8
		About once a month	16881	4.5
		2 or 3 times a month	9691	2.6
		Once a week or more	7672	2.0
c11c	How many times have you: Done crazy things	Never	183755	49.0
	even if they are a little dangerous?	I've done it, but not in the past	81537	21.7
		year Less than once a month	48158	12.8
		About once a month	27579	7.3
		2 or 3 times a month	18563	4.9
		Once a week or more	15739	4.2
c12a	How wrong do you think it is for someone your age to: Stay away from school all day when their	Not Wrong at All	22826	6.0
	parents/caregivers think they are at school?	A Little Bit Wrong	60198	15.8
		Wrong	129182	34.0
		Very wrong	167802	44.2
c12b	How wrong do you think it is for someone your age to: Take a handgun to school?	Not Wrong at All	15017	3.9
	age to. Take a flaffuguri to scrioors	A Little Bit Wrong	4223	1.1
		Wrong	19402	5.1
		Very wrong	341774	89.8

(	Question	Response		%
c12c	How wrong do you think it is for someone your	Not Wrong at All	21343	5.6
	age to: Steal anything worth more than \$5?	A Little Bit Wrong	57123	15.0
		Wrong	124821	32.9
		Very wrong	176632	46.5
c12d	How wrong do you think it is for someone your	Not Wrong at All	25376	6.7
	age to: Pick a fight with someone?	A Little Bit Wrong	80021	21.1
	Wrong	131790	34.7	
		Very wrong	142524	37.5
c12e	How wrong do you think it is for someone your		17539	4.6
age to: Attack someone with the idea of serioush hurting them?	A Little Bit Wrong	19766	5.2	
	Wrong	74324	19.6	
		Very wrong	268395	70.6
		rery meng		
c12f	How wrong do you think it is for someone your	Not Wrong at All	22466	5.9
	age to: Drink beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum) regularly?			
	example, vousa, whistey, girl, or rully regularly.	A Little Bit Wrong	41418	10.9
		Wrong	80527	21.2
		Very wrong	236028	62.0
c12g	How wrong do you think it is for someone your age to: Smoke cigarettes?	Not Wrong at All	20364	5.4
		A Little Bit Wrong	27354	7.2
		Wrong	73346	19.3
		Very wrong	259107	68.2
c12h	How wrong do you think it is for someone your age to: Use LSD, cocaine or crack, amphetamine		17468	4.6
	or another illegal drug?	A Little Bit Wrong	11249	3.0
		Wrong	47103	12.4
		Very wrong	303953	80.0

(	Question	Response		%
c12i	How wrong do you think it is for someone your	Not Wrong at All	34082	9.0
CIZI	age to: Use marijuana?		39587	10.4
		A Little Bit Wrong		
		Wrong	58244	15.4
		Very wrong	247352	65.2
c12j	age to: Use prescription drugs not prescribed	Not Wrong at All	17369	4.6
	to them?	A Little Bit Wrong	14384	3.8
		Wrong	59623	15.8
		Very wrong	287145	75.9
c13a	c13a How much do you think people risk harming	No risk	27440	7.3
	themselves if they: Take one or two drinks of an alcoholic beverage (beer, wine, hard liquor)			
nearly every day?	Slight risk	48887	13.0	
		Moderate risk	111354	29.5
		Great risk	189455	50.2
c13b	How much do you think people risk harming	No risk	24573	6.5
	themselves if they: Take five or more drinks of an alcoholic beverage (beer, wine, hard liquor) once			
	or twice a week?	Slight risk	35767	9.5
		Moderate risk	107011	28.5
		Great risk	208418	55.5
c13c	How much do you think people risk harming themselves if they: Smoke one or more packs of	No risk	23044	6.1
	cigarettes per day?	Slight risk	18124	4.8
		Moderate risk	55293	14.7
		Great risk	279001	74.3
c13d	How much do you think people risk harming	No risk	74107	19.8
	themselves if they: Try marijuana once or twice?	Slight risk	93938	25.1
		Moderate risk	76953	20.5
		Great risk	129487	34.6

Q	uestion	Response		%
c13e	How much do you think people risk harming themselves if they: Use marijuana once or twice	No risk	42880	11.5
	a week?	Slight risk	57446	15.4
		Moderate risk	99562	26.6
		Great risk	173868	46.5
c13f	How much do you think people risk harming themselves if they: Use marijuana regularly?	No risk	32064	8.6
	themselves if they. Ose manjuana regularly?	Slight risk	30383	8.1
		Moderate risk	66076	17.7
		Great risk	244818	65.6
c13g	How much do you think people risk harming themselves if they: Use prescription drugs that	No risk	22071	5.9
	are not prescribed to them?	Slight risk	17873	4.8
		Moderate risk	71143	19.0
		Great risk	263269	70.3
c13h	low much do you think people risk harming hemselves if they: Use an electronic vapor roduct such as vape or e-cigarette once or twice	No risk	29200	7.8
	a day?	Slight risk	46001	12.3
		Moderate risk	96737	25.8
		Great risk	202579	54.1
c14a	What are the chances you would be seen as cool if you: Carried a handgun?	No or very little chance	308598	82.0
	your curricu a narragarri	Little chance	36179	9.6
		Some chance	16235	4.3
		Pretty good chance	7723	2.1
		Very good chance	7462	2.0
c14b	What are the chances you would be seen as cool if you: Began drinking alcoholic beverages	No or very little chance	269817	72.0
	regularly, that is, at least once or twice a month?	Little chance	48868	13.0
		Some chance	30112	8.0
		Pretty good chance	17274	4.6
		Very good chance	8818	2.4

(	Question	Response		%
c14c	What are the chances you would be seen as	No or very little chance	296441	79.1
	cool if you: Smoked cigarettes?	Little chance	41474	11.1
		Some chance	19785	5.3
		Pretty good chance	9482	2.5
		Very good chance	7445	2.0
c14d	What are the chances you would be seen as cool	No or very little chance	269107	72.2
	if you: Used marijuana?	Little chance	41580	11.2
		Some chance	28897	7.8
		Pretty good chance	20127	5.4
		Very good chance	13035	3.5
c15	c15 I think it is okay to take something without asking as long as you get away with it.	NO!	226099	60.6
		no	127720	34.3
		yes	15164	4.1
		YES!	3840	1.0
c16	It is alright to beat people up if they start the	NO!	135095	36.2
	fight.	no	91137	24.4
		yes	94910	25.4
		YES!	51788	13.9
c17	I think sometimes it's okay to cheat at school.	NO!	163589	43.9
		no	121278	32.6
		yes	73271	19.7
		YES!	14208	3.8
c18	It is important to be honest with your parents/ caregivers, even if they become upset or you get	NO!	56431	15.2
	punished.	no	39782	10.7
		yes	145636	39.2
		YES!	129436	34.9

	Question	Response		%
c19a	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:	None	359733	96.0
	Been arrested?	1	9726	2.6
		2	2820	0.8
	3	1015	0.3	
		4	1617	0.4
c19b	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:	None	360548	96.4
	Dropped out of school?	1	8985	2.4
		2	2258	0.6
		3	802	0.2
		4	1330	0.4
c19	c 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	365209	97.6
	cui oi motoreyele.	1	4974	1.3
		2	2026	0.5
		3	642	0.2
		4	1368	0.4
c19d	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:	None	309474	82.8
	Been suspended from school?	1	39523	10.6
		2	13436	3.6
		3	5194	1.4
		4	6301	1.7

	Question	Response		%
c19e	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:	None	361434	96.9
Carried a handgun?	Carried a handgun?	1	6439	1.7
		2	1972	0.5
		3	960	0.3
		4	2199	0.6
f n	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 when their	None	278897	74.8
	parents/caregivers di	1	37209	10.0
		2	23385	6.3
		3	11306	3.0
		4	22068	5.9
friends you feel closest to). In the past 2	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:	None	336748	90.1
	Smoked cigarettes?	1	20653	5.5
		2	8073	2.2
		3	3176	0.8
		4	5096	1.4
frien	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:	None	357770	95.9
	Sold illegal drugs?	1	8385	2.2
		2	3079	0.8
		3	1161	0.3
		4	2648	0.7

(	Question	Response		%
c19i	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 or crack, amphetamines or	None	359583	96.4
	another illegal drug?	1	7396	2.0
		2	2625	0.7
		3	1465	0.4
	4	2061	0.6	
c19j	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:	None	302198	81.1
Used marijuana?	1	26936	7.2	
	2	15842	4.3	
	3	9205	2.5	
		4	18515	5.0
d1	Have you ever bet/gambled for money or	Never	296247	78.3
	anything of value?	Once or twice	47999	12.7
		Once in awhile but not regularly	24650	6.5
		Regularly in the past	4249	1.1
		Regularly now	5134	1.4
d2a	During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Games such as	Not at all	346540	92.1
poker, card games, dice, pool, darts	poker, card games, dice, pool, darts	Less than once a month	19996	5.3
		1 to 3 times a month	6122	1.6
		More than 3 times a month	3639	1.0

	%
346099	92.1
20086	5.3
6684	1.8
2779	0.7
347097	92.3
15323	4.1
7739	2.1
5900	1.6
363114	96.9
5153	1.4
3069	0.8
3492	0.9
348545	92.8
13516	3.6
6553	1.7
7142	1.9
346214	92.2
19140	5.1
6065	1.6
4145	1.1
	20086 6684 2779 347097 15323 7739 5900 363114 5153 3069 3492 348545 13516 6553 7142 346214 19140 6065

	Question	Response		%
d3	How often have you bet/gambled for money or	Never	336077	90.7
	anything of value during the past 30 days?	Once or twice	26963	7.3
		Once in twice per week	4885	1.3
		About once a day	1304	0.4
		More than once a day	1337	0.4
d4a	Have you ever felt the need to:	Bet more and more money?	11542	3.1
		Lie to important people (such as your family/ friends) about how much you gamble?	5921	1.6
d5a	If you drank alcohol during the past 12 months,	Did not drink any alcohol	352930	86.6
	how did you usually get it?	Bought it in a store	3522	0.9
		Bought it at a restaurant, bar or	1995	0.5
		club Bought it at a public event such as	1316	0.3
		a concert or sporting event Gave someone money to buy it	9781	2.4
		for me Parents/caregivers provided it	17971	4.4
		to me Friends' parents/caregivers	11067	2.7
		provided it to me Friends, brothers, or sisters over	13807	3.4
		21 provided it to me Friends, brothers, or sisters under	11464	2.8
		21 provided it to me Other relatives (uncles, aunts,	7888	1.9
		cousins, grandparents/caregivers, etc.) provided it to me	10016	2.5
		Other source provided it to me	10016	2.5
		Took without permission, stole, or found it (my home, friend's home, store, etc.)	14590	3.6
d6a	If you used any prescription drugs without a prescription during the last 12 months, how did		439983	99.6
	you get them?	prescription Took them from a family member	811	0.2
		living in my home Took them from other relatives	171	0.0
		not living in my home Took them from someone not	164	0.0
		related to me A friend or family member gave	697	0.2
		them to me Bought them from someone	259	0.1
		Ordered them over the Internet	169	0.0

	Question	Response		%
d7a	How often have you: Driven a motor vehicle	I don't drive	286521	69.1
u/a	while or shortly after drinking?	Never	123141	29.7
			1825	0.4
		About once or twice a year	2197	0.4
		About once or twice a year  About once or twice a month	604	0.3
		About once or twice a week	88	0.0
		Almost every day	285	0.1
d7b	How often have you: Driven a motor vehicle while or shortly after using marijuana (pot, hash	I don't drive	291246	69.2
	cannabis, weed, THC)?	Never	123062	29.2
		Before, but not in the past year	1840	0.4
		About once or twice a year	2065	0.5
		About once or twice a month	1154	0.3
		About once or twice a week	739	0.2
		Almost every day	779	0.2
d8	On an average school night, how many hours of	4 or less hours	25662	6.8
	sleep do you get?	5 hours	37917	10.0
		6 hours	71752	18.9
		7 hours	99927	26.3
		8 hours	95597	25.2
		9 hours	34554	9.1
		10 or more hours	14174	3.7
d9	In the last two weeks, how often have you felt	Every day	116187	30.7
	tired or sleepy during the day?	Several times	127470	33.7
		Twice	65175	17.2
		Once	44823	11.8
		Never	24947	6.6
e1a	In the past 12 months, how often have you: Been threatened to be hit or beaten up on	Never	306383	81.5
	school property?	Once or twice	52022	13.8
		Several times	11957	3.2
		Often	5698	1.5

	Question	Response		%
e1b	In the past 12 months, how often have you: Been attacked and hit by someone or beaten up on school property?	Never	346612	92.7
		Once or twice	21584	5.8
		Several times	3623	1.0
		Often	2284	0.6
e1c	In the past 12 months, how often have you: Beer offered, given, or sold alcohol, tobacco product	nNever	339113	91.1
	or other drug on school property?	Once or twice	22211	6.0
		Several times	6998	1.9
		Often	4118	1.1
e2a	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) Family supported activities or hobbies (such as dance, gymnastics, hiking, biking, skating,	69334 174334	19.2 48.3
		etc.) School sponsored activities (such as sports, music, clubs, after school programs, etc.)	220950	61.2
		Faith-based activities (such as choir, youth group, mission, church leagues, etc)	76709	21.3
		Job, employed	111853	31.0
		Volunteer	98562	27.3
		Other activities	101852	28.2
		I do not participate	45321	12.6
e3	During 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	No	353458	95.2
		Yes, but for less than a month	8314	2.2
		Yes, but for more than a month	4844	1.3
		Yes, for most of the year	4532	1.2
e4	In the past 12 months, did you ever live away from your parents/caregivers because you were kicked out, ran away, or were abandoned?	Yes	13064	3.5
		No	358456	96.5

	Question	Response		%
		·		
e5a	How many times have you changed homes in the past 12 months?	Never	317336	87.0
		1	32580	8.9
		2	7606	2.1
		3 or more	7062	1.9
e5b	How many times have you changed homes including the past 12 months, in the last 3 years?	Never	268028	73.7
		s? 1	58537	16.1
		2	20056	5.5
		3 or more	17016	4.7
e6	a How many times in the past 12 months have	Never	348321	93.3
CO	you: Attacked someone with the idea of serious		340321	33.3
	hurting them?	Once or twice	20504	5.5
		Several times	2553	0.7
		Often	1776	0.5
e6b	How many times in the past 12 months have	Never	367005	98.5
	you: Been arrested?	Once or twice	4010	1.1
		Several times	711	0.2
		Often	755	0.2
e6c	How many times in the past 12 months have you: Been drunk or high at school?	Never	355899	95.7
		Once or twice	9256	2.5
		Several times	4048	1.1
		Often	2757	0.7
e6d	you: Been suspended from school?	Never	344141	92.7
		Once or twice	21532	5.8
		Several times	4377	1.2
		Often	1382	0.4
		Often	1302	0.4
e6e	How many times in the past 12 months have you: Sold substances such as vapes, alcohol, drugs, or medications?	Never	364110	98.0
		_		
		Once or twice	4175	1.1
		Several times	1869	0.5
		Often	1403	0.4

	Question	Response		%
e6f	How many times 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 diffic	Never	316045	85.2
		Once or twice	31618	8.5
		Several times	16164	4.4
		Often	7147	1.9
e6g	How many times in the past 12 months have you: Brought a weapon (such as a handgun, knife, etc.) to school?	Never	367223	98.6
		Once or twice	3460	0.9
		Several times	770	0.2
		Often	927	0.2
f1a		NO!	277269	73.7
		no	76852	20.4
		yes	14940	4.0
		YES!	7244	1.9
f1b	Do adults at your school stop bullying when they see/hear it or when a student tells them about it?	NO!	72862	19.7
		no	81189	21.9
		yes	146092	39.5
		YES!	70019	18.9
f1c	months.	No	278140	73.8
		Yes, very rarely	42604	11.3
		Yes, now and then	31687	8.4
		Yes, several times per month	9286	2.5
		Yes, several times per week	6084	1.6
		Yes, almost daily	9043	2.4

	Question	Response		%
f1d	If you have been bullied in any way in the past	I was not bullied	283413	75.5
	12 months, where were you bullied?	On school property	78098	20.8
		At a school-sponsored event	12833	3.4
		While going to or from school	17070	4.5
		In the community	11759	3.1
		At home	11083	3.0
		Online, social media, phone	37909	10.1
f1e	If you have been bullied in the past 12 months	I have not been made fun of by	284578	76.1
	by other students, why were you bullied?	other students I don't know why	28119	7.5
		The color of my skin	7016	1.9
		My religion	4407	1.2
		My size (height, weight, etc.)	34871	9.3
		My accent	2141	0.6
		The country I was born in	2686	0.7
		The country my family (parents/	3677	1.0
		caregivers, grandparents/		
		caregivers) was born in The way I look (clothing, hairstyle, etc.)	45463	12.2
		How much money my family has or does not have My gender	7942	2.1
			8738	2.3
		My grades or school achievement	10527	2.8
		My social standing	16673	4.5
		Social conflict	12527	3.4
		My sexual-orientation	10042	2.7
		I have a disability (learning or physical disability) Some other reason	5547	1.5
			30612	8.2
f	2a If you were hurt or abused by another person in the past 12 months, how were you hurt or abused?	Physical injury	22420	19.6
		Threats	30840	27.0
		Emotional abuse, insults, name-	76402	66.8
		calling Isolation from friends and family	14957	13.1
		Control of what you were wearing	14109	12.3
		Control with whom you socialized	17991	15.7
		Other injury or abuse	13765	12.0

(	Question	Response		%
f3	In the past 12 months, did anyone on the Internet ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual?	Yes e No	57737 313600	15.5 84.5
		NO	313600	84.5
f4a	Did you ever feel so sad or hopeless almost ever day for two weeks or more in a row that you stopped doing some usual activites?	yYes No	101010 268895	27.3 72.7
f4b	Did you ever seriously consider attempting suicide?	Yes No	59446 309313	16.1 83.9
f4c	Did you make a plan about how you would at- tempt suicide?	Yes No	46128 322093	12.5 87.5
f4d	How many times did you actually attempt suicide?	Yes No	19188 347590	5.2 94.8
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		Yes	3931	29.7
	a doctor or nurse?	No	9319	70.3
f5	In the past 12 months, have any of your friends or family members close to you died?	Yes No	128331 240839	34.8 65.2

#### Appendix C: PAYS Summary Data by Gender

This Appendix presents data comparing male and female students, as well as those marking "other" (a new response option for 2021). 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

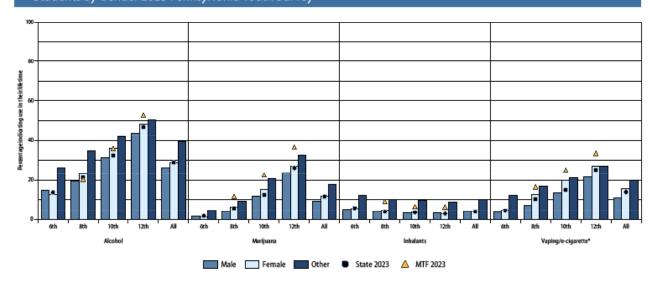
Early initiation and higher prevalence drugs - Lifetime use, Statewide Sample 2023 PAYS

#### Early initiation and higher prevalence drugs - 30-day use, Statewide Sample 2023 PAYS

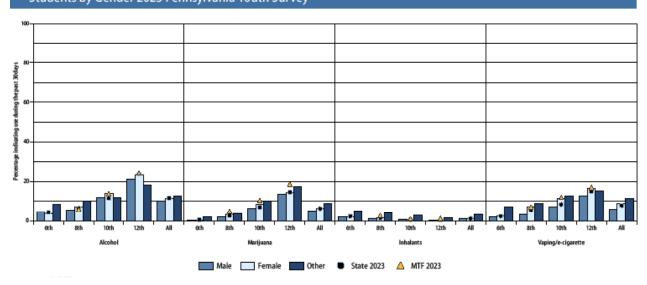
Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

\* Wording of Lifetime and 30-day use questions for all substances except cigarettes, smokeless tobacco, and electronic vapor products shifted in 2023 and could impact comparability to previous years.

#### Early initiation and higher prevalence drugs - Lifetime use Students by Gender 2023 Pennsylvania Youth Survey



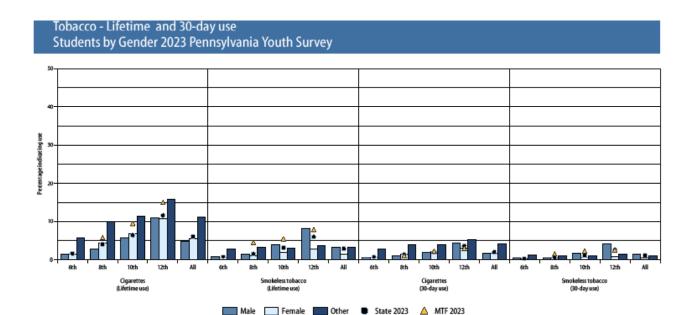
### Early initiation and higher prevalence drugs - 30-day use Students by Gender 2023 Pennsylvania Youth Survey

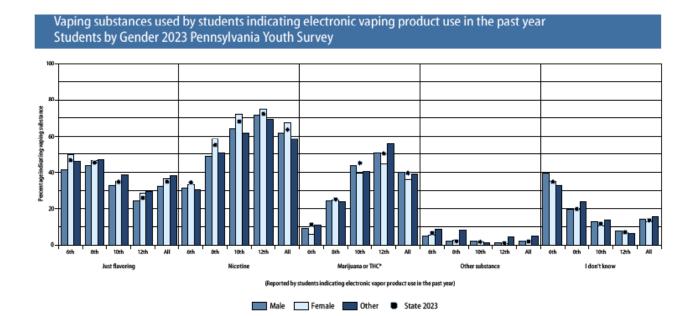


Tobacco and Vaping - Lifetime and 30-day use, Statewide Sample 2023 PAYS

Vaping Substances Used During the Past 12 Months (of past-year users), Statewide Sample 2023 PAYS

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



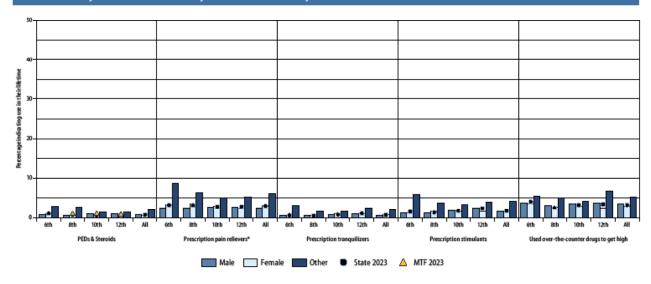


Prescription and over-the-counter drugs and medications - Lifetime, Statewide Sample 2023 PAYS

Prescription and over-the-counter drugs and medications - 30-day use, Statewide Sample 2023 PAYS

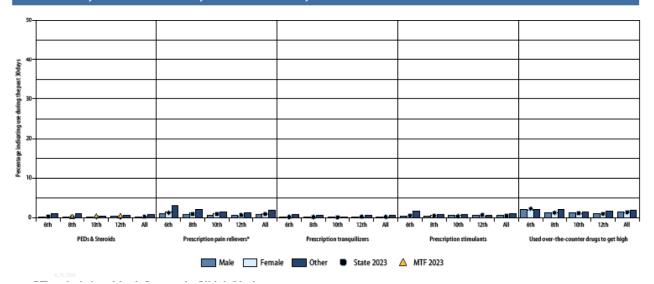
\*The most recent national data available for lifetime narcotic prescription drug use in 8th and 10th graders are from the 2014 Monitoring the Future administration. (However, 12th grade data are from the 2017 administration.)

Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item. Prescription and over-the-counter drugs and medications - Lifetime use Students by Gender 2023 Pennsylvania Youth Survey



PAY 5 2023 Substance Use: Prescription and over-the-counter drugs and medications

Prescription and over-the-counter drugs and medications - 30-day use Students by Gender 2023 Pennsylvania Youth Survey



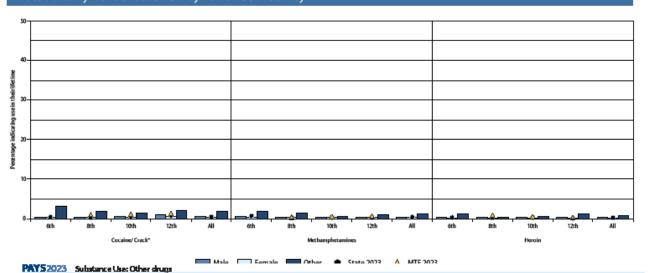
Other drugs (cocaine, crack, methamphetamines) - Lifetime, Statewide Sample 2023 PAYS

Other drugs (cocaine, crack, methamphetamines) - 30-day use, Statewide Sample 2023 PAYS

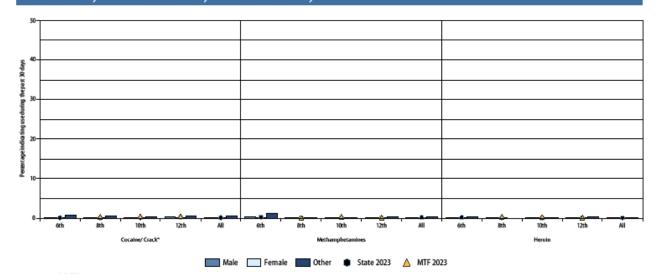
> NOTE:
> Please see the PAYS Web Tool at www.bach-harrison.com/
> PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

PAY52023 Substance Use: Other drugs

Other drugs (cocaine/crack, methamphetamines, and heroin) - Lifetime use Students by Gender 2023 Pennsylvania Youth Survey



Other drugs (cocaine/crack, methamphetamines, and heroin) - 30-day use Students by Gender 2023 Pennsylvania Youth Survey



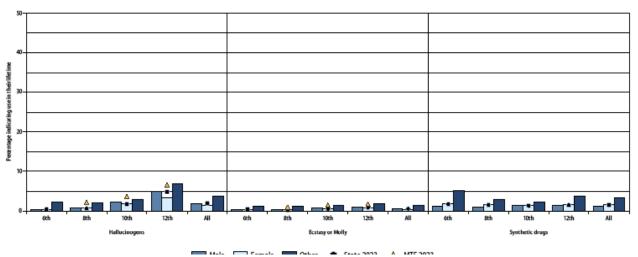
Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use, Statewide Sample 2023 PAYS

Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use, Statewide Sample 2023 PAYS

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

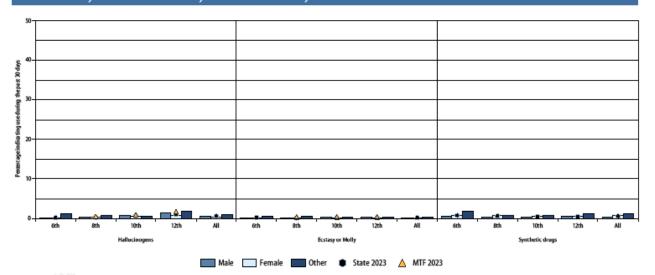
Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item. PAY52023 Substance Use: Other drugs

Other drugs (hallucinogens, ecstasy, and synthetic drugs) - Lifetime use Students by Gender 2023 Pennsylvania Youth Survey



PAY 5 2023 Substance Use: Other drugs

Other drugs (hallucinogens, ecstasy, and synthetic drugs) - 30-day use Students by Gender 2023 Pennsylvania Youth Survey



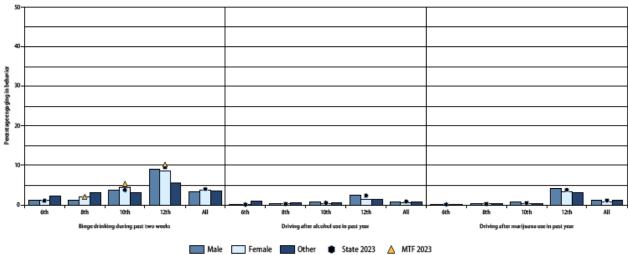
Risky substance use-related behavior, Statewide Sample 2023 PAYS

## Access and willingness to use, Statewide Sample 2023 PAYS

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

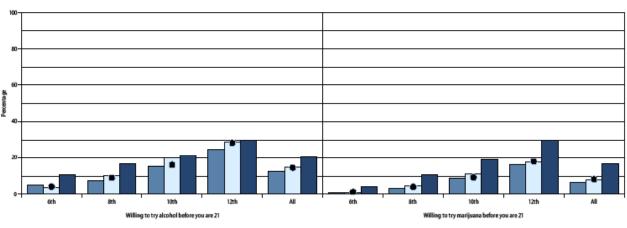
Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item. PAY 52023 Substance Use: Binge drinking and driving under the influence

Binge drinking and driving under the influence Students by Gender 2023 Pennsylvania Youth Survey



PAY 52023 Indicators of Risk: Willingness to use substances

Willingness to use substances Students by Gender 2023 Pennsylvania Youth Survey



(Students indicating "Would like to try or use"/"Would use any chance I got")

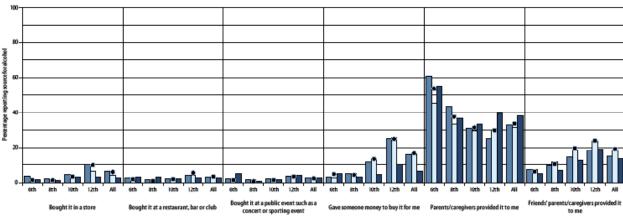
#### Sources of alcohol, Statewide Sample 2023 PAYS

## Sources of alcohol, continued, Statewide Sample 2023 PAYS

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

#### PAY52023 Indicators of Risk: Sources of substances used

### Sources of alcohol by students who reported alcohol use Students by Gender 2023 Pennsylvania Youth Survey

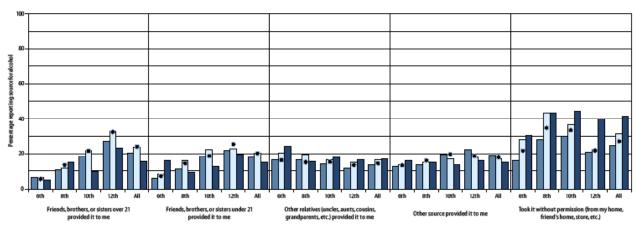


(Reported by students indicating alcohol use in the past 12 months)

Male Female Other State 2023

PAY 52023 Indicators of Risk: Sources of substances used

### Sources of alcohol by students who reported alcohol use (cont'd) Students by Gender 2023 Pennsylvania Youth Survey



(Reported by students indicating alcohol use in the past 12 months)

### Antisocial Behavior by Gender

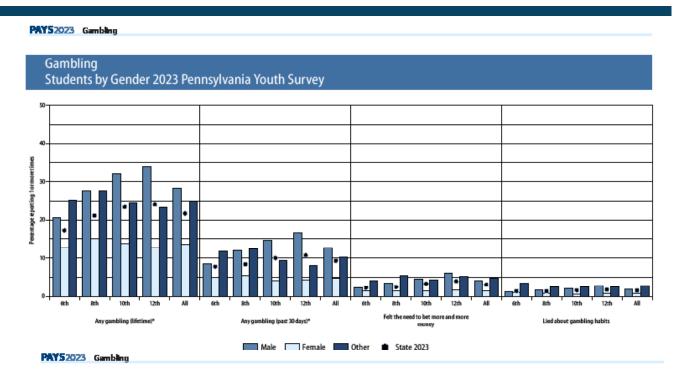
#### Gambling, Statewide Sample 2023 PAYS

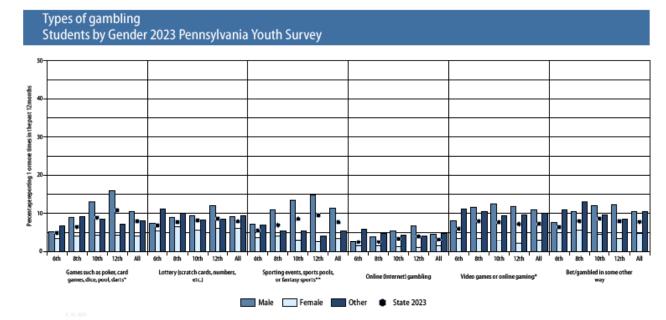
## Types of gambling, Statewide Sample 2023 PAYS

\*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 genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.



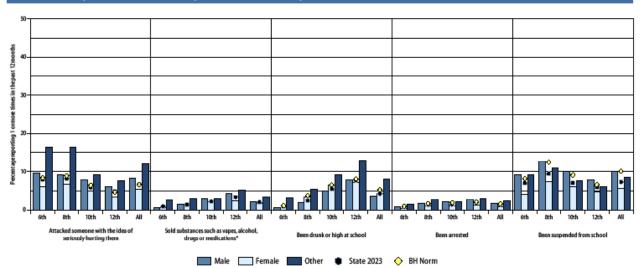


### Antisocial Behavior by Gender

## Other Antisocial behavior, Statewide Sample 2023 PAYS







NOTE:

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

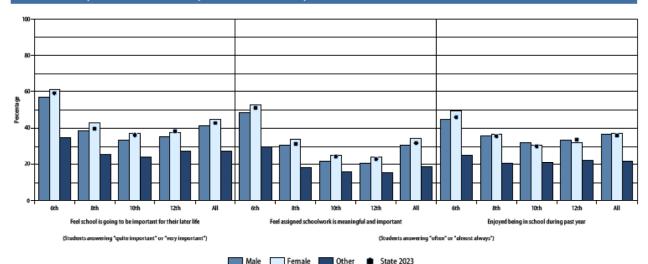
## Perceived importance of school, Statewide Sample 2023 PAYS

#### Positive school environment, Statewide Sample 2023 PAYS

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

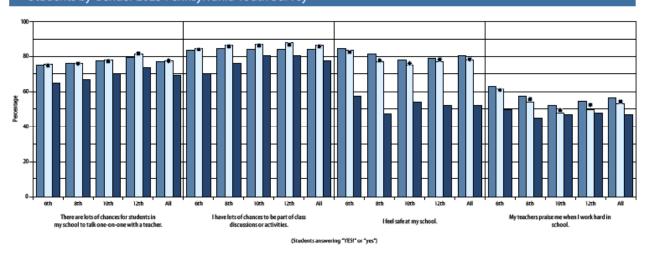
#### PAY 52023 Community and School Climate and Safety: Commitment to school

Commitment to school - Perceived importance of school Students by Gender 2023 Pennsylvania Youth Survey



PAY 5 2023 Community and School Climate and Safety: Commitment to school

Commitment to school - Positive school environment Students by Gender 2023 Pennsylvania Youth Survey



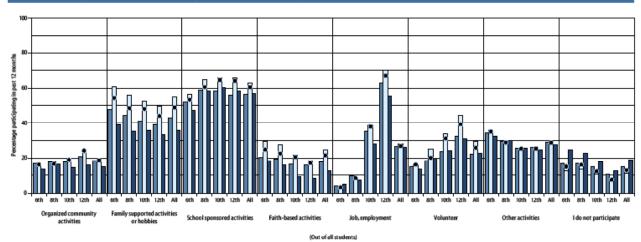
Involvement in after-school and community activities,
Statewide Sample 2023 PAYS

Violence and drugs on school property,
Statewide Sample 2023 PAYS

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

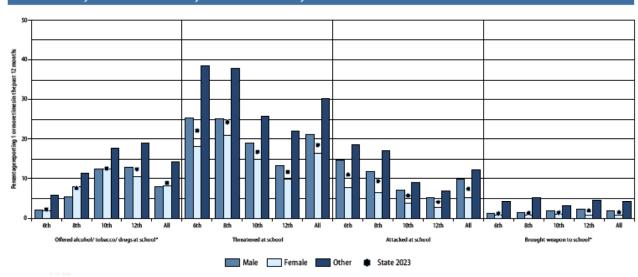






PAY 5 2023 Community and School Climate and Safety: Violence/drugs in school and community

### Violence and drugs on school property Students by Gender 2023 Pennsylvania Youth Survey



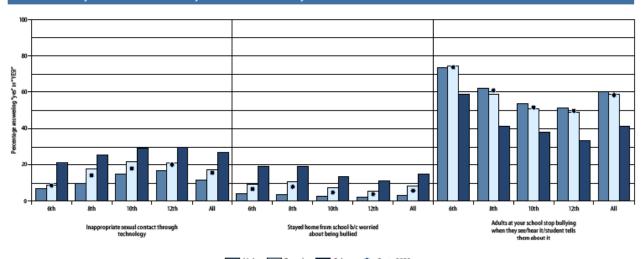
## **Bullying and Internet safety, Statewide Sample 2023 PAYS**

## Frequency of bullying, Statewide Sample 2023 PAYS

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

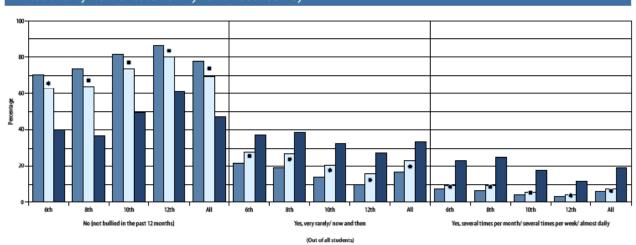


### Bullying and Internet safety Students by Gender 2023 Pennsylvania Youth Survey



PAY 52023 Community and School Climate and Safety: Bullying, Internet safety and abuse

#### Frequency of bullying Students by Gender 2023 Pennsylvania Youth Survey



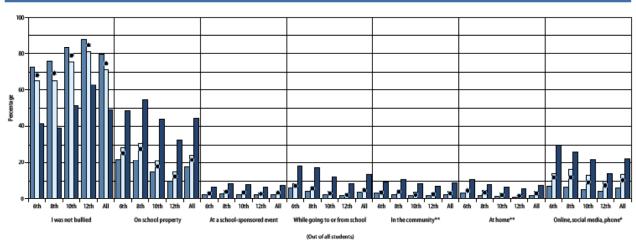
#### Location of bullying, Statewide Sample 2023 PAYS

How students were hurt or abused,
Statewide Sample 2023 PAYS

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



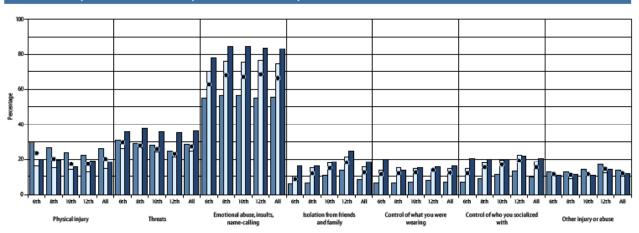




Male Female Other State 2023

PAY 5 2023 Community and School Climate and Safety: Bullying, Internet safety and abuse

#### How students were hurt or abused Students by Gender 2023 Pennsylvania Youth Survey



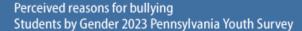
(Out of students who reported being hurt or abused by another person in the past 12 months)

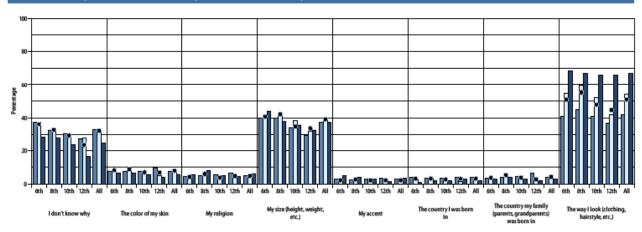
## Perceived reasons for bullying, Statewide Sample 2023 PAYS

Perceived reasons for bullying, continued,
Statewide Sample 2023 PAYS

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





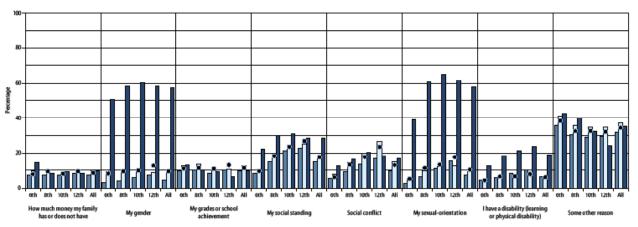


(Out of students who reported being bullied in the past 12 months)

Male Female Other State 2023

PAYS 2023 Community and School Climate and Safety: Bullying, Internet safety and abuse

### Perceived reasons for bullying (cont'd) Students by Gender 2023 Pennsylvania Youth Survey



(Out of students who reported being bullied in the past 12 months)

### Social and Emotional Health by Gender

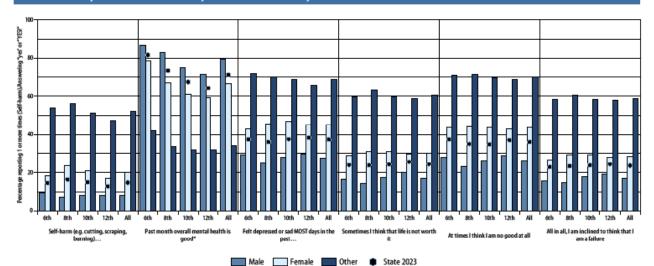
#### Mental Health Concerns, Statewide Sample 2023 PAYS

#### Suicide risk, Statewide Sample 2023 PAYS

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

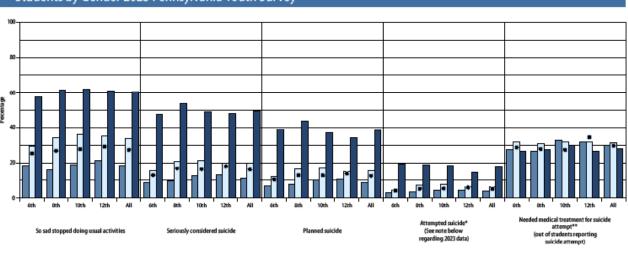
#### PAY 52023 Mental Health: Mental health concerns and suicide risk

#### Mental Health Concerns Students by Gender 2023 Pennsylvania Youth Survey



PAY 52023 Mental Health: Mental health concerns and suicide risk

#### Suicide risk Students by Gender 2023 Pennsylvania Youth Survey



Male Female Other

### Social and Emotional Health by Gender

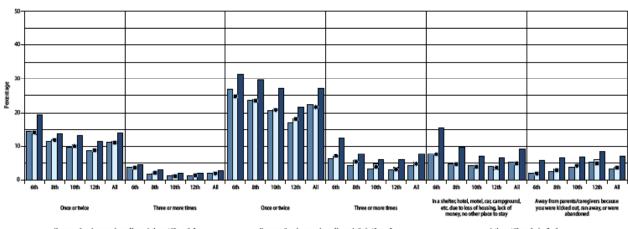
## Transitions and mobility, Statewide Sample 2023 PAYS

## Grief and other stressful events, Statewide Sample 2023 PAYS

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



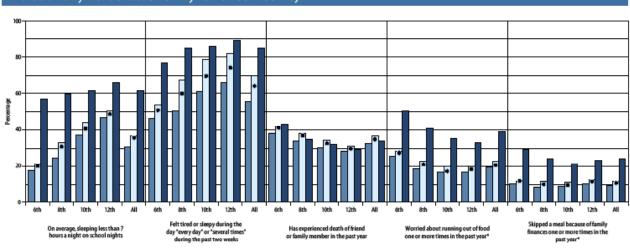




Male Female Other • St

PAYS 2023 Indicators of Risk: Stressful events and sleep

### Sleep, grief, and food insecurity Students by Gender 2023 Pennsylvania Youth Survey



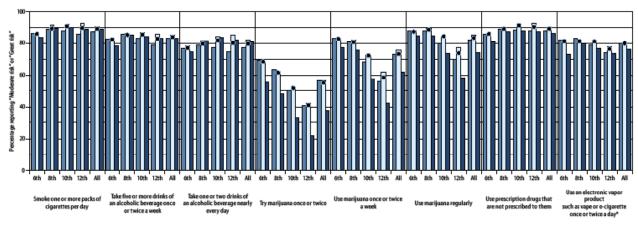
## Perception of risk, Statewide Sample 2023 PAYS

# Perception of parental disapproval, Statewide Sample 2023 PAYS

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

#### PAY52023 Indicators of Risk: Perception of risk

#### Perception of risk Students by Gender 2023 Pennsylvania Youth Survey

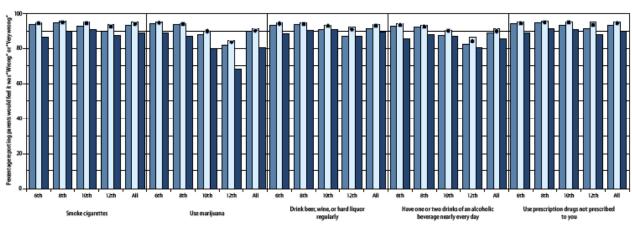


People are at moderate or great risk of harming themselves (physically or in other ways) if they ...

Male Female Other State 2023

PAY52023 Indicators of Risk: Perception of parental/caregiver disapproval

#### Perception of parental/caregiver disapproval Students by Gender 2023 Pennsylvania Youth Survey



Parents/caregivers feel it would be "Wrong" or "Very wrong" to...

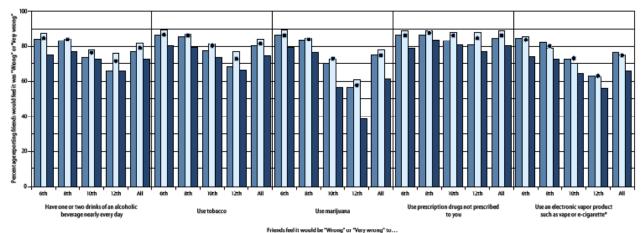
#### Perception of peer disapproval, Statewide Sample 2021 PAYS

## Attitudes toward peer use, Statewide Sample 2023 PAYS

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

#### PAY 52023 Indicators of Risk: Perception of peer disapproval

#### Perception of peer disapproval Students by Gender 2023 Pennsylvania Youth Survey

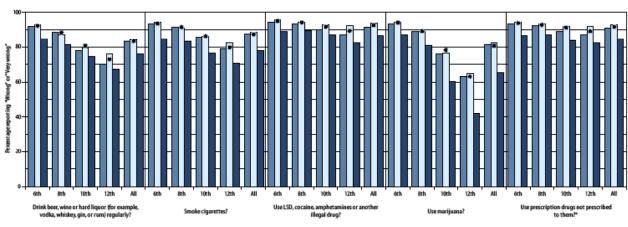


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Male Female Other State 2023

PAY52023 Indicators of Risk: Attitudes toward substance use

#### Attitudes toward peer use Students by Gender 2023 Pennsylvania Youth Survey

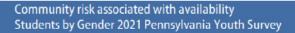


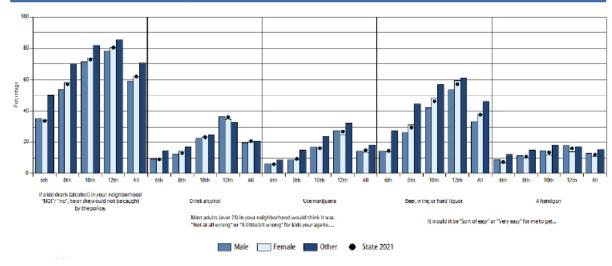
"Wrong" or "Very wrong" for someone my age to...

# Community risk associated with availability, Statewide Sample 2023 PAYS

#### Rules and antisocial behavior, Statewide Sample 2023 PAYS

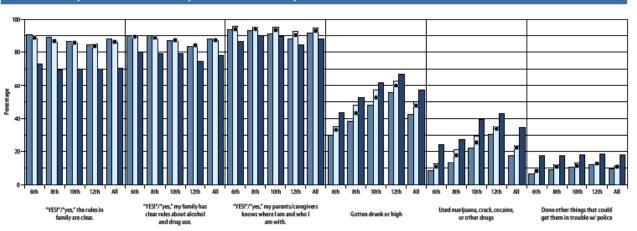






#### PAY 52023 Indicators of Risk: Other Indicators of risk

#### Other indicators of risk Students by Gender 2023 Pennsylvania Youth Survey



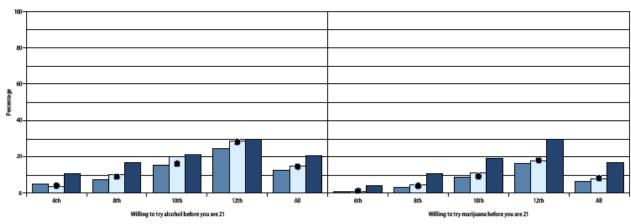
Male Female Other \$\ State 2023

I have known one or more adults who have...

### Attitudes favorable toward drug use, Statewide Sample 2023 PAYS



### Willingness to use substances Students by Gender 2023 Pennsylvania Youth Survey



(Students indicating "Would like to try or use"/"Would use any chance I got")

Male Female Other State 2023

Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel 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 2023 PAYS

#### Protective factor scales by Gender, 6th grade, Statewide Sample 2023 PAYS

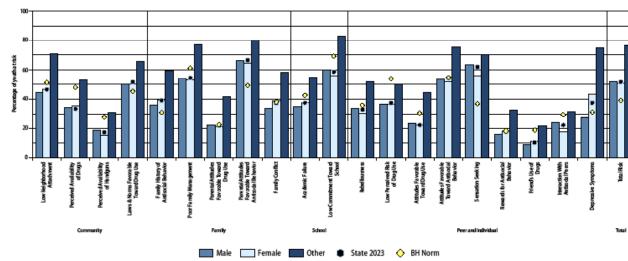
NOTE:

"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.)

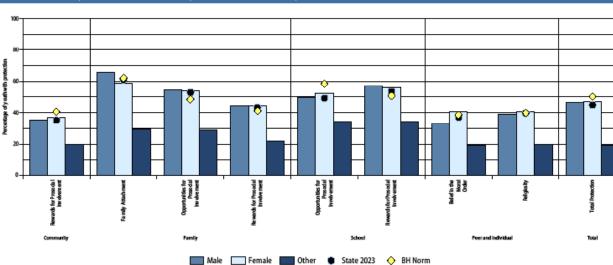
Please see the PAYS Web Tool at www.bach-harrison.com/ PAYSWebTool for exact numbers and for additional genderlevel data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item. PAYS 2023 Risk and Protective Factors: Risk and protective factors by grade





PAYS 2023 Risk and Protective Factors: Risk and protective factors by grade

#### Protective factors, 6th grade Students by Gender 2023 Pennsylvania Youth Survey



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

Risk factor scales by Gender, 8th grade, Statewide Sample 2023 PAYS

#### Protective factor scales by Gender, 8th grade, Statewide Sample 2023 PAYS

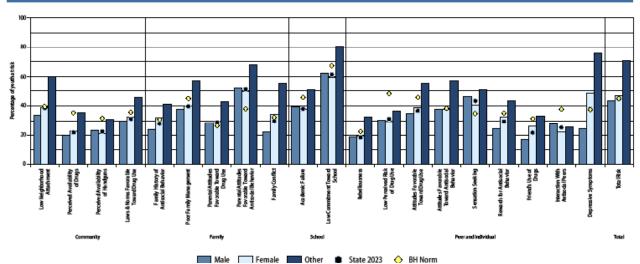
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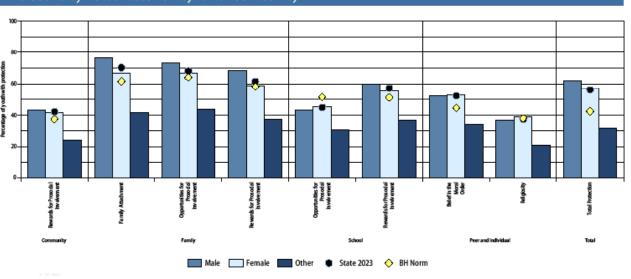
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Risk factors, 8th grade
Students by Gender 2023 Pennsylvania Youth Survey



PAYS 2023 Risk and Protective Factors: Risk and protective factors by grade

Protective factors, 8th grade Students by Gender 2023 Pennsylvania Youth Survey



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

Risk factor scales by Gender, 10th grade, Statewide Sample 2023 PAYS

#### Protective factor scales by Gender, 10th grade, Statewide Sample 2023 PAYS

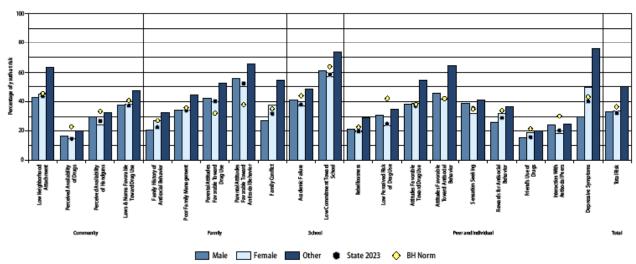
NOTE:

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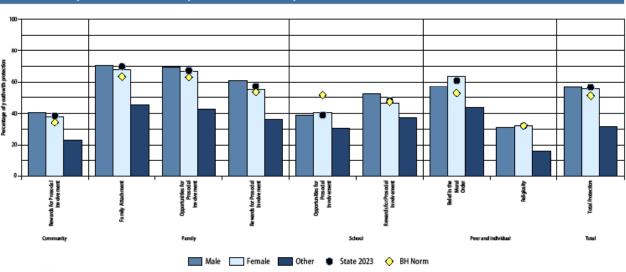
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### Risk factors, 10th grade Students by Gender 2023 Pennsylvania Youth Survey



PAYS 2023 Risk and Protective Factors: Risk and protective factors by grade

#### Protective factors, 10th grade Students by Gender 2023 Pennsylvania Youth Survey



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

Risk factor scales by Gender, 12th grade, Statewide Sample 2023 PAYS

#### Protective factor scales by Gender, 12th grade, Statewide Sample 2023 PAYS

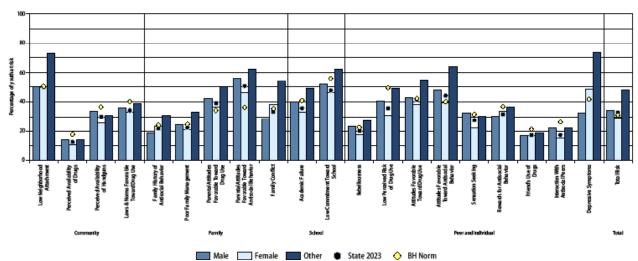
NOTE:

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

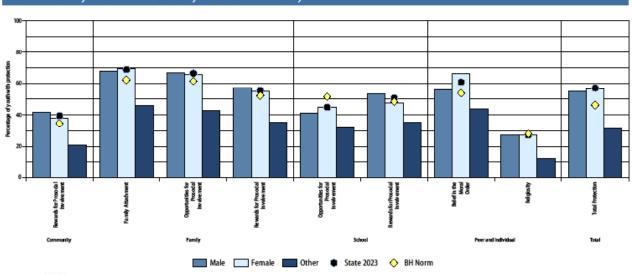
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### Risk factors, 12th grade Students by Gender 2023 Pennsylvania Youth Survey



PAYS 2023 Risk and Protective Factors: Risk and protective factors by grade

#### Protective factors, 12th grade Students by Gender 2023 Pennsylvania Youth Survey



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

#### Risk factor scales by Gender All Grades, Statewide Sample 2023 PAYS

#### Protective factor scales by Gender All Grades, Statewide Sample 2023 PAYS

#### NOTE:

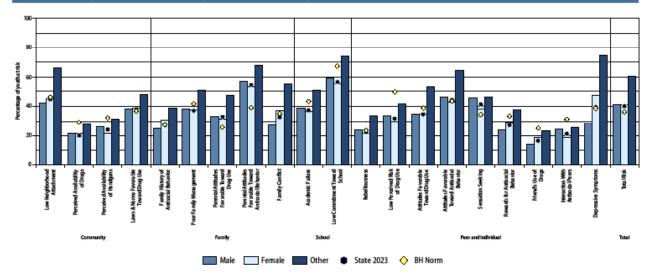
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PAY52023 Risk and Protective Factors: Risk and protective factors by grade

#### Risk factors, All grades Students by Gender 2023 Pennsylvania Youth Survey



PAY 52023 Risk and Protective Factors: Risk and protective factors by grade

#### Protective factors, All grades Students by Gender 2023 Pennsylvania Youth Survey

