Pennsylvania Youth Survey (PAYS)

Empowering Communities to Develop
Strategic Prevention Programming

State Report
PAYS 2021

Conducted by

Pennsylvania Commission on Crime and Delinquency

Pennsylvania Department of Drug and Alcohol Programs

Pennsylvania Department of Education

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Sponsored by:
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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 1,072 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.

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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 2021 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 2023 survey. If interested, please contact Geoff Kolchin at PCCD at (717) 265-8483.

Executive Summary

The "Pennsylvania Youth Survey" or "PAYS" has been conducted every other year in the Commonwealth of Pennsylvania since 1989. The biennial, odd-numbered year survey focuses on students in grades 6, 8, 10, and 12. 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 2021 PAYS was the sixteenth biennial administration (1989-2021). Comparisons in this report were made between the results of the 2017, 2019, and 2021 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.

The PAYS has been administered to youth 17 times – in the Fall of odd-numbered years, beginning in Fall 1989.

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 that their responses will remain anonymous and confidential. No individual student-level data can be obtained from the data set, and the results are reported in aggregate at the local, county, and State levels.

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

Participation by Pennsylvania Youth

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

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 261,685 public and private school students throughout the State participated in the fall 2021 Pennsylvania Youth Survey. After odd-grade and invalid/dishonest surveys were removed, a total of 246,081 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 436 school districts and charter/private schools.

There were 1,072 schools that chose to participate in the 2021 PAYS. 2020-2021 PDE enrollment figures show that there were a total of 353,920 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 246,081 valid participants in grades 6, 8, 10, and 12 (a participation rate of 69.5%), represented evenly across the State.

For PAYS, there was nearly an equal number of males and females who took the survey in all grades (49.8% female, 46.9% male, 3.2% "other"). In terms of ethnicity, 85.7% of participants were non-Hispanic and 14.3% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (70.1%), Black/African American (9.7%), or left their race unmarked (6.7%). The other race groups accounted for 13.6% 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 2021 PAYS more usable, risk and protective summary profiles were developed that show the percentage of youth at risk and the percentage of youth with protection on each scale. Please note that PAYS is only one source of data for prevention and that some of the risk and protective factors can be measured with data from other sources. Being able to gather risk and protective factor data from other sources is important as it allows the PAYS form to be as brief as possible and also allows room on the survey form for additional questions to be asked related to other prevention strategies/projects.

Table ES-1 displays levels of risk in the four domains. The best strategy for analyzing risk factor scale scores is to compare State values to the Bach Harrison Norm values, which are calculated to represent a national average (See Section 2 for more information on the BH Norm). For a majority of risk factor scale values, Pennsylvania youth in all grades had lower levels of risk in comparison to the Bach Harrison Norm. The only risk factor scales in PA that were higher than the BH Norm in 2021 for all grades were the Parental Attitudes Favorable to Antisocial Behavior scale (15.3 – 21.0 percentage points higher than the BH Norm in each grade), Parental Attitudes Favorable to Drug Use (5.1 – 7.1 percentage points higher than the BH Norm in each grade), Peer/Individual Attitudes Favorable to Antisocial Behavior (7.4 – 8.6 percentage points higher than the BH Norm in each grade), and Peer/Individual Attitudes Favorable Toward Drug Use (3.0 – 4.2 percentage points higher than the BH Norm in each grade).

Table ES-2 displays levels of protection for all four domains. Again, the best strategy for analyzing protective factor scale scores is to compare State values to the Bach Harrison Norm. In general, Pennsylvania protection tended to be similar to the BH Norm for most scales. Five scales (Community Rewards for Prosocial Involvement, Family Rewards for Prosocial Involvement, School Opportunities for Prosocial Involvement, Religiosity, 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 2021 Report, tables are also used to show data for lifetime and 30-day use. Examples of these tables are displayed in Tables ES-3 through ES-10 in this Executive Summary. Lifetime use is a measure of the percentage of students who tried the particular substance at least once in their life and is used to show the level of experience with a particular substance. Past-month (or 30-day) use is a measurement of any use in the past 30 days, and is used to demonstrate more regular substance use. When comparable, the results of the Pennsylvania survey are compared to a national survey that is conducted each year by the University of Michigan called Monitoring the Future (MTF). MTF also only surveys students in the 8th, 10th, and 12th grades.

When looking at the Pennsylvania and MTF lifetime survey results, lifetime alcohol use was higher in Pennsylvania for the 8th grade (5.2 percentage points higher in Pennsylvania compared to the national MTF rates), 10th grade (8.0 percentage points higher in Pennsylvania compared to the nation), and 12th grade (1.1 percentage points higher in Pennsylvania). In regard to tobacco use, the rate of lifetime smokeless tobacco use in Pennsylvania was much lower than the nation in the 8th grade (1.8% for Pennsylvania, 4.6% for MTF). Prescription pain reliever drug use was slightly higher than the national rate for the 12th grade (3.3% lifetime 12th grade use for PA, 2.3% use for the MTF). For other substances, State use rates were lower than, or equal to, the national rates.

PAYS data also show that rates of lifetime alcohol use decreased significantly in the 10th and 12th grades (a decrease of 9.3 percentage points in the 10th grade and a decrease of 7.8 percentage points in the 12th grade) since the 2019 survey; the lifetime cigarette use rate decreased 1.5 percentage points in the 8th grade, 2.6 percentage points in the 10th grade, 6.6 percentage points in the 12th grade, and 2.7 percentage points for all grades combined since 2019; lifetime smokeless tobacco use decreased 0.8 percentage points in the 8th grade, 2.5 percentage points in the 10th grade, and 4.4 percentage points in the 12th grade since 2019. Marijuana experimentation rates decreased significantly, with the 10th grade showing a decrease of 7.6

percentage points from 2019 (22.4%) to 2021 (14.8%). Lifetime prescription pain reliever use decreased 2.1 percentage points for the 10th grade since 2019 and decreased 2.8 percentage points for the 12th grade since 2019.

As with lifetime use, there are few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. Past-month alcohol use rates were higher in Pennsylvania for 10th and 12th grade in comparison to MTF rates (3.0 percentage points higher for the 10th grade, and 1.6 percentage points higher for the 12th grade). Past-month cigarette use is also slightly higher for Pennsylvania 10th graders (1.1 percentage points higher). 2021 was the fourth PAYS administration to gather past-month e-cigarette use data; and these data show slightly higher use for PA students in comparison to the nation for grades 8 and 10 (0.3 percentage points higher 8th grade use in Pennsylvania vs. the MTF, and 0.6 percentage points higher 10th grade use in Pennsylvania vs. the MTF).

In regard to data changes from 2019 to 2021, positive decreases were seen for many substances. Past-month alcohol use decreased 6.5 percentage points for the 12th grade (from 33.9% in 2019 to 27.4% in 2021). Past-month cigarette use decreased 3.0 percentage points in the 12th grade (from 7.5% in 2019 to 4.5% in 2021). Past-month smokeless tobacco use also significantly decreased for the 10th and 12th grades. The 12th grade saw a decrease in past month prescription drug use when we look at how the data have fallen since the 2017 survey. For example, in 2017, 1.7% of 12th graders had tried a prescription pain reliever; in 2021, the rate had dropped to 0.5%. In 2017, 1.7% of 12th graders had tried a prescription stimulant; in 2021, the rate had dropped to 0.5%.

Table ES-1

Risk Factor Scales

	6th				8th				10th				12th				All Grades			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
Community																				
Low Neighborhood Attachment	41.0	44.5	44.2	42.1	35.1	35.2	36.0	35.7	42.8	42.5	42.9	42.8	50.5	51.9	53.4	49.4	42.5	43.5	44.2	42.5
Perceived Availability of Drugs	32.8	33.5	34.3	35.8	25.9	25.5	23.1	34.9	28.5	25.4	18.5	34.5	30.8	26.8	18.6	32.7	29.4	27..6	23.3	34.4
Perceived Availability of Handguns	15.7	13.9	16.0	22.4	23.4	21.8	23.1	33.2	31.0	28.0	27.0	38.3	37.9	34.6	31.8	45.5	27.7	24.9	24.8	35.6
Laws & Norms Favorable Toward Drug Use	43.6	45.8	46.7	43.6	31.8	32.4	32.6	33.5	38.8	40.3	40.7	42.1	38.9	37.7	39.0	44.2	38.1	38.8	39.7	40.6
Family																				
Family History of Antisocial Behavior	37.3	37.5	33.7	44.0	34.0	30.7	27.8	40.4	30.3	28.8	24.9	39.1	30.3	27.0	23.1	37.4	32.8	30.9	27.2	39.9
Poor Family Management	39.0	43.8	47.5	44.8	35.7	34.0	38.9	41.4	37.6	35.1	35.9	41.6	32.2	29.3	27.0	35.0	36.0	35.4	37.1	40.2
Parental Attitudes Favorable Toward Drug Use	15.6	17.4	18.5	11.4	27.3	26.6	29.7	22.7	42.1	43.5	42.7	35.6	42.9	42.2	41.9	36.8	32.8	32.8	33.6	28.0
Parental Attitudes Favorable Toward Antisocial Behavior	50.1	53.3	57.9	36.9	40.9	41.7	47.2	30.0	47.2	50.4	51.8	33.6	47.1	47.7	49.4	34.1	46.2	48.2	51.5	33.3
Family Conflict	34.0	35.1	32.7	36.9	30.9	30.1	28.3	32.7	35.8	34.2	34.0	37.5	38.0	36.6	35.3	37.5	34.8	34.0	32.6	36.1
School																				
Academic Failure	30.7	34.4	38.1	32.6	36.3	38.3	43.0	32.5	37.4	38.5	44.7	35.1	35.9	36.6	40.7	33.4	35.3	37.0	41.7	33.5
Low Commitment Toward School	37.2	45.4	50.3	47.0	46.8	52.7	58.3	50.1	49.8	55.3	61.7	53.8	43.8	48.6	53.1	49.5	44.7	50.6	56.0	50.3
Peer And Individual																				
Rebelliousness	25.8	27.2	27.7	33.8	20.8	18.3	17.7	26.0	26.1	24.4	21.6	30.4	28.4	25.2	22.2	31.7	25.3	23.7	22.2	30.1
Gang Involvement	11.3	10.3	2.9	7.7	11.3	10.7	1.9	7.4	11.2	11.3	1.7	7.2	14.6	13.9	2.8	7.9	12.1	11.6	2.3	7.5
Perceived Risk of Drug Use	47.2	48.8	51.6	50.9	43.8	43.2	44.8	47.7	46.3	46.7	45.7	48.8	58.6	58.2	57.1	58.6	49.1	49.2	49.7	51.4
Attitudes Favorable Toward Drug Use	21.5	22.4	21.5	17.3	40.2	40.7	40.9	37.4	44.2	45.0	42.7	39.7	46.6	45.5	44.4	41.4	38.7	38.7	37.7	35.7
Attitudes Favorable Toward Antisocial Behavior	36.8	41.2	47.4	38.8	29.2	32.0	36.8	29.4	37.7	39.8	42.8	35.1	38.3	39.7	43.1	35.3	35.6	38.1	42.5	34.2
Sensation Seeking	36.7	39.6	46.9	36.8	31.5	30.7	34.9	34.8	33.7	33.6	31.8	34.9	30.3	29.4	26.2	31.5	32.9	33.2	34.6	34.4
Rewards for Antisocial Behavior	16.4	17.2	16.4	21.6	33.0	32.6	29.5	41.4	36.9	34.5	28.9	39.5	40.1	37.2	31.7	44.1	32.3	30.7	26.9	38.2

Table ES-2

Protective Factor Scales

	6th				8th				10th				12th				All Grades			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
Community																				
Rewards for Prosocial Involvement	45.8	39.7	34.4	41.4	45.9	43.2	39.9	45.1	40.6	38.5	36.9	39.7	40.1	39.6	37.9	38.9	42.9	40.3	37.3	41.3
Family																				
Family Attachment	65.6	62.1	59.4	63.5	61.8	61.8	60.9	59.9	63.7	64.6	61.6	61.6	61.0	60.6	57.8	59.1	62.9	62.3	59.9	60.7
Opportunities for Prosocial Involvement	58.3	54.8	52.4	57.2	68.4	68.0	66.2	65.9	61.4	64.3	61.6	60.6	59.5	60.1	58.8	58.3	61.9	61.9	59.9	60.7
Rewards for Prosocial Involvement	60.7	57.4	55.1	56.9	69.0	67.4	63.7	65.7	60.4	60.9	55.1	57.9	56.0	55.5	51.5	54.6	61.5	60.3	56.3	58.9
School																				
Opportunities for Prosocial Involvement	60.8	54.2	52.0	58.8	51.9	47.0	44.5	54.4	43.7	39.3	38.0	51.3	45.5	43.3	40.8	52.1	49.9	45.7	43.6	53.6
Rewards for Prosocial Involvement	62.9	57.1	58.1	54.6	55.5	51.7	54.4	51.6	43.8	41.5	44.2	46.2	47.6	43.2	45.9	49.4	51.9	48.1	50.3	50.2
Peer And Individual																				
Religiosity	44.4	40.5	37.8	50.5	43.7	40.5	34.4	45.9	38.8	36.0	29.3	40.2	34.5	31.3	25.1	34.0	40.1	37.0	31.4	42.1
Belief In The Moral Order	52.1	45.8	41.5	50.5	58.5	62.0	54.7	58.0	61.9	62.2	60.4	60.6	59.7	61.7	60.3	58.8	58.3	58.2	54.6	57.9
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

Grade	Alcohol (Lifetime Use)				Alcohol (30-Day Use)				Binge Drinking			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	16.8	16.7	13.9	n/a	3.3	3.2	3.1	n/a	1.3	1.2	1.0	n/a
8th	33.0	32.3	26.9	21.7	9.3	8.4	6.9	7.3	3.3	2.9	2.0	2.8
10th	53.0	52.0	42.7	34.7	22.3	21.6	16.1	13.1	8.7	8.4	5.3	5.9
12th	69.2	63.0	55.2	54.1	35.9	33.9	27.4	25.8	16.5	17.2	11.8	11.8
All	43.3	41.0	34.8	n/a	17.9	16.8	13.4	n/a	7.5	7.4	5.0	n/a

Table ES-4

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

Grade	Cigarettes (Lifetime Use)				Cigarettes (30-Day Use)				Smokeless Tobacco (Lifetime Use)				Smokeless Tobacco (30-Day Use)				E-Cigarettes (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	2.7	2.3	2.0	n/a	0.6	0.5	0.3	n/a	1.1	1.1	0.7	n/a	0.3	0.3	0.2	n/a	2.3	3.8	2.8	n/a
8th	9.4	6.9	5.4	7.0	2.5	1.9	1.4	1.1	4.4	2.6	1.8	4.6	1.8	0.9	0.4	1.6	10.9	12.5	9.2	8.9
10th	16.2	12.2	9.6	10.0	6.0	4.0	2.9	1.8	8.9	6.4	3.9	4.9	4.2	2.1	1.3	1.7	21.9	26.5	16.2	15.6
12th	29.0	21.9	15.3	17.8	13.2	7.5	4.5	4.1	15.9	11.8	7.4	8.6	7.5	5.0	2.2	2.2	29.3	33.1	23.7	24.0
All	14.5	10.8	8.1	n/a	5.6	3.5	2.3	n/a	7.6	5.5	3.5	n/a	3.5	2.1	1.0	n/a	16.3	19.0	13.0	n/a

Table ES-5

Marijuana Use: Lifetime and Past-Month

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.9	1.3	1.2	n/a	0.5	0.5	0.4	n/a
8th	8.4	7.4	5.7	10.2	4.6	4.0	2.7	4.1
10th	22.4	22.4	14.8	22.0	12.0	12.9	8.0	10.1
12th	38.1	37.5	30.4	38.6	20.8	20.8	16.8	19.5

Table ES-6

Inhalant Use: Lifetime and Past-Month

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	3.6	4.4	5.0	n/a	1.6	2.0	1.8	n/a
8th	5.2	5.7	4.4	11.3	1.6	1.7	1.4	1.8
10th	4.2	5.0	4.3	7.2	0.9	1.1	1.1	0.9
12th	4.2	4.7	3.7	5.0	0.6	0.8	0.5	0.7
All	4.3	4.9	4.3	n/a	1.1	1.4	1.2	n/a

Table ES-7

Prescription Drugs: Lifetime Use

Grade	PEDs & Steroids				Prescription Pain Relievers				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.5	0.6	0.5	n/a	1.8	2.2	3.1	n/a	0.4	0.5	0.5	n/a	0.6	0.9	0.9	n/a	2.3	2.7	2.9	n/a
8th	0.6	0.7	0.6	1.2	3.9	3.3	3.2	n/a	1.1	1.0	0.7	2.5	1.1	1.6	1.6	5.8	2.9	3.0	2.4	n/a
10th	1.0	0.8	0.8	0.7	5.9	4.9	2.8	n/a	2.6	2.5	1.1	2.6	3.3	3.4	1.9	5.2	4.6	4.9	2.8	n/a
12th	1.2	0.9	0.6	0.8	8.8	6.1	3.3	2.3	4.5	3.3	1.7	3.3	6.8	4.2	2.9	4.9	5.1	5.1	3.3	n/a
All	0.8	0.8	0.7	n/a	5.1	4.1	3.1	n/a	2.2	1.9	1.0	n/a	3.0	2.5	1.8	n/a	3.8	3.9	2.9	n/a

Table ES-8

Prescription Drugs: Past Month Use

Grade	PEDs & Steroids				Prescription Pain Relievers				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.2	0.3	0.1	n/a	0.7	1.1	1.1	n/a	0.1	0.2	0.1	n/a	0.3	0.5	0.3	n/a	1.2	1.5	1.3	n/a
8th	0.2	0.2	0.2	0.2	1.2	1.1	1.2	n/a	0.5	0.3	0.2	0.4	0.4	0.6	0.6	1.7	1.2	1.4	0.9	n/a
10th	0.3	0.2	0.3	0.1	1.7	1.2	0.7	n/a	0.7	0.7	0.2	0.5	0.9	1.1	0.5	1.4	1.5	1.4	0.8	n/a
12th	0.3	0.3	0.1	0.5	1.7	1.1	0.5	0.3	1.3	0.7	0.2	0.4	1.7	1.0	0.5	1.0	1.1	1.1	0.6	n/a
All	0.3	0.2	0.2	n/a	1.3	1.1	0.9	n/a	0.7	0.5	0.2	n/a	0.8	0.8	0.5	n/a	1.3	1.3	0.9	n/a

Table ES-9

Other Illegal Drugs: Lifetime Use

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.1	0.1	0.2	n/a	0.2	0.2	0.2	n/a	0.2	0.1	0.2	n/a	1.8	1.7	1.6	n/a	0.1	0.2	0.3	n/a	0.2	0.2	0.2	n/a	0.1	0.2	0.2	n/a
8th	0.2	0.1	0.2	0.5	0.9	0.7	0.7	1.8	0.8	0.5	0.4	1.0	1.5	1.6	1.2	n/a	0.5	0.4	0.3	0.6	0.4	0.3	0.3	0.4	0.3	0.2	0.3	0.3
10th	0.4	0.4	0.2	0.3	2.8	3.8	2.3	3.5	1.6	1.5	0.8	1.4	1.6	1.3	0.9	n/a	1.1	1.1	0.5	1.2	0.6	0.5	0.3	0.7	0.4	0.4	0.3	0.4
12th	0.5	0.3	0.4	0.4	6.3	5.9	5.5	7.1	3.1	2.1	1.6	2.8	2.0	1.4	0.7	n/a	2.7	2.1	1.3	2.5	0.6	0.5	0.5	1.5	0.6	0.4	0.6	0.6
All	0.3	0.2	0.3	n/a	2.6	2.7	2.2	n/a	1.4	1.1	0.7	n/a	1.7	1.5	1.1	n/a	1.1	1.0	0.6	n/a	0.4	0.4	0.3	n/a	0.3	0.3	0.3	n/a

Table ES-10

Other Illegal Drugs: Past-Month Use

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.0	0.0	0.0	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.8	0.9	0.5	n/a	0.1	0.1	0.0	n/a	0.1	0.1	0.1	n/a	0.0	0.0	0.0	n/a
8th	0.1	0.0	0.0	0.1	0.4	0.2	0.2	0.4	0.4	0.2	0.0	0.2	0.5	0.6	0.4	n/a	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0
10th	0.2	0.1	0.0	0.1	0.9	0.9	0.4	0.8	0.4	0.3	0.2	0.1	0.4	0.3	0.2	n/a	0.2	0.2	0.1	0.3	0.2	0.1	0.0	0.2	0.1	0.1	0.1	0.1
12th	0.1	0.1	0.0	0.1	1.3	1.4	1.0	1.0	0.5	0.3	0.3	0.2	0.4	0.3	0.1	n/a	0.8	0.5	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.1
All	0.1	0.0	0.0	n/a	0.7	0.7	0.4	n/a	0.3	0.2	0.1	n/a	0.5	0.5	0.3	n/a	0.3	0.2	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a

Summary

In the 2021 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 risk factor scales in Pennsylvania that were higher than the BH Norm in 2021 for all grades across all domains were Low Neighborhood Attachment, Parental Attitudes Favorable to Drug Use, Parental Attitudes Favorable to Antisocial Behavior, Academic Failure, Low Commitment Toward School, Attitudes Favorable Toward Drug Use, and Attitudes Favorable Toward Antisocial Behavior.

Protective Factor Profiles

In general, Pennsylvania protection tended to be higher than the BH Norm for most scales. Only two scales (Religiosity and School Opportunities for Prosocial Involvement) in Pennsylvania showed protection scores were lower than the BH Norm for all grades.

Substance Use for Pennsylvania

When looking at the Pennsylvania and MTF lifetime survey results, lifetime alcohol use was higher in Pennsylvania for the 8th grade (5.2 percentage points higher in Pennsylvania compared to the national MTF rates), 10th grade (8.0 percentage points higher in Pennsylvania compared to the nation), and 12th grade (1.1 percentage points higher in Pennsylvania). In regard to tobacco use, the rate of lifetime smokeless tobacco use in Pennsylvania was lower than the nation in the 8th, 10th, and 12th grades. Prescription pain reliever drug use was also slightly lower than the national rate for the 8th, 10th, and 12th grades. For most other substances, state use rates were similar to the national rates. In comparison to data gathered through the MTF, 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.

There are few instances in which Pennsylvania 30-day use rates are higher than national MTF rates. Past-month alcohol use rates were higher in Pennsylvania for 10th and 12th grade in comparison to MTF rates (3.0 percentage points higher for the 10th grade, and 1.6 percentage points higher for the 12th grade). Past-month cigarette use is also slightly higher for Pennsylvania 10th graders (1.1 percentage points higher). 2021 was the fourth PAYS administration to gather past-month e-cigarette use data; and these data show similar use for PA students in comparison to the nation for grades 8, 10, and 12 (0.3 percentage points higher 8th grade use in Pennsylvania vs. the MTF, and 0.6 percentage points higher 10th grade use in Pennsylvania vs. the MTF). As with lifetime marijuana use, in comparison to data gathered through the MTF, 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.

Substance Use by Gender

The 2021 survey included a new response option of "Other" to the gender demographics question. A total of 7,927 youth (3.2% of the survey population) marked this "Other" response.

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. There are usage reports that differ by more than 3.0 percent by category reported. One area in which males are higher users is with smokeless tobacco use, in which a higher percentage of male students in all grades reported use of smokeless tobacco (4.6% lifetime use by males, 1.7% lifetime use by females, and 3.0% for those indicating "other").

Students that marked "other" to the gender question report significantly higher lifetime use for alcohol (34.7% lifetime use for males, 32.4% for females, and 43.8% for those indicating "other"), cigarettes (7.3% lifetime use for males, 7.6% for females, and 14.1% for those indicating "other"), marijuana (11.3% for males, 13.2% for females, and 16.4% for those indicating "other"), inhalants (4.0% for male, 4.3% for females, and 11.4% for those indicating "other"), narcotic prescription drugs (2.8% for males,

3.2% for females, and 7.7% for those indicating "other"), and over-the-counter drugs to get high (2.8% for males, 2.7% for females, and 6.0% for those indicating "other").

While past-month cigarette use rates are similar for female and male students in all grades (2.1% for male, 2.0% for female), the use rate for students marking "other" was significantly higher (4.3%). Students marking "other" also reported higher past month rates of vaping (10.5% for male, 14.2% for female, and 16.4% for those indicating "other"), marijuana use (6.1% for male, 7.1% for female, and 8.5% for those indicating "other"), and inhalant use (1.1% for male, 1.1% for female, and 3.6% for those indicating "other").

Perceived Harmfulness of ATODs:

Of the seven substance use categories, students perceived the greatest risk in using prescription drugs not prescribed to them (83.7% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (80.0% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (41.5% of students perceived moderate or great risk) and smoking marijuana once or twice a week (58.8% of students perceived great or moderate risk).

Sources of Obtaining Alcohol

For all grades combined, 32.2% of alcohol-using youth indicated their parents provided it; 31.3% took the alcohol without permission, stole it, or found it; 27.0% indicated that friends or siblings over 21 bought it for them; 22.0% gave someone money to buy it for them; 21.3% indicated friends or siblings under the age of 21 provided it; 20.3% indicated their friends' parents provided it; 16.5% indicated other relatives provided it; 6.0% bought it at a store; 2.6% bought it at a restaurant, bar, or club; 2.5% bought it at a public event such as a concert or sporting event; and 20.0% obtained it from another source not listed.

Sources of Obtaining Prescription Drugs

For all grades combined, 47.8% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 40.8% indicated that a friend or family member gave them to the student, 19.5% indicated that they bought them from someone, 12.7% indicated they took them from relatives who were not living in their home, 12.0% indicated they took them from someone not related to them, and 10.9% indicated they ordered them over the Internet.

Antisocial Behavior by Grade and Gender

The 2021 survey included a new response option of "Other" to the gender demographics question. A total of 7,927 youth (3.2% of the survey population) marked this "Other" response.

In comparison to the BH Norm (used to provide a comparison to a more national average), Pennsylvania youth indicate antisocial behavior rates that are lower than this national average. Rates of attacking someone to seriously harm them are 2.1 percentage points to 3.2 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 (4.4% for Pennsylvania, all grades combined; 8.8% for the BH Norm)

Looking at the data by gender, more males engage in binge drinking and are suspended from school than females and those indicating "other" for the gender question. These tables also show that students who indicated "other" for the gender question, reported higher rates of being drunk or high at school (3.9% for males and 4.3% for females compared to 7.0% for those indicating "other").

School-Related Violence and Drug Behaviors

Of all students surveyed, 16.7% indicate having been threatened at school at least once in the past year, and 3.5% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 6.6% of all students indicated having been attacked at school, and 1.1% indicated having been attacked with a weapon at school. In the past month, 0.8% of students in the state sample indicated that they brought a weapon (such as a gun, knife, or club) to school at least one time.

Bullying and Internet Safety

Just under one in four (23.2% of all students) indicated they had been bullied

in the past year, 14.6% reported having been electronically bullied, and 4.1% said they had stayed home from school in the past year due to worries about bullying. Rates of being electronically bullied were highest in the 8th grade (17.2% of 8th graders reported having been electronically bullied). Students were also asked about inappropriate sexual contact through technology. Of all students, 19.9% marked "YES!" or "yes" to this question and 10th graders reported the highest response to this question (25.0% marked "YES!" or "yes").

Gang Involvement

PAYS gathers 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.

Gambling

About one in three students (30.4%) have gambled in their lifetime and just under one in sixteen (5.9%) have gambled in the past month. Past-month gambling decreased 3.4 percentage points in all grades from 2019 (9.3%) to 2021 (5.9%). The individual activities most often participated in during the past year were playing the lottery (18.3% of all students, a grade-level peak of 19.6% in the 6th grade), betting on personal games of skill (16.5% of all students, a grade-level peak of 17.8% in the 6th grade), and betting on poker or other card games (11.4% of all students, a grade-level peak of 12.9% 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. More students reported driving after smoking marijuana in the past year in 2021 (1.7% of the total survey sample population, and 5.9% of 12th grade respondents).

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

The following are some key findings from these mental health, trauma, and stress-related data:

- The survey data show that 40.1% of all students indicated (via responding "YES!" or "yes" to the statement) that they had felt depressed or sad most days in the past 12 months; 27.9% of all students indicated that they sometimes thought life is not worth it; 38.6% of all students indicated that "at times I think I am no good at all"; 31.0% of all students indicated that they were so sad they stopped doing usual activities; and 26.2% indicated that they felt that they were a failure. Further 17.6% 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 increase in reported rates of students thinking "I am no good at all" in the past year; an increase for all grades combined of 2.3 percentage points (36.3% in 2019 and 38.6% in 2021). The rate of students who reported "all in all, I am inclined to think I am failure" also increased for all grades combined from 23.4% in 2019 to 26.2% in 2021.
- In terms of sleep problems, 38.3% of all students indicated that slept less an 7 hours a night on an average school night, and 65.3% indicated they felt tired or sleeping during the day "every day" or "several times" during the past two weeks. Students reporting that were so sad that stopped doing activities increased 5.8% (25.2% in 2019, 31.0% in 2021).
- 37.9% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 9.1% indicated having the stress of worrying that food at home would run out; and 5.0% indicated the stress of having to skip a meal due to a lack of money.
- 18.6% of students in all grades combined indicated that they had considered suicide in the past year. The grade-level rates for this question were as follows: 12.2% of 6th graders, 18.8% of 8th graders, 21.4% of 10th graders, and 21.3% of 12th graders indicated they had considered suicide in the past year. Suicide consideration increased for all grades since 2019.

- 14.7% 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: 9.9% of 6th graders, 15.2% of 8th graders, 17.1% of 10th graders, and 16.2% of 12th graders indicating they had created a suicide plan.
- In regard to those students who indicated they had attempted suicide in the past year, 7.8% of 6th graders, 11.2% of 8th graders, 12.2% of 10th graders, 12.2% of 12th graders, and 10.9% 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 four times higher than non-depressed students. Depressed students indicate use rates that are ten times higher for past-month cigarette use and more than seven 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, 25.8% reported that they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Of students who indicated they had been bullied in the past year, 61.2% 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, 41.5% had considered suicide in the past year, 33.8% had made a suicide plan in the past year, and 30.1% 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," 32.7% indicated they had used alcohol in their lifetime and 11.4% indicated they had used alcohol in the past month. In contrast, of students who marked "NO!" or "no" to that statement, 52.0% indicated they had used alcohol in their lifetime and 26.7% indicated they had used alcohol in the past month. These data reinforce the idea that parents must set clear rules and expectations regarding substance use.

Academic Performance and Substance Use

Of the youth who report getting better grades, fewer have tried ATODs and fewer are currently using ATODs than those who report poorer grades. Failing (D or F) youth indicate past month alcohol use rates that are nearly two times higher than "A" students' alcohol use rates, past month marijuana use rates that are four times higher than the "A" students' use rates, and past month cigarette use rates that are nearly eight 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, 5.7% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (10.4%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 12.2%. Of youth who indicated they worried about food once a month or more, 15.3% of those youth indicated regular marijuana use.

Perceived Parental Acceptability and Substance Use

A large majority of students perceive parental disapprove of substance use. Of all students, 94.7% indicated their parents felt it was "Wrong" or "Very wrong" to use tobacco, 89.2% perceived parental disapproval of marijuana use, 88.0% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.1% perceived parental disapproval of prescription drug use. Relatively few students (6.2% lifetime, 2.7% 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 23.6% 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 6.2% had tried marijuana in their lifetime and only 2.8% had used it in the last month. However, when youth thought that there was even a "Little chance" that they would be seen as cool, marijuana use rates were over three times higher for lifetime use (23.8%) and over four times higher for past-month use (12.0%). Youth who thought that there was a "Very good chance" they would be seen as cool were over nine 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 2021 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 11.5% indicated having moved one or two times in the past year, and 1.7% 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 4.9% 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 Prevention (CSAP) project called the Six-State Consortium. The goal of the Consortium was to develop a survey that provided scientifically sound information about the levels of risk and protection in a community. The survey has been further refined through the Diffusion Consortium Project that involved seven states and was funded by four Federal Agencies: the National Institute of Drug Abuse (NIDA), Safe and Drug Free Schools Program, Office of Juvenile Justice and Delinquency Prevention, and CSAP. The PAYS questionnaire was created by The Pennsylvania State University (formatted and printed by Bach Harrison, L.L.C.) to better meet the needs of Pennsylvania.

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

Risk and protective factors are characteristics of a community that are reported by the youth who complete the survey. Besides measuring risk and protective factors, the survey also assesses the current prevalence of ATOD use. The substances that were measured by the survey include: 1) alcohol, 2) cigarettes, 3) e-cigarettes, 4) smokeless tobacco, 5) marijuana, 6) inhalants, 7) heroin, 8) hallucinogens, 9) ecstasy, 10) synthetic drugs, 11) cocaine, 12) crack, 13) methamphetamines, 14) Performance Enhancing Drugs (PEDs)/steroids, 15) prescription pain relievers, 16) prescription tranquilizers, and 17) prescription stimulants. The questions that ask about substance use are similar to those used in the national survey, Monitoring the Future, in order that comparisons between the two surveys can be made easily.

There were a total of 21 risk factor scales and 8 protective factor scales that were measured by the 2021 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 2021 PAYS consisted of three main forms — a Form A with 109 questions, a Form B with 105 questions, a Form C with 105 questions, and a Spanish form with 114 questions. Each form consisted of various combinations of question groupings, with all three forms containing question group X first, with Form A including question groupings A, D, B, E, and C; with Form B including question groupings B, E, C, F, and A; and with Form C including question groupings C, F, A, D, and B. The Spanish form contained all groupings — X, as well as A through F. Because many of the questions have multiple components, a total of 230 questions were asked of students across all four forms. The questions were printed in three test booklets that were machine scoreable.

The online version of the 2021 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. The 2021 PAYS online form also contained questions on COVID-19 impacts and remote/online learning experiences and perceptions. As these data were not included on all forms, and therefore do not represent the entire Commonwealth of Pennsylvania, the data are not featured here. These data, however, were provided to districts who participated online and at the county level. County-level reports with these data can be accessed at the following URL: https://www.pccd.pa.gov/Juvenile-Justice/Pages/County-Level-Special-Reports-on-the-Impact-of-COVID-19.aspx.

Roughly 80% of 2021 PAYS forms were completed in online format, and 20% 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.

Classroom teachers administered the survey. Teachers were given a script to read and were asked to provide information on participation.

Administration

Prior to recruitment, the 2021 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 2021 that the survey was scheduled to be administered in the fall of 2021 and they were given information about the survey and the advantages of having their students participate. Districts were given the opportunity to indicate whether they preferred to administer the survey in paper/pencil format or via an online survey platform, and were also asked to name one district/school-level survey coordinator with which Bach Harrison could work to coordinate the survey. Through this mailing, sampled districts/schools were also notified about their inclusion in the State's sample.

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

During September through November, Bach Harrison, L.L.C. ensured that the required surveys, survey materials, and administration instructions were mailed to established survey contacts in school districts or schools.

In the case of districts choosing an online administration, district-level contacts were emailed unique school-level URLs to be used for the survey administration as well as survey proctor instructions.

The period of early October to early December was established for survey administration. Most schools administered the survey using the PAYS online format; roughly 80% of students took the survey online and 20% 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 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.

70.1% of PAYS respondents were white, 9.7% were African American, and 13.6% accounted for other groups.

PAYS Census-Effort Project Completion Rate

The survey goals for the 2021 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 261,685 public and private school students throughout the State participated in the Fall 2021 Pennsylvania Youth Survey. After invalid/dishonest/odd-grade surveys were removed, a total of 246,081 surveys were represented in final local-level reports.

Enrollment figures from the 2020-2021 PDE Public School Enrollment Reports web site show that for the 2020-2021 school year (the most current enrollment available through project planning reporting) the total enrollment in grades 6, 8, 10, and 12 was 500,202. The enrollment in those grades for the school districts, charter schools, and private schools that signed on to administer the 2021 PAYS was 353,920. Thus, the final participation rate for the full state eligible population was 49.2%, and the participation rate of eligible participating schools was 69.5%. A statewide sample was drawn to provide the data for this State Report and to use as a State-level comparison in local-level reports. There were 27,375 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 261,685 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 246,081 valid surveys completed by students in grades 6, 8, 10, and 12.

Total PAYS Project Survey Participants

The characteristics of the youth who took the survey (all students, not just those in the State Sample) are presented in Table 1-2. The results in this State Report are completed for grades 6, 8, 10, and 12. There was nearly

an equal number of males and females who took the survey in all grades (46.9% female, 49.8% male, 3.2% "other"). In terms of ethnicity, 85.7% of participants were non-Hispanic and 14.3% indicated they were of Hispanic, Latino, or Spanish ethnicity. In terms of race, the majority of respondents were White (70.1%), Black/African American (9.7%), or left their race unmarked (6.7%). The other race groups accounted for 13.6% 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 2017, 2019, and 2021 PAYS statewide samples (the results of which are presented in this report) was 6th, 8th, 10th and 12th grade students enrolled in public schools across Pennsylvania. A single-stage design was used, with stratification by grade level, and with the sampling unit defined as grade levels within schools. Schools selected for the statewide sample were instructed to survey all students in the selected grade level. The selection methodology for the 2021 statewide sample continued and improved upon the 2015, 2017, and 2019 statewide samples to ensure continuity. Bach Harrison worked with the 2021 sample to update it based on current school availability and grade ranges.

The schools involved in the 2017, 2019, and 2021 samples were originally selected in the 2011 PAYS administration. In 2011, specialized sampling software, PCSample, was used to select a representative sample of public schools. The software is designed for stratified systematic sampling with random starts. To ensure a good distribution of schools by geographic location and enrollment size, schools were sorted by county and in descending order of grade enrollment before sampling. Within each stratum, schools were selected with probability proportional to size, with size being the grade enrollment of the school. While most selected schools were only asked to survey one grade level, a small set of schools had two grade levels selected for participation in the statewide sample. The sample is designed to yield a self-weighting sample within strata so that every eligible student has an equal chance of selection. A self-weighting sample is desirable because it tends to improve the precision of the estimates. Using this design, 253 school-grade combinations were selected from the sample frame for the 2011 survey. Bach Harrison reviewed the sample frame and adjusted it to account for schools that had either closed or changed the range of grades that were housed at the school. The result for 2021 was that there were 248 schools included in the 2021 sample frame. Of these combinations, 183 participated in the 2021 Statewide Sample.

Of the 248 schools selected for the sample frame, 183 participated in the 2021 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 2017/2019/2021 administrations, a list of all Pennsylvania public schools with grade level enrollment data were provided by the Pennsylvania Department of Education. These enrollment data were the starting point for the development of the sampling frame. The frame cleaning process involved the following tasks:

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

The same weighting strategies that were used in previous PAYS administrations were applied to 2021 data to maintain consistency.

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: 248 schools (some with multiple grades) were included in the sample. Out of these, 183, or 73.8%, participated in the survey.
- Student Participation: There were a total of 500,202 students in the state's eligible population and 46,718 students eligible in sampled schools/grades. Out of the state sample, 27,375, or 58.7%, returned usable survey responses for the appropriate grade levels.
- Overall Participation: 73.8% * 58.7% = 43.3%.

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 ±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.

Table 1-1

State Sample Confidence Intervals

	State Enrollment of Eligible Schools		State Sample		Confidence Interval
	#	%	#	%	
All grades	448,696	100.0%	27,375	100.0%	±0.8
6th	111,546	24.9%	6,517	23.8%	±1.7
8th	111,153	24.8%	8,548	31.2%	±1.5
10th	114,474	25.5%	6,040	22.1%	±1.8
12th	111,523	24.9%	6,270	22.9%	±1.7

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, 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 261,685 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, 1,377 (0.5%) were eliminated due to students either meeting a validity check or marking a grade that was impossible for the school attended. (Please note this rate is lower than in previous administrations; the online survey's skip logic regarding lifetime/30-day use logic can be attributed to this decrease.). Surveys deemed to be dishonest were eliminated because of five predetermined dishonesty indicators – 1) the students indicated that they had used the non-existent drug metaclorazoles (695 surveys); 2) the students reported an impossibly high level of multiple drug use (507 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (235 surveys); 4) the students reported an age that was inconsistent with their grade or their school (359 surveys); or 5) the student marked inconsistent responses regarding lifetime gang involvement and age of first gang involvement (36). 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, 9,707 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, 4,517 surveys were eliminated due to students not reporting a grade level, and 3 surveys were eliminated due to students marking multiple grades.

A total of 15,604 questionnaires were eliminated from most analyses. This is less than the sum of those eliminated according to the criteria cited above because many of those eliminated met more than one criteria for elimination.

Other measures to reduce response bias included carefully pretesting the questionnaire to ensure that students understood the meaning of each

question, using a well developed and tested administration protocol, and reading the same instructions to all students who participated in the survey.

Validity of PAYS Data: Statewide Sample Only

In regard to only the students who belong to the statewide sample, there were a total of 27,447 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, 73 were eliminated because respondents were determined to be dishonest. Surveys deemed to be dishonest were eliminated because of four predetermined dishonesty indicators – 1) the students indicated that they had used the non-existent drug (48 surveys); 2) the students reported an impossibly high level of multiple drug use (35 surveys); 3) the students indicated past-month use rates that were higher than lifetime use rates (18 surveys); 4) the students reported an age that was inconsistent with their grade or their school (21 surveys); or 5) the students reported inconsistent lifetime gang involvement and age of first gang involvement data (1). These surveys were not included in the final analyses. A total of 73 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 2017		State 2019		State 2021	
	Number	Percent	Number	Percent	Number	Percent
Total Survey Respondents	253,566	100.0	280,944	100.0	246,081	100.0
Survey Respondents by Grade						
6th	62,971	24.8	71,073	25.3	61,883	25.1
8th	70,214	27.7	78,994	28.1	72,076	29.3
10th	65,164	25.7	72,014	25.6	61,931	25.2
12th	55,217	21.8	58,863	21	50,191	20.4
Survey Respondents by Gender						
Male	124,823	50.3	138,807	50.2	121,792	49.8
Female	123,271	49.7	137,444	49.8	114,733	46.9
Other	n/a	n/a	n/a	n/a	7,937	3.2
Survey Respondents by Ethnicity						
Yes, of Hispanic, Latino, or Spanish Origin	33,940	13.4	40,941	14.6	35,218	14.3
No, not of Hispanic, Latino, or Spanish origin	219,626	86.6	240,003	85.4	210,863	85.7
Survey Respondents by Race						
Black, African American	22,272	8.8	26,308	9.4	23,823	9.7
American Indian	4,095	1.6	4,321	1.5	3,446	1.4
Asian/Pacific Islander	13,134	5.2	15,858	5.6	14,769	6.0
White, Caucasian	179,972	71.0	196,546	70.0	172,381	70.1
Multi-racial	14,065	5.5	17,063	6.1	15,273	6.2
Race Unmarked	20,028	7.9	20,848	7.4	16,389	6.7

Figure 1-1

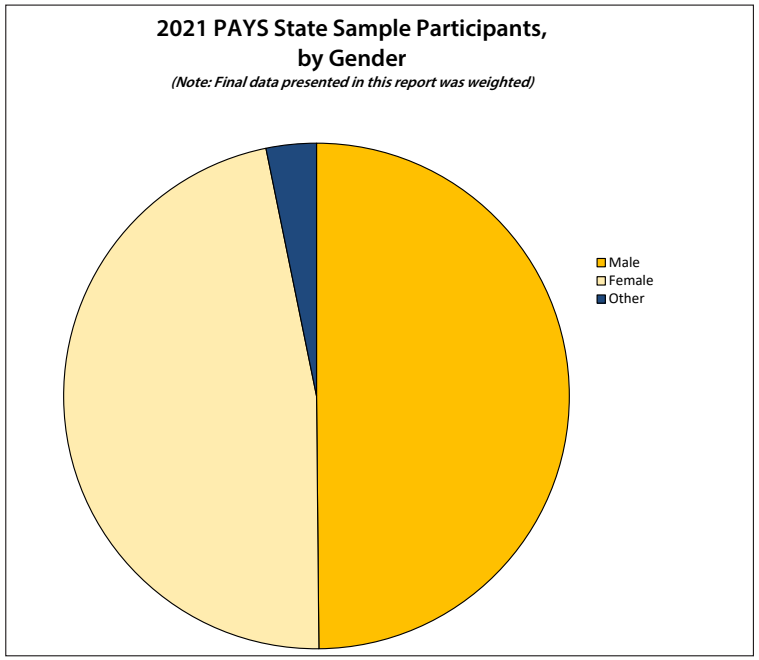


Figure 1-2

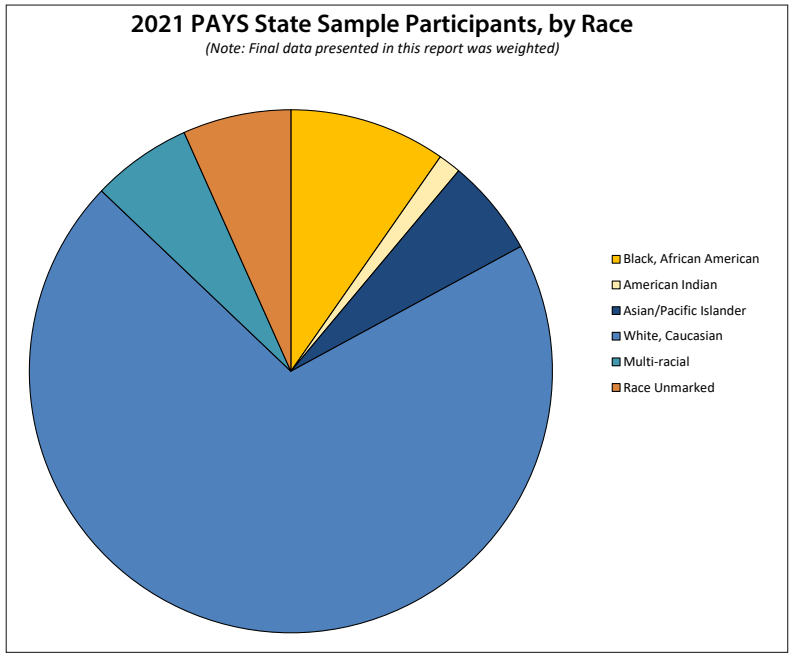
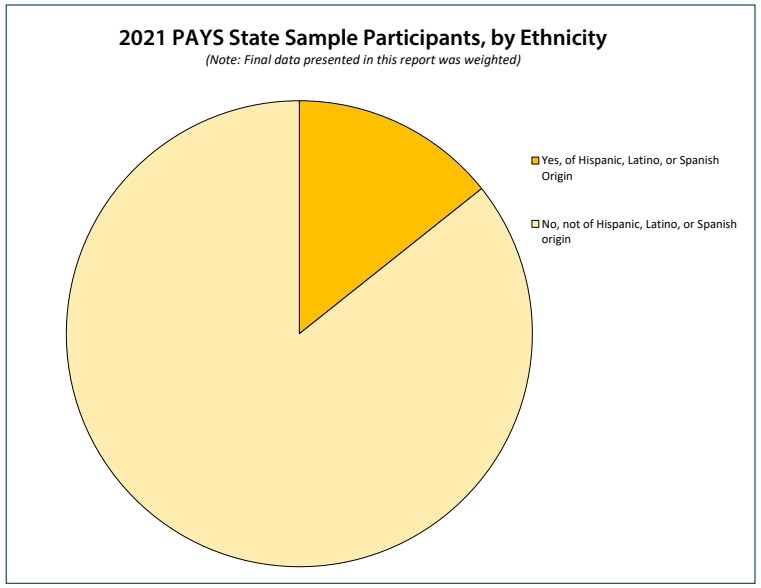


Figure 1-3



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

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. They have also identified a set of protective factors that help to buffer the harmful effects of risk.

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

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

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

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.

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.

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

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

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

Table 2-1

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance 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	✓	✓			✓	
Low Neighborhood Attachment and Community Disorganization	✓	✓			✓	

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.

Risk Factor Scale Results

Table 2-2 contains the percentage of students at risk on each of the four 2021 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 (46.7% at risk in the 6th grade) while the highest risk scale score for the 8th, 10th, and 12th grades was Low Neighborhood Attachment (36.0% at risk in the 8th grade, 42.9% at risk in the 10th grade, and 53.4% 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 Low Neighborhood Attachment and Laws and Norms Favorable Toward Drug Use. For the Low Neighborhood Attachment scale, a higher percentage of Pennsylvania youth were at risk for Low Neighborhood Attachment in all grades. 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 2021 PAYS collected data for one community domain protective factor scale — Community Rewards for Prosocial Involvement. Protective factor scale scores ranged from as low as 34.4% for the 6th grade up to 39.9% for the 8th grade.

Comparisons to 2019 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 2019 to 2021. For the Perceived Availability of Drugs scale, both 10th and 12th grade saw significant decreases (a decrease of 6.9 percentage points in the 10th grade and a decrease of 8.2 percentage points in the 12th grade) since 2019. For the Perceived Availability of Handguns scale, 10th and 12th grades saw significant decreases in risk. The Laws and Norms Favorable to Drug Use scale increased 1.3 percentage points for the 12th grade. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data. Protection decreased from 2019 to 2021 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

	6th				8th				10th				12th				All			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
Community Risk Factor Scales																				
Low Neighborhood Attachment	41.0	44.5	44.2	42.1	35.1	35.2	36.0	35.7	42.8	42.5	42.9	42.8	50.5	51.9	53.4	49.4	42.5	43.5	44.2	42.5
Perceived Availability of Drugs	32.8	33.5	34.3	35.8	25.9	25.5	23.1	34.9	28.5	25.4	18.5	34.5	30.8	26.8	18.6	32.7	29.4	27..6	23.3	34.4
Perceived Availability of Handguns	15.7	13.9	16.0	22.4	23.4	21.8	23.1	33.2	31.0	28.0	27.0	38.3	37.9	34.6	31.8	45.5	27.7	24.9	24.8	35.6
Laws & Norms Favorable Toward Drug Use	43.6	45.8	46.7	43.6	31.8	32.4	32.6	33.5	38.8	40.3	40.7	42.1	38.9	37.7	39.0	44.2	38.1	38.8	39.7	40.6
Community Protective Factor Scales																				
Rewards for Prosocial Involvement	45.8	39.7	34.4	41.4	45.9	43.2	39.9	45.1	40.6	38.5	36.9	39.7	40.1	39.6	37.9	38.9	42.9	40.3	37.3	41.3

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

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

Table 2-3

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

Family History of the Problem Behavior (Linked to Substance 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 57.9% at risk in the 6th grade, 47.2% at risk in the 8th grade, 51.8% at risk in the 10th grade, and 49.4% at risk in the 12th grade). In comparison to the BH Norm, Pennsylvania students in all grades indicated lower risk within the following scale: Family History of Antisocial Behavior (10.3 to 14.3 percentage points lower risk in each grade). In contrast, Pennsylvania students in all grades indicated higher risk than the BH Norm for Parental Attitudes Favorable to Drug Use and Parental Attitudes Favorable to Antisocial Behavior.

Protective Factor Scale Results

The 2021 PAYS collected data for the following family domain protective factor scales: Family Attachment, Family Opportunities for Prosocial Involvement, and Family Rewards for Prosocial Involvement. For the 6th grade, protection was highest for the Family Attachment scale (59.4% with protection in the 6th grade), while the 8th and 12th grades grade showed the highest protection for the Family Opportunities for Prosocial Involvement scale (66.2% with protection in the 8th grade and 58.8% protection in the 12th grade). In comparison to the BH Norm, protection scale scores were lower for the 6th grade for all three scales.

Comparisons to 2019 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2019 survey, the scale scores for Poor Family Management increased up to 4.9 percentage points in grades 6, 8, and 10. Scale scores for Parental Attitudes Favorable toward Drug Use increased slightly for grades 6 and 8. See charts on pages 2-17 through 2-21 for further multi-year risk and protective factor data.

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

Table 2-4

Family Domain Risk and Protective Factor Scales

	6th				8th				10th				12th				All			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
Family Risk Factor Scales																				
Family History of Antisocial Behavior	37.3	37.5	33.7	44.0	34.0	30.7	27.8	40.4	30.3	28.8	24.9	39.1	30.3	27.0	23.1	37.4	32.8	30.9	27.2	39.9
Poor Family Management	39.0	43.8	47.5	44.8	35.7	34.0	38.9	41.4	37.6	35.1	35.9	41.6	32.2	29.3	27.0	35.0	36.0	35.4	37.1	40.2
Parental Attitudes Favorable Toward Drug Use	15.6	17.4	18.5	11.4	27.3	26.6	29.7	22.7	42.1	43.5	42.7	35.6	42.9	42.2	41.9	36.8	32.8	32.8	33.6	28.0
Parental Attitudes Favorable Toward Antisocial Behavior	50.1	53.3	57.9	36.9	40.9	41.7	47.2	30.0	47.2	50.4	51.8	33.6	47.1	47.7	49.4	34.1	46.2	48.2	51.5	33.3
Family Conflict	34.0	35.1	32.7	36.9	30.9	30.1	28.3	32.7	35.8	34.2	34.0	37.5	38.0	36.6	35.3	37.5	34.8	34.0	32.6	36.1
Family Protective Factor Scales																				
Family Attachment	65.6	62.1	59.4	63.5	61.8	61.8	60.9	59.9	63.7	64.6	61.6	61.6	61.0	60.6	57.8	59.1	62.9	62.3	59.9	60.7
Opportunities for Prosocial Involvement	58.3	54.8	52.4	57.2	68.4	68.0	66.2	65.9	61.4	64.3	61.6	60.6	59.5	60.1	58.8	58.3	61.9	61.9	59.9	60.7
Rewards for Prosocial Involvement	60.7	57.4	55.1	56.9	69.0	67.4	63.7	65.7	60.4	60.9	55.1	57.9	56.0	55.5	51.5	54.6	61.5	60.3	56.3	58.9

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

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

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 38.1% at risk in the 6th grade to 44.7% at risk in the 10th grade, while scale scores for Low Commitment to School ranged from 50.3% at risk in the 6th grade to 61.7% at risk in the 10th grade. In comparison to the BH Norm, more Pennsylvania youth in all grades are 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 38.0% with protection in the 10th grade to 52.0% with protection in the 6th grade, and School Rewards for Prosocial Involvement ranged from 44.2% with protection in the 10th grade to 58.1% with protection in the 6th grade.

Comparisons to 2019 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2019 survey, the scale scores for Low Commitment to School increased 4.5 to 6.4 percentage points in grades 6, 8, 10 and 12; while scale scores for Academic Failure increased 3.7 to 6.2 percentage points in the 6th, 8th, 10th, and 12th grades. Protection within the school domain continued to decrease for all grades and for 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

	6th				8th				10th				12th				All			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
School Risk Factor Scales																				
Academic Failure	30.7	34.4	38.1	32.6	36.3	38.3	43.0	32.5	37.4	38.5	44.7	35.1	35.9	36.6	40.7	33.4	35.3	37.0	41.7	33.5
Low Commitment Toward School	37.2	45.4	50.3	47.0	46.8	52.7	58.3	50.1	49.8	55.3	61.7	53.8	43.8	48.6	53.1	49.5	44.7	50.6	56.0	50.3
School Protective Factor Scales																				
Opportunities for Prosocial Involvement	60.8	54.2	52.0	58.8	51.9	47.0	44.5	54.4	43.7	39.3	38.0	51.3	45.5	43.3	40.8	52.1	49.9	45.7	43.6	53.6
Rewards for Prosocial Involvement	62.9	57.1	58.1	54.6	55.5	51.7	54.4	51.6	43.8	41.5	44.2	46.2	47.6	43.2	45.9	49.4	51.9	48.1	50.3	50.2

Peer/Individual Risk and Protective Factors

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

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

Table 2-7

YOUTH AT RISK	PROBLEM BEHAVIORS					
	Substance 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, anti-crime, pro-social attitudes. They have difficulty imagining why people use drugs, commit crimes, and drop out of school. In middle school, as others they know participate in such activities, their attitudes often shift toward greater acceptance of these behaviors. This places them at higher risk.

Depressive Symptoms (Linked to Substance 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 2021 PAYS gathers data for ten risk factor scales in the Peer/Individual Domain. Risk factor results are presented in Table 2-8.

The highest risk score for youth in all grades was Perceived Risk of Drug Use (51.6% at risk in the 6th grade, 44.8% at risk in the 8th grade, 45.7% at risk in the 10th grade, and 57.1% 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, 10, and 12 indicated higher risk for the following two scales: Attitudes Favorable Toward Drug Use risk scale (4.2 percentage points higher than the BH Norm for the 6th grade, 3.5 percentage points higher than the BH Norm for the 8th grade, 3.0 percentage points higher than the BH Norm for the 10th grade, and 3.0 percentage points higher for the 12th grade) and Attitudes Favorable Toward Antisocial Behavior (8.6 percentage points higher than the BH Norm for the 6th grade, 7.4 percentage points higher than the BH Norm for the 8th grade, 7.7 percentage points higher than the BH Norm for the 10th grade, and 7.8 percentage points higher for the 12th grade). In contrast, the following are Peer/Individual domain scales in which a lower percentage of Pennsylvania youth in all grades (in comparison to the BH Norm) were at risk: Rebelliousness, Rewards Favorable to Antisocial Behavior, Friends' Use of Drugs, and Interaction with Antisocial Peers.

Protective Factor Scale Results

There are two protective factor scales for the peer/individual domain. Protective factor results for this domain are presented in Table 2-8. For the Belief in the Moral Order scale, protection ranged from 41.5% with protection in the 6th grade up to 60.4% with protection in the 10th grade. Protective factor scale scores for Religiosity ranged from 25.1% with protection in the 12th grade up to 37.8% with protection for this scale in the 6th grade. In comparison to the BH Norm, a greater percentage of Pennsylvania youth in grade 12 indicated protection within the Belief in the Moral Order scale (1.5 percentage points higher), while a lower percentage of youth in all grades indicated protection within the Religiosity scale (8.9 to 12.7 percentage points lower protection).

Comparisons to 2019 PAYS Data

Risk and protective factor data from three administrations are reported here for Pennsylvania. Since the 2019 survey, the scale scores for Attitudes Favorable Toward Antisocial Behavior increased 3.0 to 6.2 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

	6th				8th				10th				12th				All Grades			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
Peer And Individual Risk Factor Scales																				
Rebelliousness	25.8	27.2	27.7	33.8	20.8	18.3	17.7	26.0	26.1	24.4	21.6	30.4	28.4	25.2	22.2	31.7	25.3	23.7	22.2	30.1
Gang Involvement	11.3	10.3	2.9	7.7	11.3	10.7	1.9	7.4	11.2	11.3	1.7	7.2	14.6	13.9	2.8	7.9	12.1	11.6	2.3	7.5
Perceived Risk of Drug Use	47.2	48.8	51.6	50.9	43.8	43.2	44.8	47.7	46.3	46.7	45.7	48.8	58.6	58.2	57.1	58.6	49.1	49.2	49.7	51.4
Attitudes Favorable Toward Drug Use	21.5	22.4	21.5	17.3	40.2	40.7	40.9	37.4	44.2	45.0	42.7	39.7	46.6	45.5	44.4	41.4	38.7	38.7	37.7	35.7
Attitudes Favorable Toward Antisocial Behavior	36.8	41.2	47.4	38.8	29.2	32.0	36.8	29.4	37.7	39.8	42.8	35.1	38.3	39.7	43.1	35.3	35.6	38.1	42.5	34.2
Sensation Seeking	36.7	39.6	46.9	36.8	31.5	30.7	34.9	34.8	33.7	33.6	31.8	34.9	30.3	29.4	26.2	31.5	32.9	33.2	34.6	34.4
Rewards for Antisocial Behavior	16.4	17.2	16.4	21.6	33.0	32.6	29.5	41.4	36.9	34.5	28.9	39.5	40.1	37.2	31.7	44.1	32.3	30.7	26.9	38.2
Friend's Use of Drugs	10.5	10.5	9.3	14.6	30.2	28.3	22.7	35.3	31.7	29.8	19.0	35.1	32.8	28.8	21.1	34.4	27.0	24.7	18.2	31.7
Interaction With Antisocial Peers	20.7	21.9	15.8	31.7	27.0	24.9	21.4	38.0	26.4	26.3	19.4	36.6	28.6	25.9	20.4	36.1	25.9	24.8	19.3	36.0
Depressive Symptoms	27.9	30.8	34.4	31.1	36.8	34.2	40.0	37.4	41.5	43.3	45.4	43.2	43.2	45.0	45.3	41.8	37.7	38.5	41.5	38.7
Peer And Individual Protective Factor Scales																				
Religiosity	44.4	40.5	37.8	50.5	43.7	40.5	34.4	45.9	38.8	36.0	29.3	40.2	34.5	31.3	25.1	34.0	40.1	37.0	31.4	42.1
Belief In The Moral Order	52.1	45.8	41.5	50.5	58.5	62.0	54.7	58.0	61.9	62.2	60.4	60.6	59.7	61.7	60.3	58.8	58.3	58.2	54.6	57.9

Figure 2-1

Risk factor scales, 6th grade, Statewide Sample 2021 PAYS

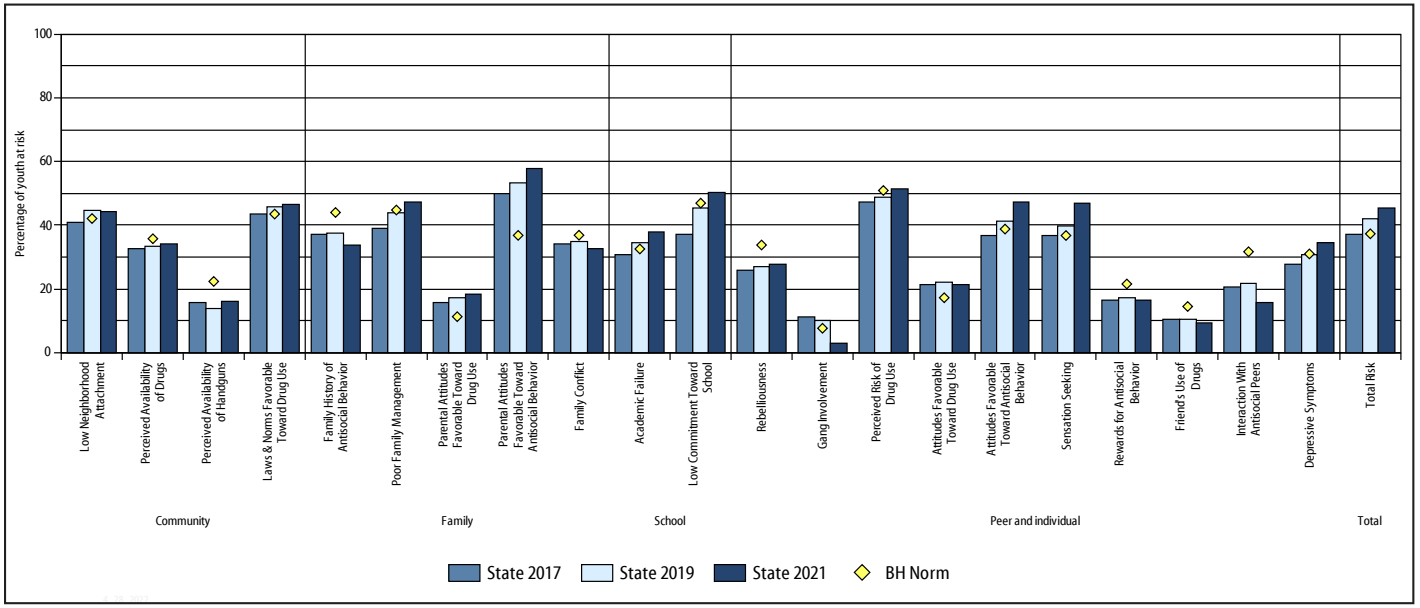
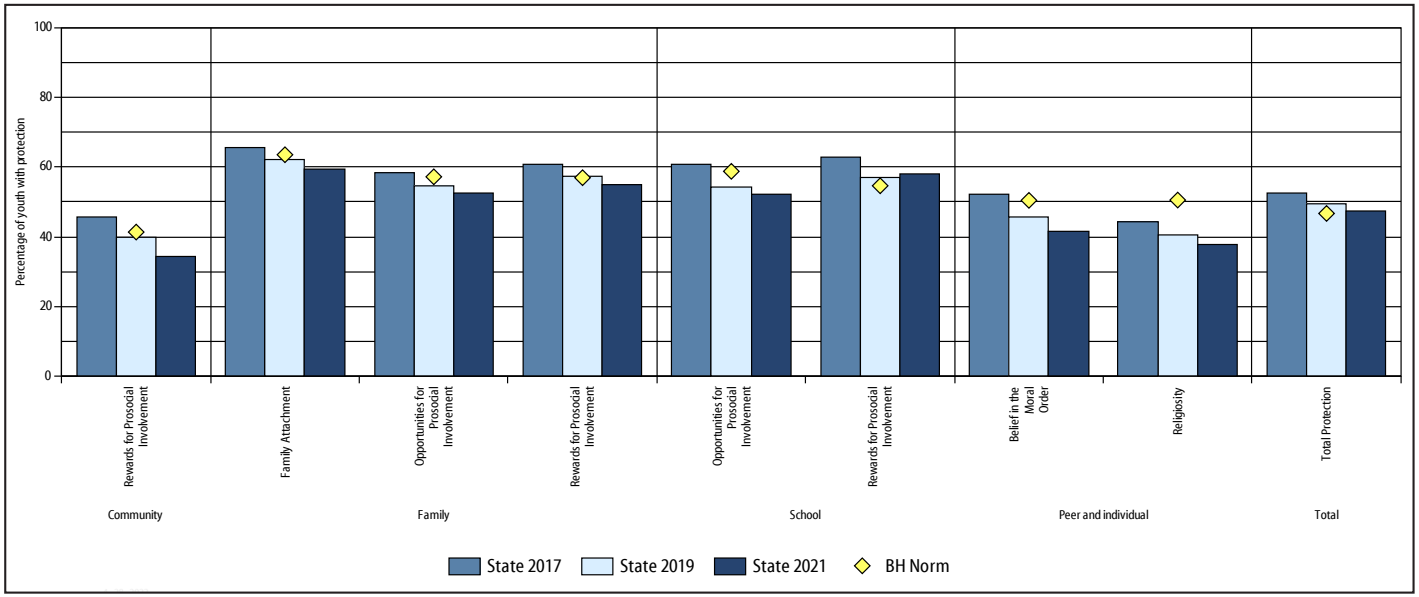


Figure 2-2

Protective factor scales, 6th grade, Statewide Sample 2021 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.)

Figure 2-3

Risk factor scales, 8th grade, Statewide Sample 2021 PAYS

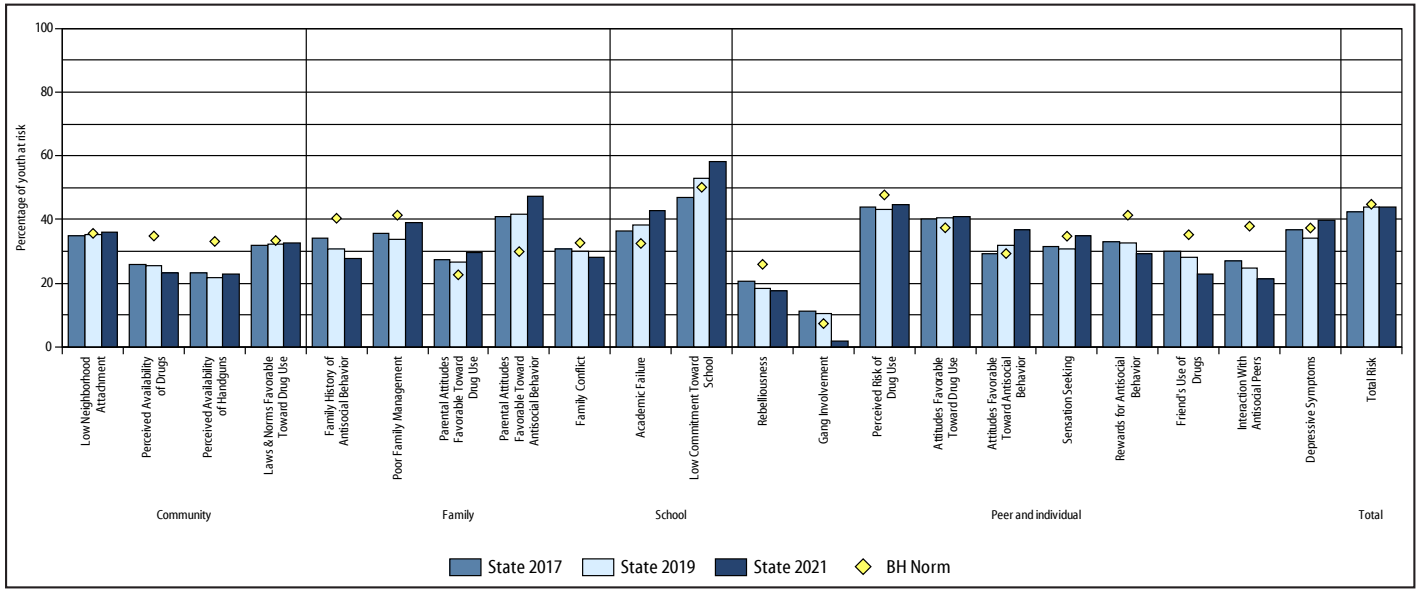
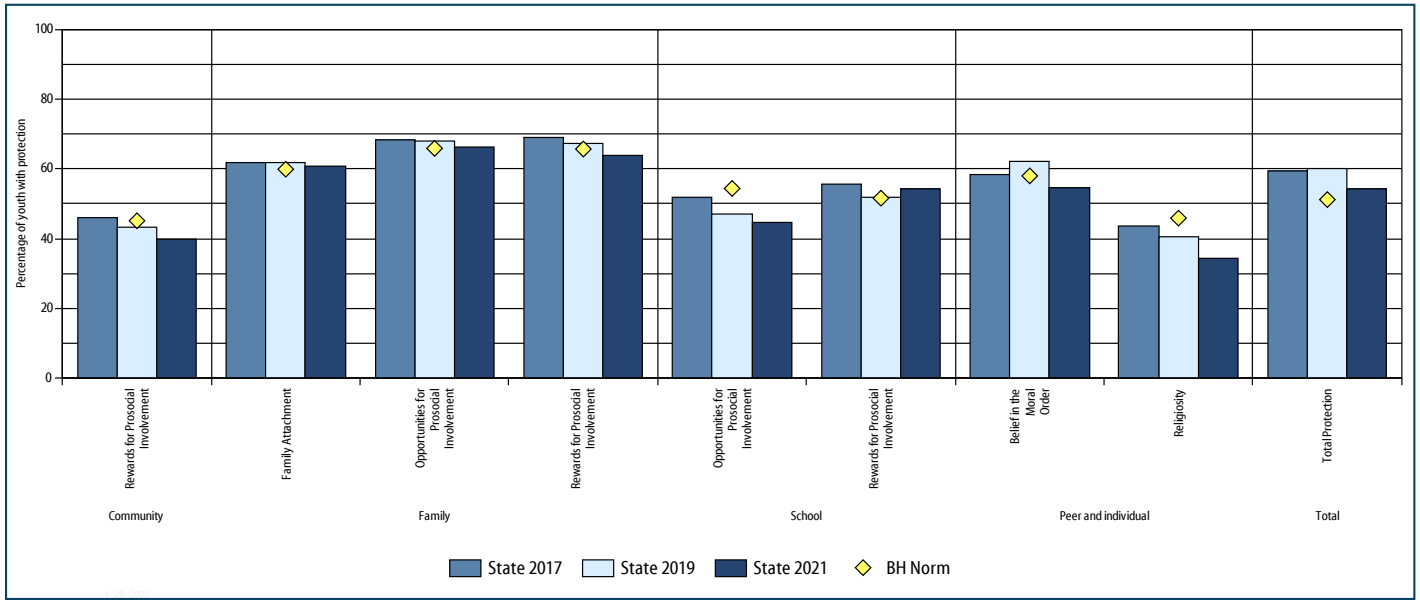


Figure 2-4

Protective factor scales, 8th grade, Statewide Sample 2021 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.)

Figure 2-5

Risk factor scales, 10th grade, Statewide Sample 2021 PAYS

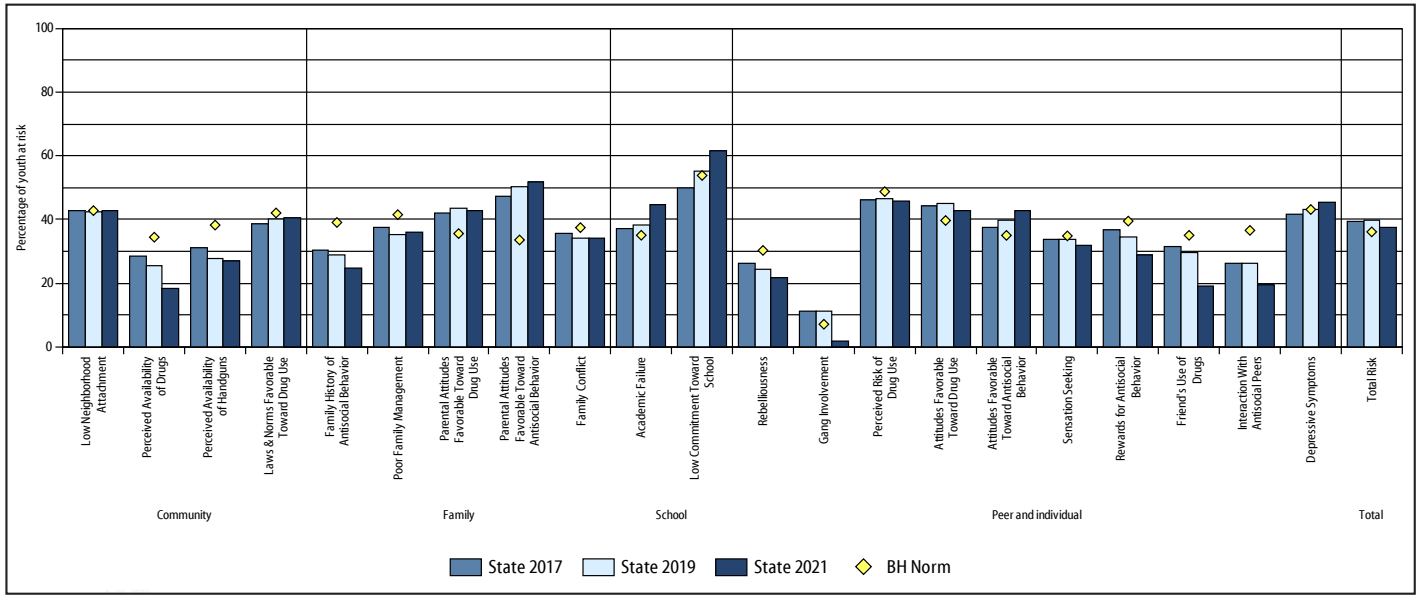
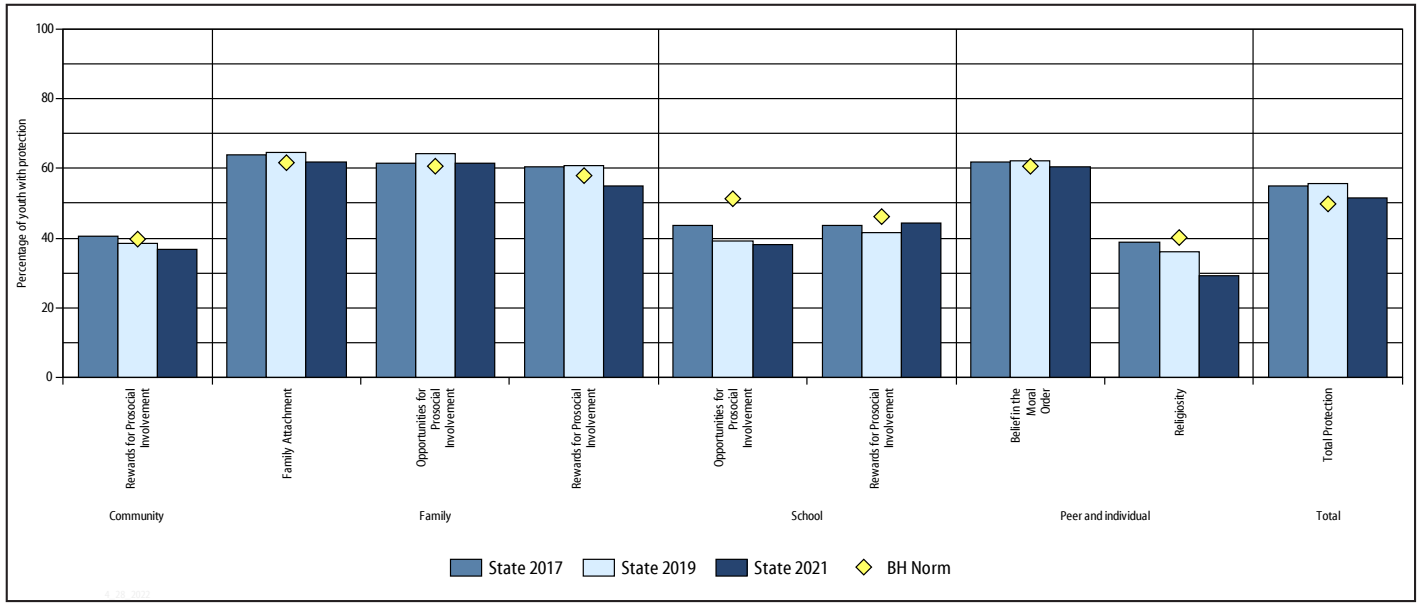


Figure 2-6

Protective factor scales, 10th grade, Statewide Sample 2021 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.)

Figure 2-7

Risk factor scales, 12th grade, Statewide Sample 2021 PAYS

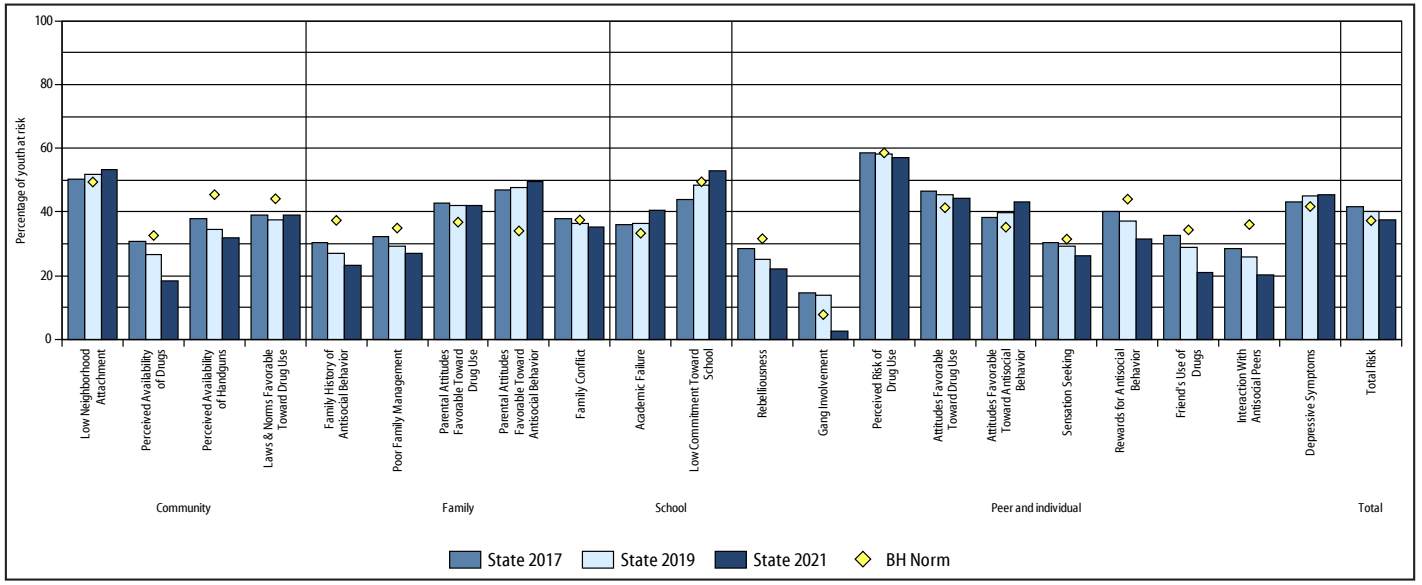
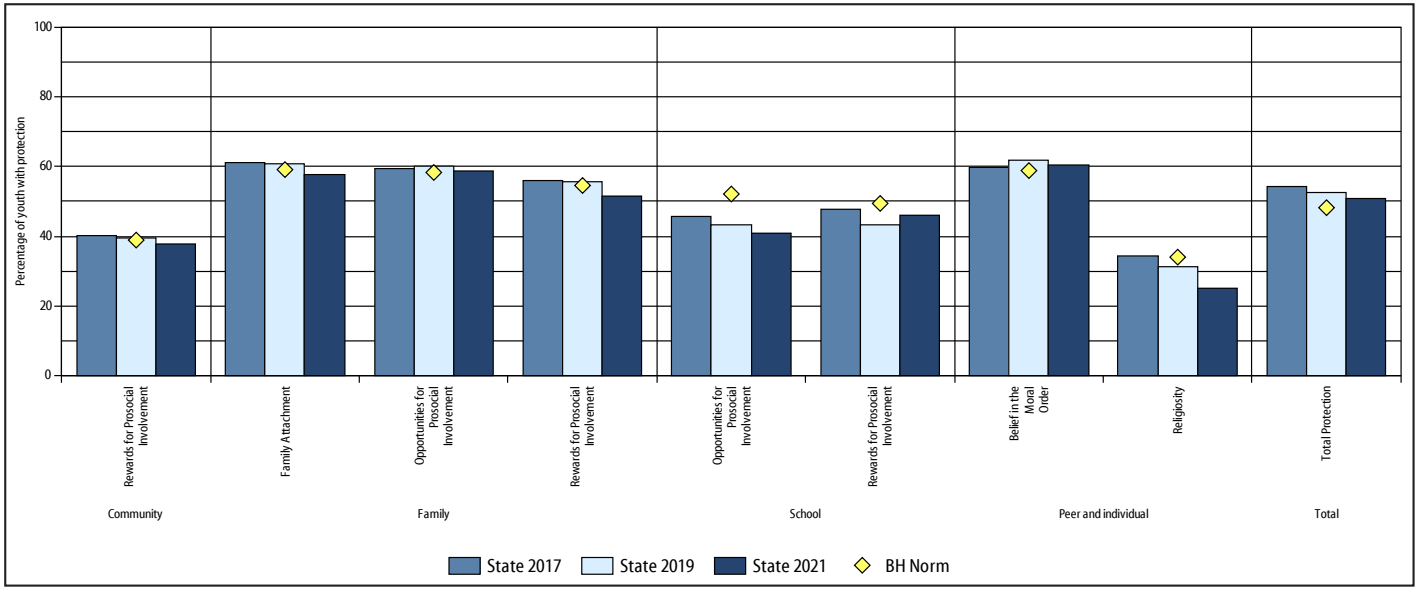


Figure 2-8

Protective factor scales, 12th grade, Statewide Sample 2021 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.)

Figure 2-9

Risk factor scales, All Grades Combined, Statewide Sample 2021 PAYS

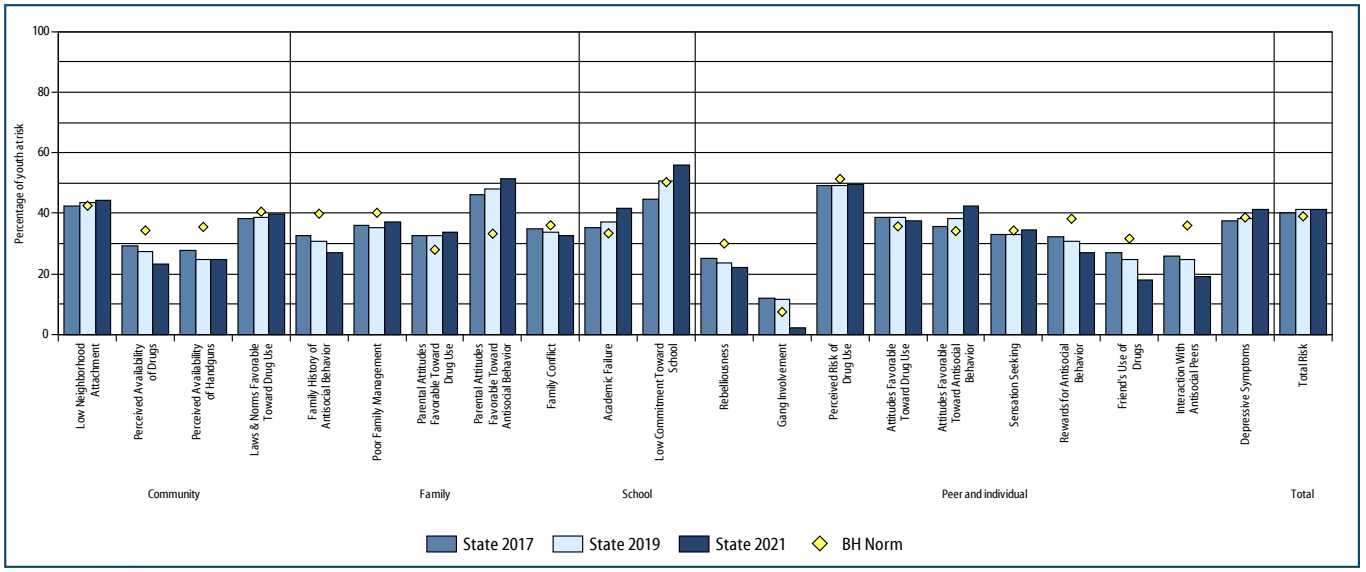
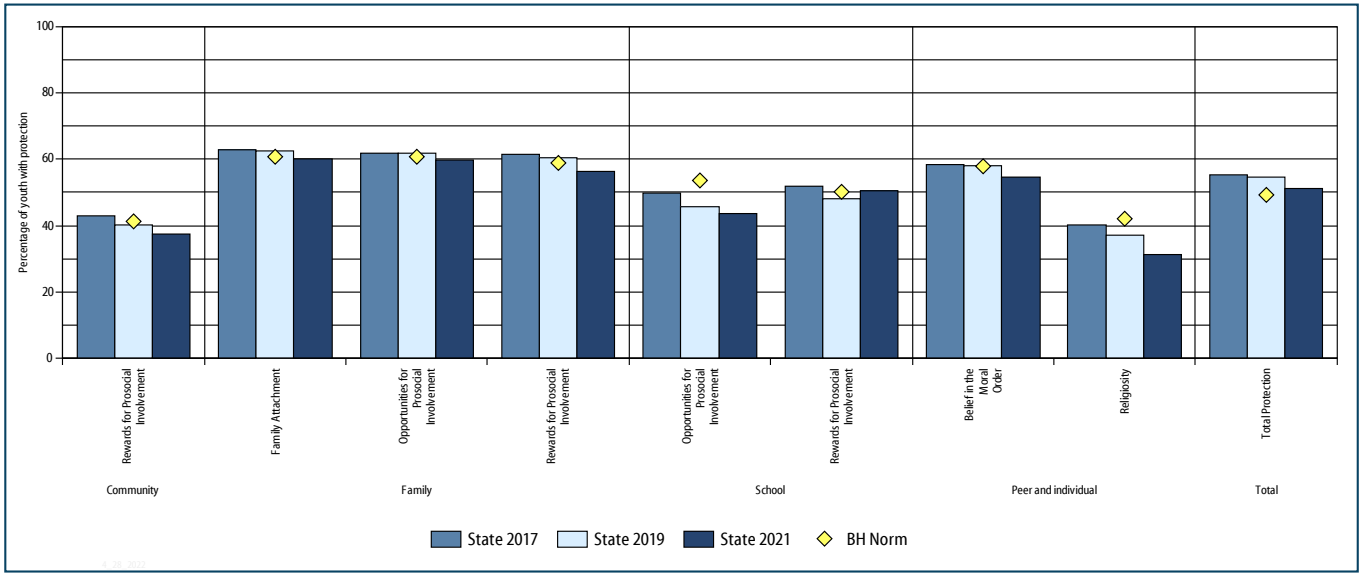


Figure 2-10

Protective factor scales, All Grades Combined, Statewide Sample 2021 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 2021 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 2021 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 2021 PAYS results presented in Table 3.1-1 show that 34.8% of students in grades 6, 8, 10, and 12 have used alcohol at least once in their lifetime. By grade, 13.9% of 6th graders, 26.9% of 8th graders, 42.7% of 10th graders, and 55.2% of 12th graders have used alcohol in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.1-1), Pennsylvania youth in the all grades indicated higher lifetime alcohol use rates than youth in same grades in the national sample. Pennsylvania rates were 5.2 percentage points higher than national rates in the 8th grade (26.9% in Pennsylvania, compared to 21.7% in the national sample), 8.0 percentage points higher than national rates in the 10th grade (42.7% in Pennsylvania, compared to 34.7% in the national sample), and 1.1 percentage points higher than national rates in the 12th grade (55.2% in Pennsylvania, compared to 54.1% in the national sample).

Since the 2019 survey, lifetime alcohol use for all grades decreased, with the greatest decrease of 9.3 percentage points for the 10th grade. For all students combined, lifetime alcohol use decreased from 41.0% in 2019 to 34.8% in 2021.

Past Month Alcohol Use

The 2021 PAYS results presented in Table 3.1-1 and Figure 3.1-1 show that 13.4% of students in grades 6, 8, 10, and 12 have used alcohol at least once in the past 30 days. In looking at past month use rates by grade level, 3.1% of 6th graders, 6.9% of 8th graders, 16.1% of 10th graders, and 27.4% 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 10th and 12th grades indicated past month alcohol use rates that were higher than those of youth in same grades in the national sample (3.0 percentage points higher in the 10th grade and 1.6 percentage points higher in the 12th grade).

Since the 2019 survey, past month alcohol use decreased significantly in the 12th grade (from 33.9% in 2019 to 27.4% in 2021).

Binge Drinking

The 2021 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 2021 PAYS found that 5.0% 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, 2.0% of 8th graders, 5.3% of 10th graders, and 11.8% of 12th graders reported binge drinking.

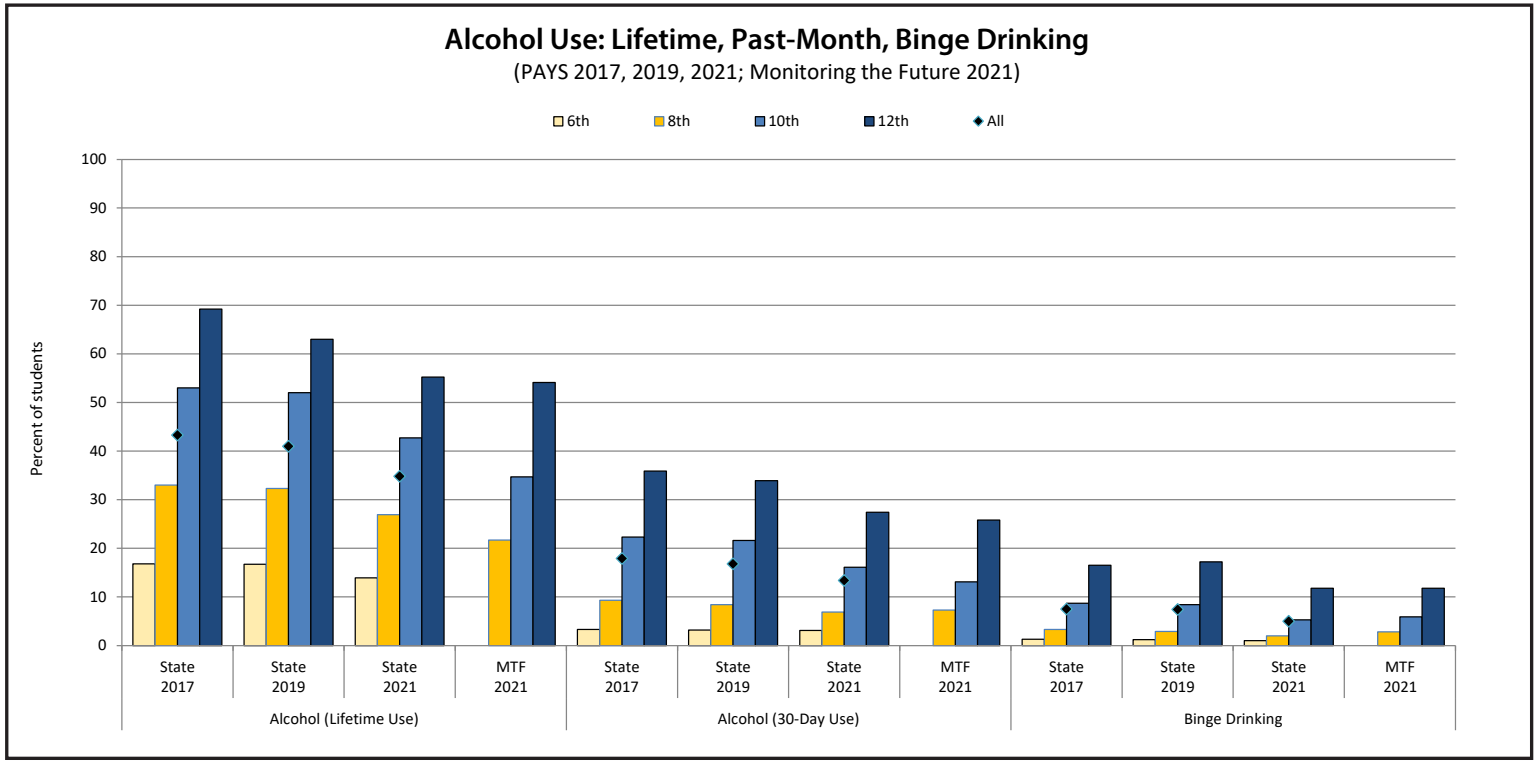
Binge drinking rates have been gradually decreasing since 2011. For all grades combined, binge drinking has decreased since 2017 (7.5% in 2017, 7.4% in 2019, 5.0% in 2021).

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

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

Grade	Alcohol (Lifetime Use)				Alcohol (30-Day Use)				Binge Drinking			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	16.8	16.7	13.9	n/a	3.3	3.2	3.1	n/a	1.3	1.2	1.0	n/a
8th	33.0	32.3	26.9	21.7	9.3	8.4	6.9	7.3	3.3	2.9	2.0	2.8
10th	53.0	52.0	42.7	34.7	22.3	21.6	16.1	13.1	8.7	8.4	5.3	5.9
12th	69.2	63.0	55.2	54.1	35.9	33.9	27.4	25.8	16.5	17.2	11.8	11.8
All	43.3	41.0	34.8	n/a	17.9	16.8	13.4	n/a	7.5	7.4	5.0	n/a

Figure 3.1-1



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

In the 2021 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 2021 PAYS results presented in Table 3.2-1 show that 8.1% of students in grades 6, 8, 10, and 12 have used cigarettes at least once in their lifetime, and 3.5% 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 2019 survey, lifetime cigarette use decreased in the 8th, 10th, and 12th grades, with a decrease of 1.5 percentage points in the 8th grade, 2.6 percentage points in the 10th grade, 6.6 percentage points in the 12th grade, and 2.7 percentage points overall. Since the 2019 survey, smokeless tobacco lifetime use rates decreased 2.0 percentage points for all grades combined.

Past Month Tobacco Use

The 2021 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 1.0% of students in the same grades have used smokeless tobacco. In looking at past month cigarette use rates by grade level, 0.3% 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 0.2% of 6th graders, 0.4% of 8th graders, 1.3% of 10th graders, and 2.2% of 12th graders have used smokeless tobacco in the past month. The 2021 PAYS was the fourth administration to collect data on past-month e-cigarette/vape device use. The 2021 survey showed that 13.0% of students had used an e-cigarette or vape device in the past month. By grade, 2.8% of 6th graders indicated past-month use, 9.2% of 8th graders indicated past-month use, 16.2% of 10th graders indicated past-month use, and 23.7% of 12th graders indicated past-month use.

In comparison to data gathered through the national MTF Survey (see Figure 3.2-1), Pennsylvania 10th and 12th graders indicated higher past-month cigarette use (2.9% for Pennsylvania 10th graders compared to 1.8% for MTF, and 4.5% for Pennsylvania 12th graders compared to 4.1% for MTF). As for e-cigarettes/vape devices, the past-month use rate was similar in all grates to the MTF.

Since the 2019 survey, past month e-cigarette use decreased 3.3 percentage points in the 8th grade, 10.3 percentage points in the 10th grade, and 9.4 percentage points in the 12th grade. Past-month smokeless tobacco use decreased 2.8 percentage points for the 12th grade since the 2019 survey.

Substances Vaped

The 2021 PAYS results presented in Table 3.2-3 and Figure 3.2-2 show the percent of past-year e-cigarette users who are using vape devices for different substances. Of past-year vape users, most (56.1%) are using nicotine in their devices, while 34.5% have used just flavoring, 25.6% have used marijuana or hash oil, and 1.8% had used another substance in their vape device. Of those who have vaped in the past year, 21.3% were unsure of what they had inhaled.

Table 3.2-1

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

Grade	Cigarettes (Lifetime Use)				Cigarettes (30-Day Use)				Smokeless Tobacco (Lifetime Use)				Smokeless Tobacco (30-Day Use)				E-Cigarettes (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	2.7	2.3	2.0	n/a	0.6	0.5	0.3	n/a	1.1	1.1	0.7	n/a	0.3	0.3	0.2	n/a	2.3	3.8	2.8	n/a
8th	9.4	6.9	5.4	7.0	2.5	1.9	1.4	1.1	4.4	2.6	1.8	4.6	1.8	0.9	0.4	1.6	10.9	12.5	9.2	8.9
10th	16.2	12.2	9.6	10.0	6.0	4.0	2.9	1.8	8.9	6.4	3.9	4.9	4.2	2.1	1.3	1.7	21.9	26.5	16.2	15.6
12th	29.0	21.9	15.3	17.8	13.2	7.5	4.5	4.1	15.9	11.8	7.4	8.6	7.5	5.0	2.2	2.2	29.3	33.1	23.7	24.0
All	14.5	10.8	8.1	n/a	5.6	3.5	2.3	n/a	7.6	5.5	3.5	n/a	3.5	2.1	1.0	n/a	16.3	19.0	13.0	n/a

Figure 3.2-1

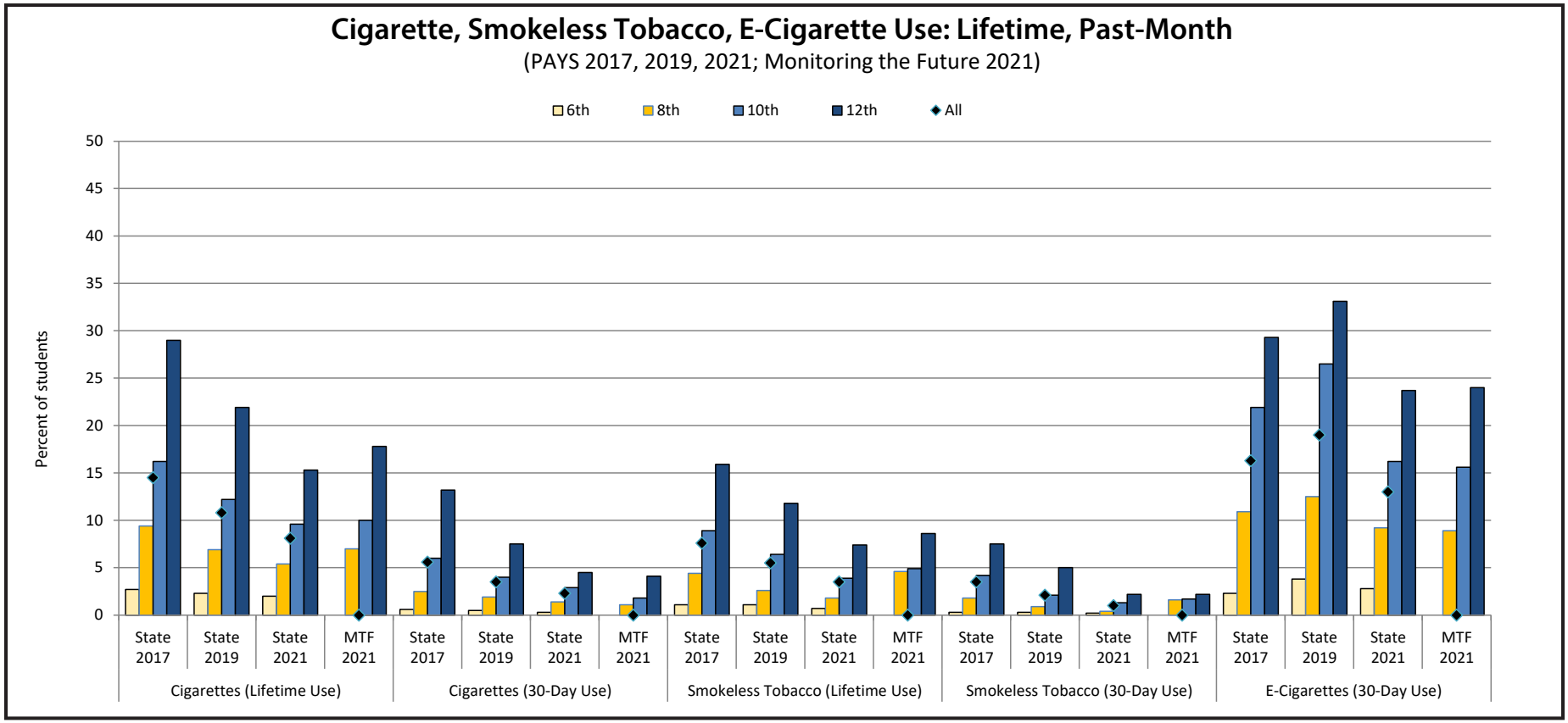
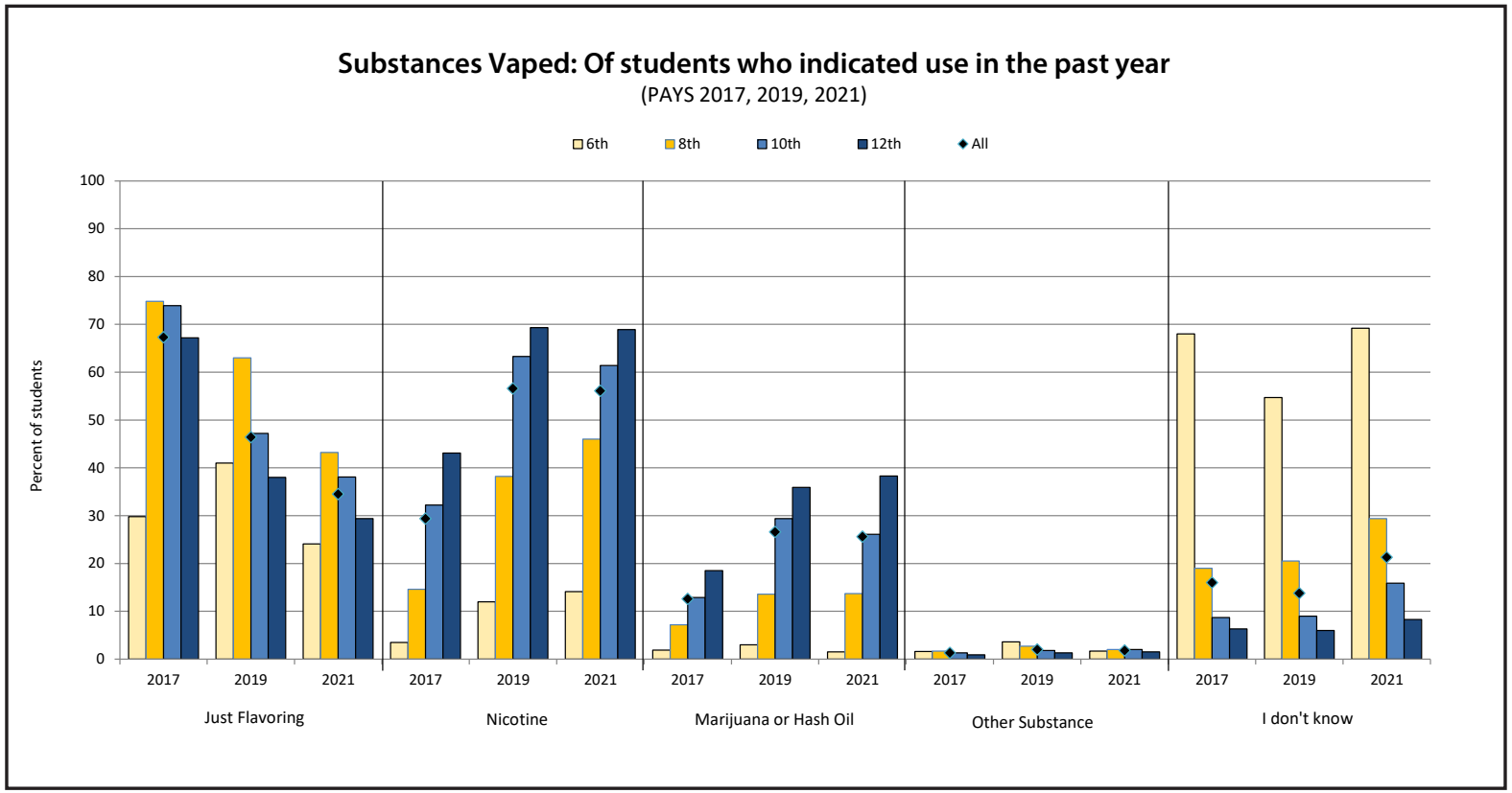


Table 3.2-2 **Substances Vaped** *(of students indicating any use in the past 30 days)*

Grade	Just flavoring			Nicotine			Marijuana or hash oil			Other substance			I don't know		
	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021
6th	29.8	41.0	24.1	3.5	12.0	14.1	1.9	3.0	1.5	1.6	3.6	1.7	68.0	54.7	69.2
8th	74.8	63.0	43.2	14.6	38.2	46.0	7.2	13.6	13.7	1.7	2.7	2.0	19.0	20.5	29.4
10th	73.9	47.2	38.1	32.2	63.3	61.4	12.9	29.4	26.1	1.3	1.8	2.0	8.7	9.0	15.9
12th	67.2	38.0	29.4	43.1	69.3	68.9	18.5	35.9	38.3	0.9	1.3	1.5	6.3	6.0	8.3
All	67.3	46.4	34.5	29.4	56.6	56.1	12.6	26.6	25.6	1.3	2.0	1.8	16.0	13.8	21.3

Figure 3.2-2



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

In the 2021 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 2021 PAYS results presented in Table 3.3-1 show that 13.1% of students in grades 6, 8, 10, and 12 have used marijuana at least once in their lifetime. By grade, 1.2% of 6th graders, 5.7% of 8th graders, 14.8% of 10th graders, and 30.4% 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 4.5 percentage points lower than national rates in the 8th grade (5.7% in Pennsylvania, compared to 10.2% in the national sample), 7.2 percentage points lower than national rates in the 10th grade (14.8% in Pennsylvania, compared to 22.0% in the national sample), and 8.2 percentage points lower than national rates in the 12th grade (30.4% in Pennsylvania compared to 38.6% in the national sample).

Past Month Marijuana Use

The 2021 PAYS results presented in Table 3.3-1 and Figure 3.3-1 show that 7.0% 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, 0.4% of 6th graders, 2.7% of 8th graders, 8.0% of 10th graders, and 16.8% of 12th graders in Pennsylvania have used marijuana in the past 30 days.

As with lifetime marijuana use, in comparison to data gathered through the national MTF Survey (see Figure 3.3-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower past month marijuana use rates than youth in same grades in the national sample. Pennsylvania rates were 1.4 percentage points lower than national rates in the 8th grade (2.7% in Pennsylvania, compared to 4.1% in the national sample), 2.1 percentage points lower than national rates in the 10th grade (8.0% in Pennsylvania, compared to 10.1% in the national sample), and 2.7 percentage points lower than national rates in the 12th grade (16.8% in Pennsylvania compared to 19.5% in the national sample).

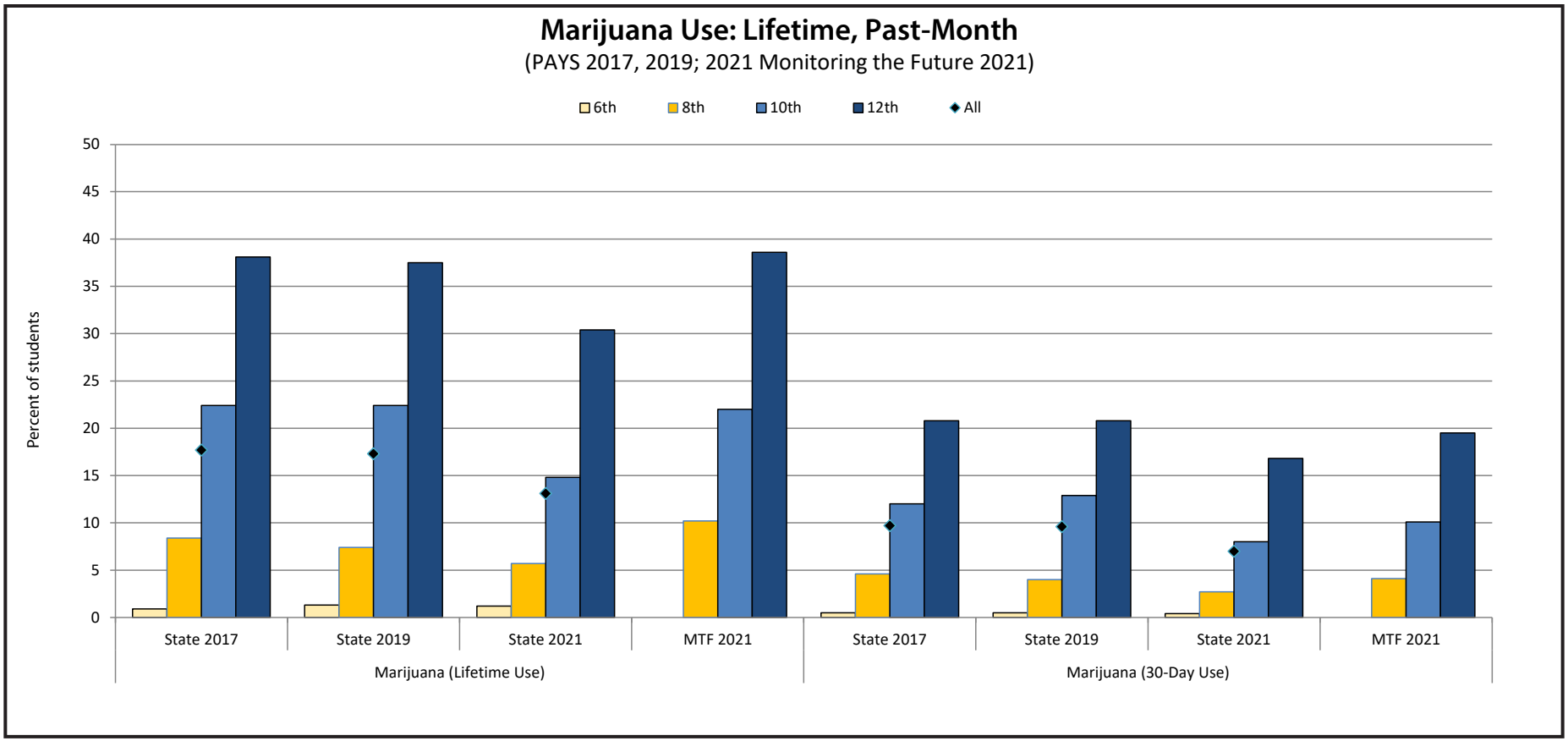
For data regarding lifetime and 30-day marijuana use by county and grade, please refer to the PAYS Portal at www.pays.pa.gov or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 3.3-1

Marijuana Use: Lifetime and Past-Month

Grade	Marijuana (Lifetime Use)				Marijuana (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.9	1.3	1.2	n/a	0.5	0.5	0.4	n/a
8th	8.4	7.4	5.7	10.2	4.6	4.0	2.7	4.1
10th	22.4	22.4	14.8	22.0	12.0	12.9	8.0	10.1
12th	38.1	37.5	30.4	38.6	20.8	20.8	16.8	19.5
All	17.7	17.3	13.1	n/a	9.7	9.6	7.0	n/a

Figure 3.3-1



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

In the 2021 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 2021 PAYS results presented in Table 3.4-1 show that 4.3% of students in grades 6, 8, 10, and 12 have used inhalants at least once in their lifetime. By grade, 5.0% of 6th graders, 4.4% of 8th graders, 4.3% of 10th graders, and 3.7% 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 6.9 percentage points lower than national rates in the 8th grade (4.4% in Pennsylvania, compared to 11.3% in the national sample), 2.9 percentage points lower than national rates in the 10th grade (4.3% in Pennsylvania, compared to 7.2% in the national sample), and 1.3 percentage points lower than national rates in the 12th grade (3.7% in Pennsylvania compared to 5.0% in the national sample).

Past Month Inhalant Use

The 2021 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 1.8% of 6th graders, 1.4% of 8th graders, 1.1% of 10th graders, and 0.5% 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.

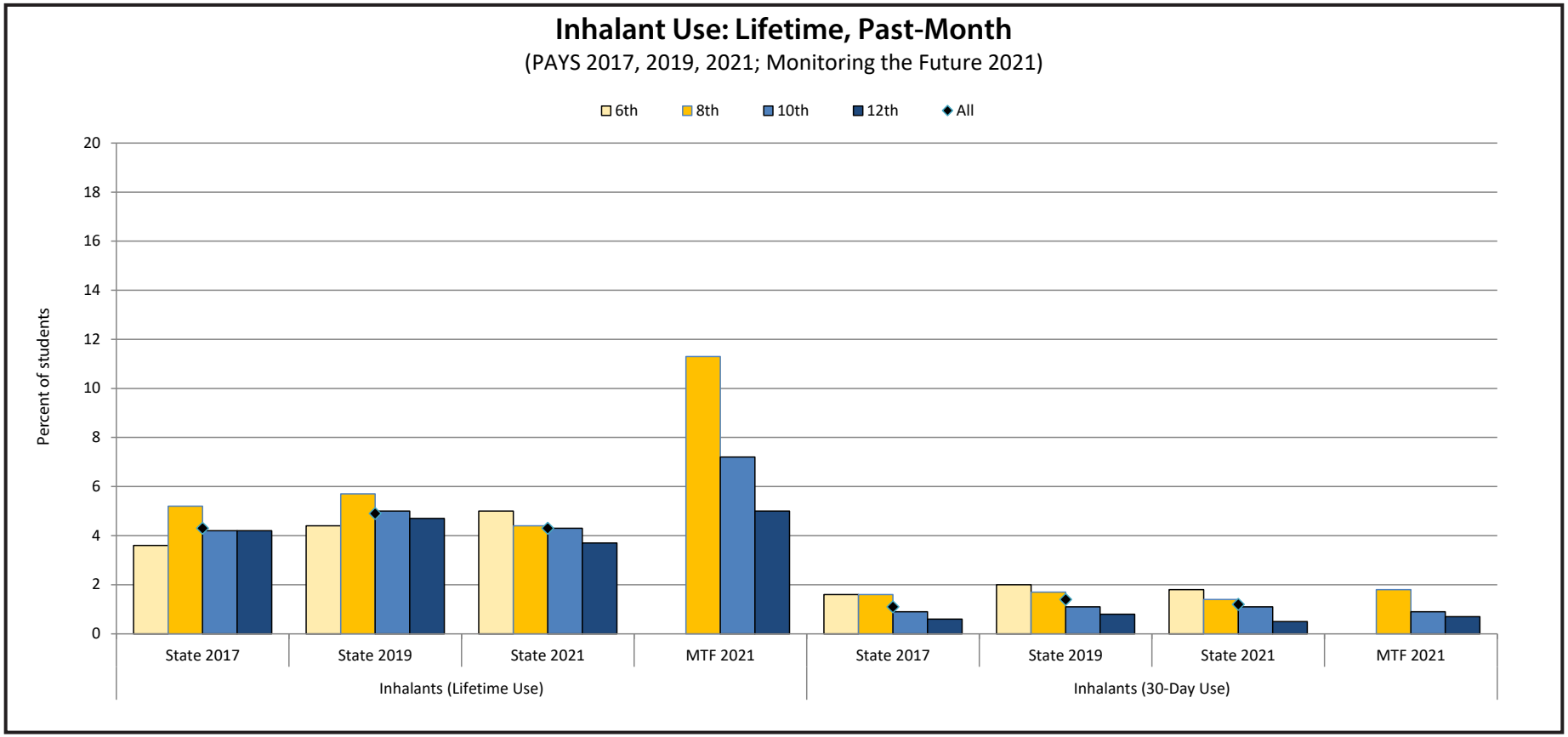
For data regarding lifetime and 30-day inhalant use by county and grade, please refer to the PAYS Portal at www.pays.pa.gov or the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool.

Table 3.4-1

Inhalant Use: Lifetime and Past-Month

Grade	Inhalants (Lifetime Use)				Inhalants (30-Day Use)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	3.6	4.4	5.0	n/a	1.6	2.0	1.8	n/a
8th	5.2	5.7	4.4	11.3	1.6	1.7	1.4	1.8
10th	4.2	5.0	4.3	7.2	0.9	1.1	1.1	0.9
12th	4.2	4.7	3.7	5.0	0.6	0.8	0.5	0.7
All	4.3	4.9	4.3	n/a	1.1	1.4	1.2	n/a

Figure 3.4-1



3.5 Lifetime and 30-Day Prescription Drug Use

In the 2021 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 2021 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, 3.1% have used prescription pain relievers in their lifetime, 1.0% have used prescription tranquilizers in their lifetime, 1.8% have used prescription stimulants, and 2.9% used over-the-counter drugs (for the purpose of getting high) in their lifetime (all use is without a doctor's orders).

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.5-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime prescription stimulant and prescription tranquilizer use rates than youth in same grades in the national sample. Pennsylvania youth in the 12th grade indicated slightly higher lifetime use of prescription pain relievers (1.0 percentage points higher). (Note: Comparable MTF data are not available for over-the-counter drugs.)

Since the 2019 survey, lifetime prescription drug use rates decreased slightly, for most substances and grades though prescription stimulant use among 8th graders remained stable (1.6%).

Past Month (non-prescribed) Prescription Drug Use

The 2021 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 0.9% 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 PED, prescription pain relievers, and prescription tranquilizer 30-day use were either identical or very similar. However, prescription stimulant use was lower in grades 8 (1.1 percentage points lower in PA) and 10 (0.9 percentage points lower in PA).

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

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

Grade	PEDs & Steroids				Prescription Pain Relievers				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.5	0.6	0.5	n/a	1.8	2.2	3.1	n/a	0.4	0.5	0.5	n/a	0.6	0.9	0.9	n/a	2.3	2.7	2.9	n/a
8th	0.6	0.7	0.6	1.2	3.9	3.3	3.2	n/a	1.1	1.0	0.7	2.5	1.1	1.6	1.6	5.8	2.9	3.0	2.4	n/a
10th	1.0	0.8	0.8	0.7	5.9	4.9	2.8	n/a	2.6	2.5	1.1	2.6	3.3	3.4	1.9	5.2	4.6	4.9	2.8	n/a
12th	1.2	0.9	0.6	0.8	8.8	6.1	3.3	2.3	4.5	3.3	1.7	3.3	6.8	4.2	2.9	4.9	5.1	5.1	3.3	n/a
All	0.8	0.8	0.7	n/a	5.1	4.1	3.1	n/a	2.2	1.9	1.0	n/a	3.0	2.5	1.8	n/a	3.8	3.9	2.9	n/a

Figure 3.5-1

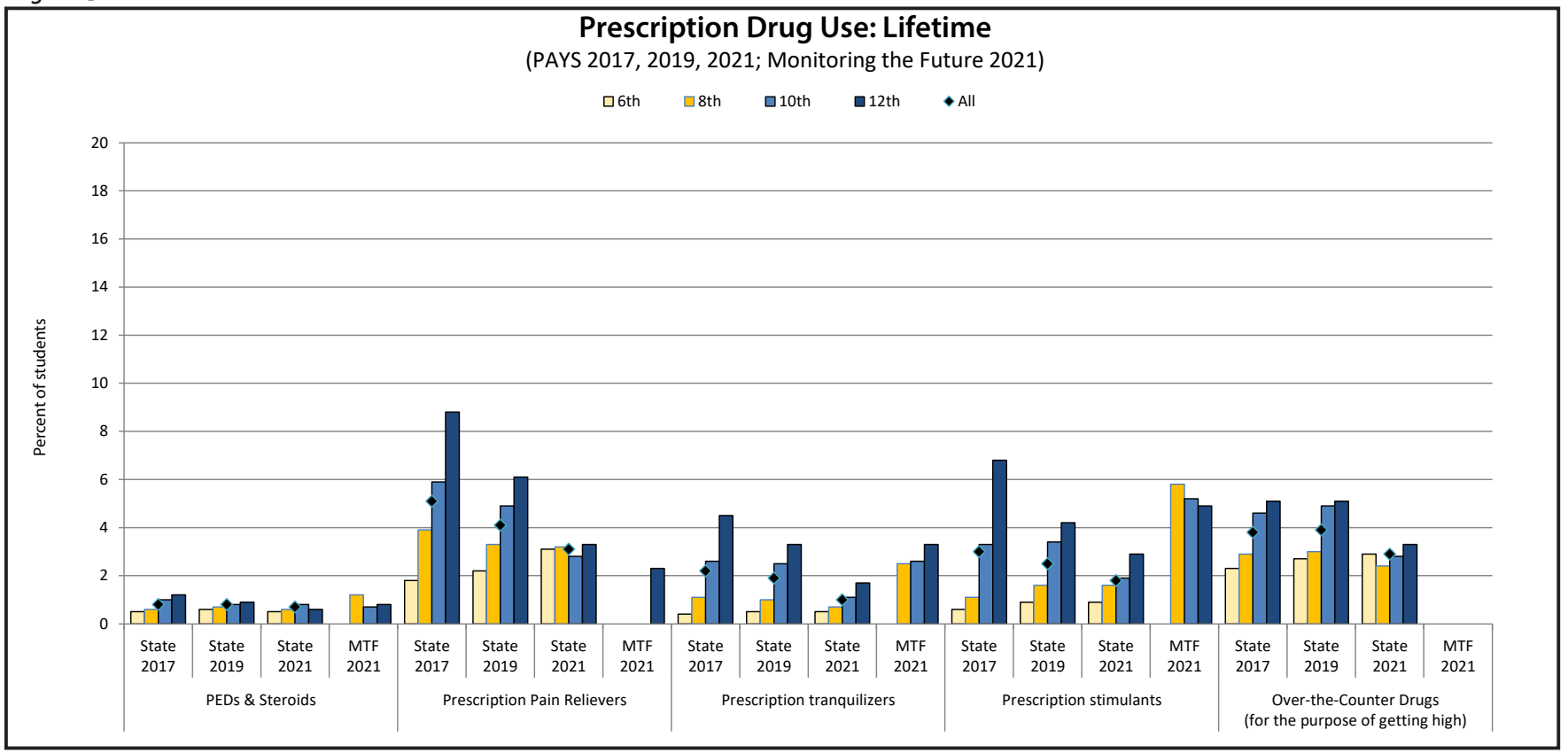
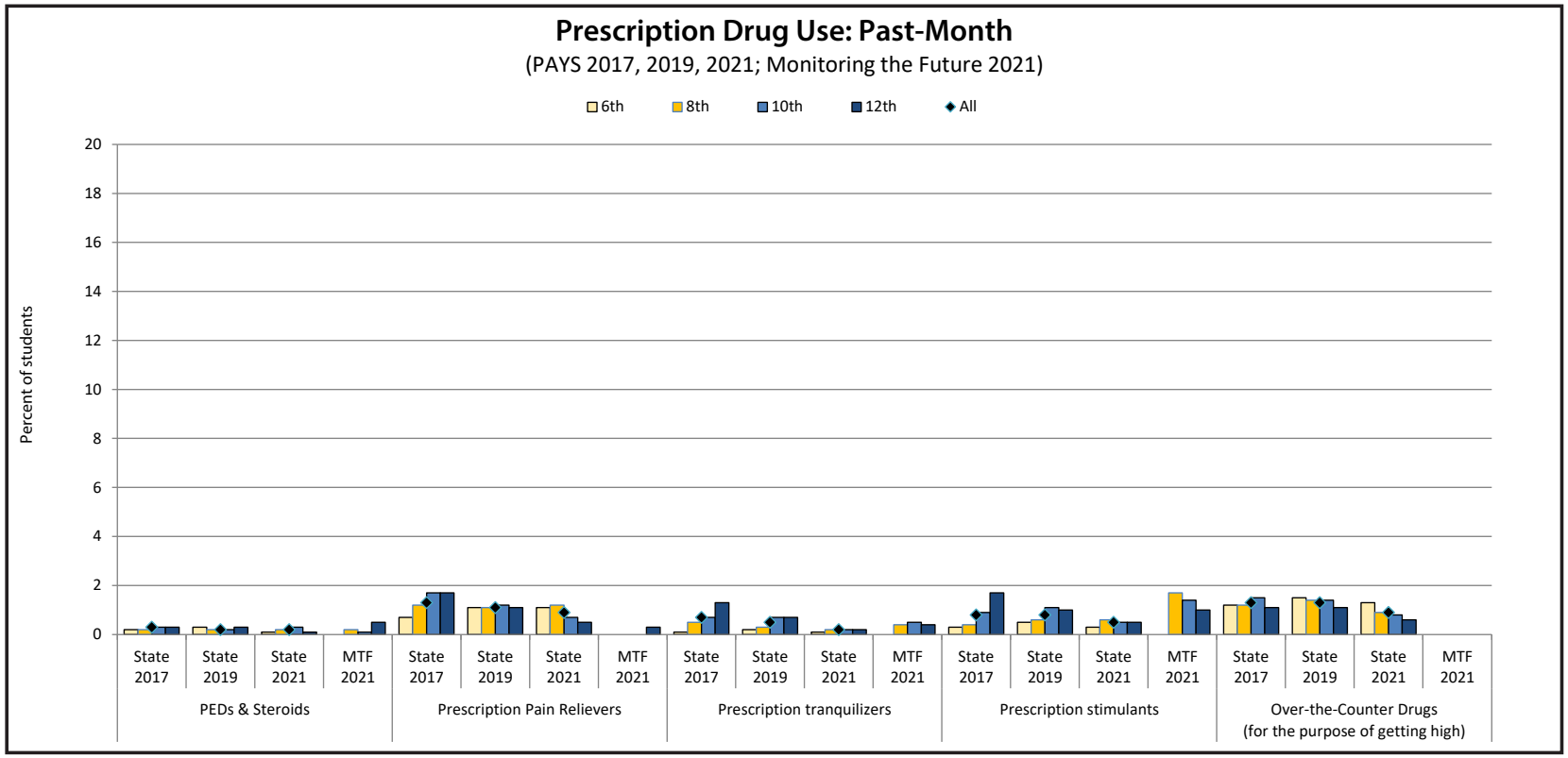


Table 3.5-2

Prescription Drugs: Past-Month Use

Grade	PEDs & Steroids				Prescription Pain Relievers				Prescription tranquilizers				Prescription stimulants				Over-the-Counter Drugs (for the purpose of getting high)			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.2	0.3	0.1	n/a	0.7	1.1	1.1	n/a	0.1	0.2	0.1	n/a	0.3	0.5	0.3	n/a	1.2	1.5	1.3	n/a
8th	0.2	0.2	0.2	0.2	1.2	1.1	1.2	n/a	0.5	0.3	0.2	0.4	0.4	0.6	0.6	1.7	1.2	1.4	0.9	n/a
10th	0.3	0.2	0.3	0.1	1.7	1.2	0.7	n/a	0.7	0.7	0.2	0.5	0.9	1.1	0.5	1.4	1.5	1.4	0.8	n/a
12th	0.3	0.3	0.1	0.5	1.7	1.1	0.5	0.3	1.3	0.7	0.2	0.4	1.7	1.0	0.5	1.0	1.1	1.1	0.6	n/a
All	0.3	0.2	0.2	n/a	1.3	1.1	0.9	n/a	0.7	0.5	0.2	n/a	0.8	0.8	0.5	n/a	1.3	1.3	0.9	n/a

Figure 3.5-2



3.6 Lifetime and 30-Day Other Illicit Drug Use

In the 2021 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 2021 PAYS results presented in Table 3.6-1 show that 0.3% of students in grades 6, 8, 10, and 12 have used heroin at least once in their lifetime, 2.2% have used hallucinogens in their lifetime, 1.1% have used synthetic drugs, 0.7% have used ecstasy in their lifetime, 0.6% have used cocaine in their lifetime, 0.3% have used crack, and 0.3% have used other methamphetamines in their lifetime.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.6-1), Pennsylvania youth in the 8th, 10th, and 12th grades indicated lower lifetime use rates in comparison to youth represented by the MTF Survey. In comparison to MTF use rates for grades 8, 10, and 12, Pennsylvania lifetime hallucinogen use rates were 1.1 to 1.6 percentage points lower for the 8th through 12th grades, and lifetime cocaine use rates were 0.3 to 1.2 percentage points lower for the 8th through 12th grades.

Since the 2019 survey, lifetime illicit drug use rates were relatively unchanged, though lifetime hallucinogen use decreased 1.5 percentage points for 10th graders (from 3.8% in 2019 to 2.3% in 2021).

Past Month Other Illicit Drug Use

The 2021 PAYS results presented in Table 3.6-2 and Figure 3.6-2 show that 0.0% 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 - 0.4%, ecstasy - 0.1%, synthetic drugs - 0.3%, cocaine - 0.1%, crack - 0.1%, and methamphetamines - 0.1%.

In comparison to data gathered through the national Monitoring the Future (MTF) Survey (see Figure 3.6-2), Pennsylvania youth in the 8th, 10th, and 12th grades indicated similar use rates (0.4 percentage points or less difference) in comparison to youth represented by the MTF Survey.

Since the 2019 survey, past-month illicit drug use rates were largely unchanged.

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

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

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.1	0.1	0.2	n/a	0.2	0.2	0.2	n/a	0.2	0.1	0.2	n/a	1.8	1.7	1.6	n/a	0.1	0.2	0.3	n/a	0.2	0.2	0.2	n/a	0.1	0.2	0.2	n/a
8th	0.2	0.1	0.2	0.5	0.9	0.7	0.7	1.8	0.8	0.5	0.4	1.0	1.5	1.6	1.2	n/a	0.5	0.4	0.3	0.6	0.4	0.3	0.3	0.4	0.3	0.2	0.3	0.3
10th	0.4	0.4	0.2	0.3	2.8	3.8	2.3	3.5	1.6	1.5	0.8	1.4	1.6	1.3	0.9	n/a	1.1	1.1	0.5	1.2	0.6	0.5	0.3	0.7	0.4	0.4	0.3	0.4
12th	0.5	0.3	0.4	0.4	6.3	5.9	5.5	7.1	3.1	2.1	1.6	2.8	2.0	1.4	0.7	n/a	2.7	2.1	1.3	2.5	0.6	0.5	0.5	1.5	0.6	0.4	0.6	0.6
All	0.3	0.2	0.3	n/a	2.6	2.7	2.2	n/a	1.4	1.1	0.7	n/a	1.7	1.5	1.1	n/a	1.1	1.0	0.6	n/a	0.4	0.4	0.3	n/a	0.3	0.3	0.3	n/a

Figure 3.6-1

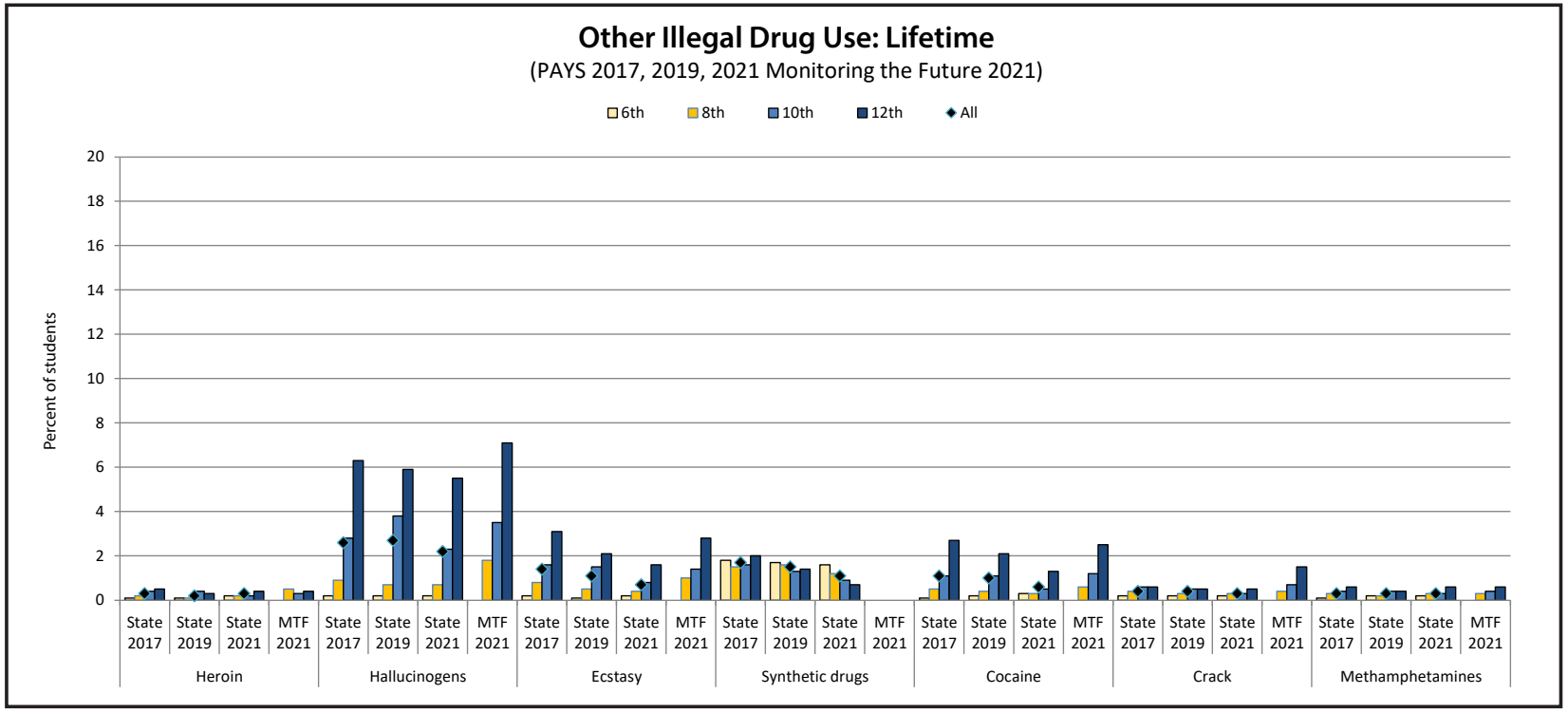
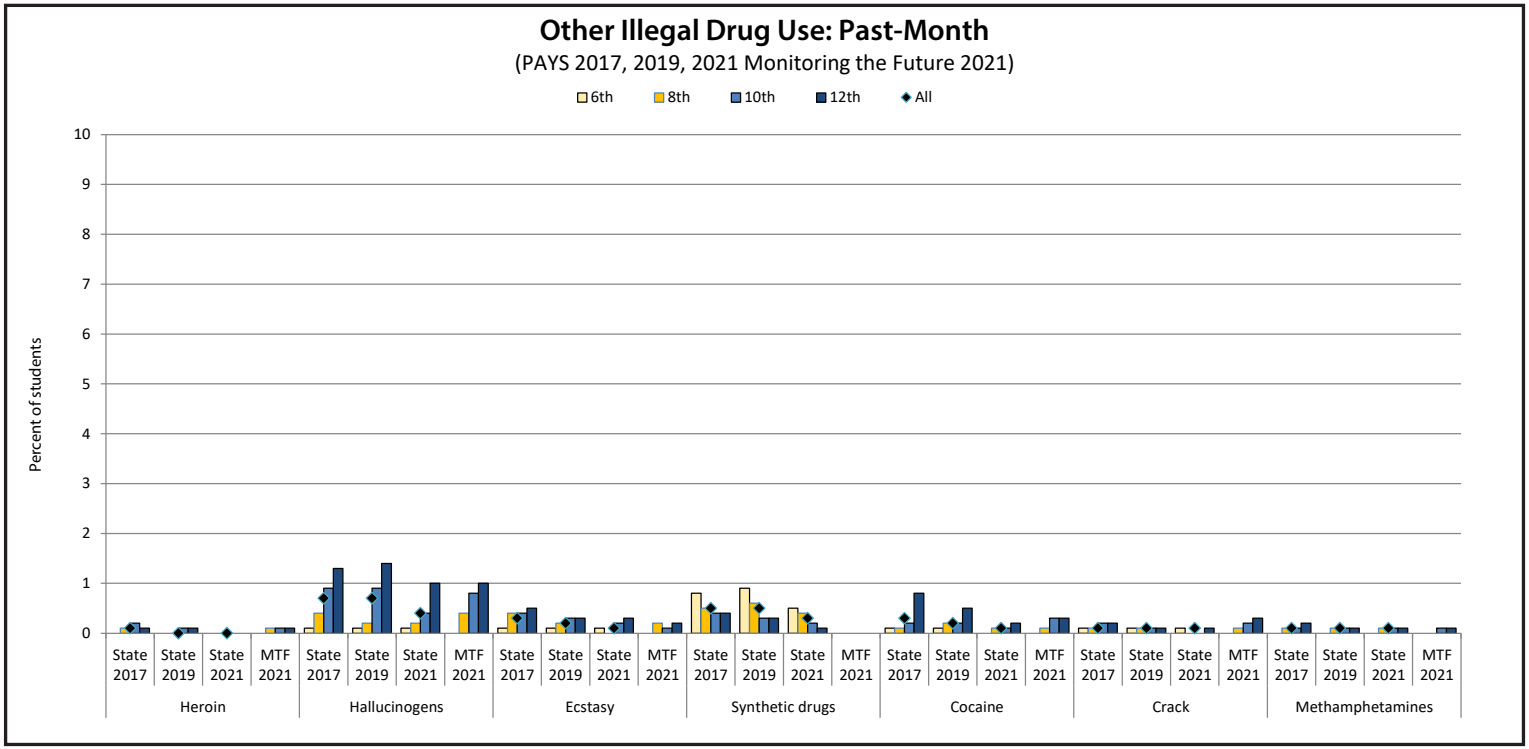


Table 3.6-2

Other Illegal Drugs: Past-Month Use

Grade	Heroin				Hallucinogens				Ecstasy				Synthetic drugs				Cocaine				Crack				Methamphetamines			
	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021	State 2017	State 2019	State 2021	MTF 2021
6th	0.0	0.0	0.0	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a	0.8	0.9	0.5	n/a	0.1	0.1	0.0	n/a	0.1	0.1	0.1	n/a	0.0	0.0	0.0	n/a
8th	0.1	0.0	0.0	0.1	0.4	0.2	0.2	0.4	0.4	0.2	0.0	0.2	0.5	0.6	0.4	n/a	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0
10th	0.2	0.1	0.0	0.1	0.9	0.9	0.4	0.8	0.4	0.3	0.2	0.1	0.4	0.3	0.2	n/a	0.2	0.2	0.1	0.3	0.2	0.1	0.0	0.2	0.1	0.1	0.1	0.1
12th	0.1	0.1	0.0	0.1	1.3	1.4	1.0	1.0	0.5	0.3	0.3	0.2	0.4	0.3	0.1	n/a	0.8	0.5	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.1
All	0.1	0.0	0.0	n/a	0.7	0.7	0.4	n/a	0.3	0.2	0.1	n/a	0.5	0.5	0.3	n/a	0.3	0.2	0.1	n/a	0.1	0.1	0.1	n/a	0.1	0.1	0.1	n/a

Figure 3.6-2



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 (4.6% lifetime use by males, 1.7% lifetime use by females, and 3.0% for those indicating "other").

Students that marked "other" to the gender question reported a higher lifetime use rate for alcohol (32.4% lifetime use for males, 34.7% for females, and 43.8% for those indicating "other"), cigarettes (7.3% lifetime use for males, 7.6% for females, and 12.8% for those indicating "other"), marijuana (11.3% for males, 13.2% for females, and 16.9% for those indicating "other"), inhalants (4.0% for males, 4.3% for females, and 11.4% for those indicating "other"), narcotic prescription pain relievers (2.8% for males, 3.2% for females, and 7.7% for those indicating "other"), and over-the-counter drugs to get high (2.8% for males, 2.7% for females, and 4.2% for those indicating "other").

Table 3.7-1

Lifetime Substance Use by Gender: Males

Grade	Alcohol			Cigarettes			Smokeless Tobacco			Marijuana			Inhalants			Cocaine			Crack			Heroin		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	19.8	18.7	14.2	3.2	2.3	1.7	1.7	1.5	0.9	1.5	1.4	1.3	3.9	4.5	5.2	0.2	0.2	0.4	0.2	0.1	0.3	0.1	0.1	0.4
8th	34.2	31.2	26.3	8.3	6.5	4.4	5.6	3.5	2.2	7.5	7.3	4.8	4.8	5.2	3.5	0.5	0.3	0.3	0.4	0.4	0.2	0.3	0.1	0.2
10th	50.5	49.5	39.8	15.8	12.0	9.5	13.1	9.5	5.6	22.1	21.6	13.6	4.6	4.7	4.1	1.4	1.3	0.5	0.6	0.6	0.4	0.5	0.5	0.3
12th	65.9	60.1	51.8	27.7	23.1	15.0	23.0	18.0	10.8	38.9	36.6	28.0	4.7	5.7	3.6	3.6	2.8	1.5	0.9	0.5	0.6	0.7	0.4	0.5
All	41.7	40.0	32.4	13.2	11.0	7.3	10.3	8.1	4.6	16.7	16.8	11.3	4.5	5.0	4.0	1.3	1.2	0.6	0.5	0.4	0.4	0.4	0.3	0.3

Lifetime Substance Use by Gender: Males

Grade	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.3	0.1	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.7	0.5	0.6	2.1	1.6	2.9	0.4	0.5	0.4	0.7	0.7	0.9	1.5	1.2	1.2	2.7	2.9	3.1
8th	0.9	1.0	0.6	0.4	0.2	0.2	0.8	0.6	0.3	0.7	0.5	0.5	3.4	2.7	2.5	1.2	0.9	0.4	1.3	1.6	1.3	1.2	1.3	0.9	3.2	3.1	2.1
10th	3.6	4.4	2.6	0.5	0.6	0.4	1.8	1.8	1.0	1.2	1.1	1.2	5.3	5.0	2.6	2.8	2.2	0.9	3.3	3.6	1.8	1.3	1.5	0.9	4.7	4.7	2.9
12th	8.0	7.7	6.4	0.8	0.5	0.5	3.6	2.4	1.6	1.8	1.4	0.8	8.8	6.2	3.1	5.1	3.2	1.2	7.8	4.9	2.5	2.2	1.6	0.8	6.3	6.3	3.4
All	3.0	3.3	2.3	0.5	0.4	0.4	1.5	1.2	0.7	1.1	0.9	0.8	4.7	3.9	2.8	2.3	1.7	0.7	3.1	2.7	1.6	1.5	1.4	0.9	4.1	4.3	2.8

Table 3.7-2

Lifetime Substance Use by Gender: Females

Grade	Alcohol			Cigarettes			Smokeless Tobacco			Marijuana			Inhalants			Cocaine			Crack			Heroin		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	13.3	14.8	12.0	2.1	2.2	1.8	0.5	0.7	0.4	0.9	1.2	0.9	3.6	4.4	4.7	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1
8th	33.3	33.4	26.9	8.8	7.2	6.0	2.1	1.6	1.4	7.5	7.6	6.4	5.2	6.1	4.9	0.3	0.4	0.3	0.3	0.1	0.3	0.2	0.1	0.2
10th	55.1	54.7	45.2	16.6	12.6	9.1	4.1	3.1	1.9	22.9	23.2	15.6	4.4	5.2	3.9	0.8	0.8	0.3	0.3	0.4	0.1	0.3	0.2	0.1
12th	69.8	65.8	58.4	25.4	20.4	14.2	5.7	5.5	3.5	38.9	38.4	32.6	3.6	3.6	3.3	2.2	1.5	0.8	0.4	0.5	0.1	0.3	0.3	0.1
All	42.1	42.2	34.7	12.8	10.6	7.6	3.0	2.7	1.7	16.9	17.7	13.2	4.2	4.8	4.3	0.8	0.7	0.4	0.3	0.3	0.2	0.2	0.2	0.2

Lifetime Substance Use by Gender: Females

Grade	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.1	0.3	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.5	0.7	0.5	2.4	2.9	3.1	0.3	0.6	0.5	0.5	1.2	0.9	2.3	2.3	1.9	2.4	2.5	2.8
8th	0.7	0.5	0.8	0.3	0.1	0.4	0.5	0.3	0.4	0.7	0.8	0.8	4.3	3.9	3.6	1.2	1.2	0.8	1.2	1.6	1.7	2.0	2.0	1.4	2.8	2.8	2.4
10th	2.6	3.3	1.7	0.4	0.2	0.2	1.4	1.3	0.5	0.6	0.5	0.3	6.0	4.8	2.6	3.1	2.9	1.0	3.1	3.2	1.9	1.5	1.3	0.8	4.1	5.1	2.5
12th	4.8	4.2	4.3	0.5	0.3	0.3	2.5	1.8	1.4	0.5	0.3	0.3	7.8	6.0	3.2	4.7	3.3	1.9	5.9	3.3	2.8	1.8	1.2	0.4	4.5	3.9	3.1
All	2.0	2.1	1.7	0.3	0.2	0.3	1.1	0.9	0.6	0.6	0.6	0.5	5.0	4.4	3.2	2.2	2.0	1.0	2.6	2.3	1.8	1.9	1.7	1.2	3.4	3.6	2.7

Table 3.7-3

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

Grade	Alcohol State 2021	Cigarettes State 2021	Smokeless Tobacco State 2021	Marijuana State 2021	Inhalants State 2021	Cocaine State 2021	Crack State 2021	Heroin State 2021
6th	13.3	2.1	0.5	0.9	3.6	0.1	0.1	0.1
8th	33.3	8.8	2.1	7.5	5.2	0.3	0.3	0.2
10th	55.1	16.6	4.1	22.9	4.4	0.8	0.3	0.3
12th	69.8	25.4	5.7	38.9	3.6	2.2	0.4	0.3
All	42.1	12.8	3.0	16.9	4.2	0.8	0.3	0.2

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

Grade	Hallucinogens State 2021	Methamphet-amine State 2021	Ecstasy State 2021	Performance Enhancing Drugs State 2021	Prescription pain Relievers State 2021	Prescription Tranquilizers State 2021	Prescription Stimulants State 2021	Synthetic Drugs State 2021	Over-the-Counter Drugs to Get High State 2021
6th	0.1	0.2	0.2	0.5	2.4	0.3	0.5	2.3	2.4
8th	0.7	0.3	0.5	0.7	4.3	1.2	1.2	2.0	2.8
10th	2.6	0.4	1.4	0.6	6.0	3.1	3.1	1.5	4.1
12th	4.8	0.5	2.5	0.5	7.8	4.7	5.9	1.8	4.5
All	2.0	0.3	1.1	0.6	5.0	2.2	2.6	1.9	3.4

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 (2.1% for male, 2.0% for female), the use rate for students marking "other" was significantly higher (4.3%). Students marking "other" also reported higher rates of vaping (10.5% for male, 14.2% for female, and 16.4% for those indicating "other"), marijuana use (6.1% for male, 7.1% for female, and 8.5% for those indicating "other"), and inhalant use (1.1% for male, 1.1% for female, and 3.6% 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

Grade	Alcohol			Cigarettes			Smokeless Tobacco			E-Cigarettes/Vaping Devices			Marijuana			Inhalants			Cocaine			Crack			Heroin		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	4.1	3.7	3.7	0.7	0.4	0.2	0.5	0.4	0.2	2.8	3.7	2.4	0.8	0.6	0.5	1.8	2.0	1.8	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1
8th	9.0	7.6	6.1	2.2	1.5	1.1	2.2	1.1	0.5	11.3	11.1	7.1	4.1	3.9	2.4	1.5	1.5	1.1	0.2	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0
10th	20.1	19.5	14.6	5.9	3.8	2.6	6.4	3.3	2.2	22.1	24.0	13.5	12.8	12.9	7.1	0.9	1.2	1.0	0.4	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.0
12th	35.1	32.9	24.7	12.4	8.1	5.0	11.2	8.2	3.3	31.1	31.7	20.4	22.5	21.5	15.7	0.7	1.0	0.4	0.9	0.7	0.3	0.2	0.2	0.1	0.2	0.1	0.1
All	16.3	16.0	11.7	5.0	3.5	2.1	4.8	3.3	1.5	16.2	17.7	10.5	9.5	9.8	6.1	1.3	1.4	1.1	0.4	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1

Grade	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.3	0.1	0.1	0.9	0.7	0.8	0.2	0.2	0.1	0.3	0.4	0.2	0.6	0.4	0.3	1.7	1.4	1.5
8th	0.3	0.3	0.3	0.1	0.1	0.1	0.3	0.2	0.0	0.3	0.2	0.2	1.1	0.8	0.9	0.5	0.3	0.2	0.5	0.5	0.4	0.4	0.5	0.2	1.1	1.4	1.5
10th	0.9	1.3	0.4	0.2	0.2	0.1	0.5	0.4	0.1	0.3	0.3	0.5	1.5	1.3	0.6	0.9	0.6	0.1	1.0	1.1	0.3	0.3	0.3	0.3	1.6	1.5	1.3
12th	1.8	2.0	1.2	0.2	0.1	0.1	0.6	0.3	0.3	0.4	0.4	0.2	1.8	1.0	0.5	1.3	0.7	0.0	1.9	1.1	0.4	0.2	0.3	0.2	1.4	1.3	1.3
All	0.7	0.9	0.5	0.1	0.1	0.1	0.4	0.2	0.1	0.3	0.3	0.2	1.3	0.9	0.7	0.7	0.5	0.1	0.9	0.8	0.3	0.4	0.4	0.2	1.4	1.4	1.4

Table 3.8-2

Past Month Substance Use by Gender: Females

Grade	Alcohol			Cigarettes			Smokeless Tobacco			E-Cigarettes/Vaping Devices			Marijuana			Inhalants			Cocaine			Crack			Heroin		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	2.6	2.8	2.4	0.4	0.7	0.3	0.2	0.3	0.1	1.8	3.9	2.5	0.5	0.5	0.3	1.8	2.1	1.6	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
8th	10.0	9.3	7.5	2.9	2.1	1.6	0.8	0.6	0.3	10.3	13.7	11.1	4.1	4.0	3.2	1.9	1.9	1.5	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1
10th	23.7	23.8	17.3	6.3	4.2	2.8	1.4	0.7	0.3	21.7	28.8	18.5	12.6	12.8	8.6	1.0	1.1	1.0	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1
12th	37.3	35.0	30.5	10.8	6.9	3.6	1.9	1.8	0.9	27.8	34.6	26.5	20.7	20.1	17.6	0.5	0.7	0.4	0.5	0.4	0.0	0.1	0.0	0.0	0.1	0.0	0.0
All Grades	17.7	17.7	13.8	4.9	3.5	2.0	1.1	0.9	0.4	15.0	20.3	14.2	1.8	9.4	7.1	0.2	1.4	1.1	0.1	0.2	0.1	0.2	0.1	0.1	0.3	0.0	0.0

Grade	Hallucinogens			Methamphetamine			Ecstasy			Performance Enhancing Drugs			Prescription pain Relievers			Prescription Tranquilizers			Prescription Stimulants			Synthetic Drugs			Over-the-Counter Drugs to Get High		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.2	0.3	0.1	1.2	1.5	1.2	0.1	0.3	0.1	0.3	0.6	0.3	1.1	1.3	0.7	1.3	1.4	1.3
8th	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.2	1.6	1.5	1.4	0.4	0.2	0.2	0.4	0.7	0.6	0.7	0.7	0.5	1.2	1.4	1.0
10th	0.6	0.5	0.4	0.1	0.1	0.1	0.3	0.2	0.3	0.1	0.1	0.1	1.8	1.2	0.5	0.9	0.8	0.3	0.9	1.1	0.4	0.3	0.4	0.2	1.2	1.6	0.9
12th	1.0	0.7	0.7	0.1	0.1	0.0	0.4	0.3	0.2	0.1	0.2	0.0	1.7	1.3	0.4	1.1	0.8	0.3	1.4	1.0	0.4	0.3	0.3	0.0	1.0	0.8	0.7
All Grades	0.1	0.4	0.3	0.5	0.1	0.0	0.1	0.2	0.1	2.3	0.2	0.1	0.8	1.4	0.9	0.9	0.5	0.2	0.6	0.9	0.5	1.3	0.6	0.4	9.1	1.3	1.0

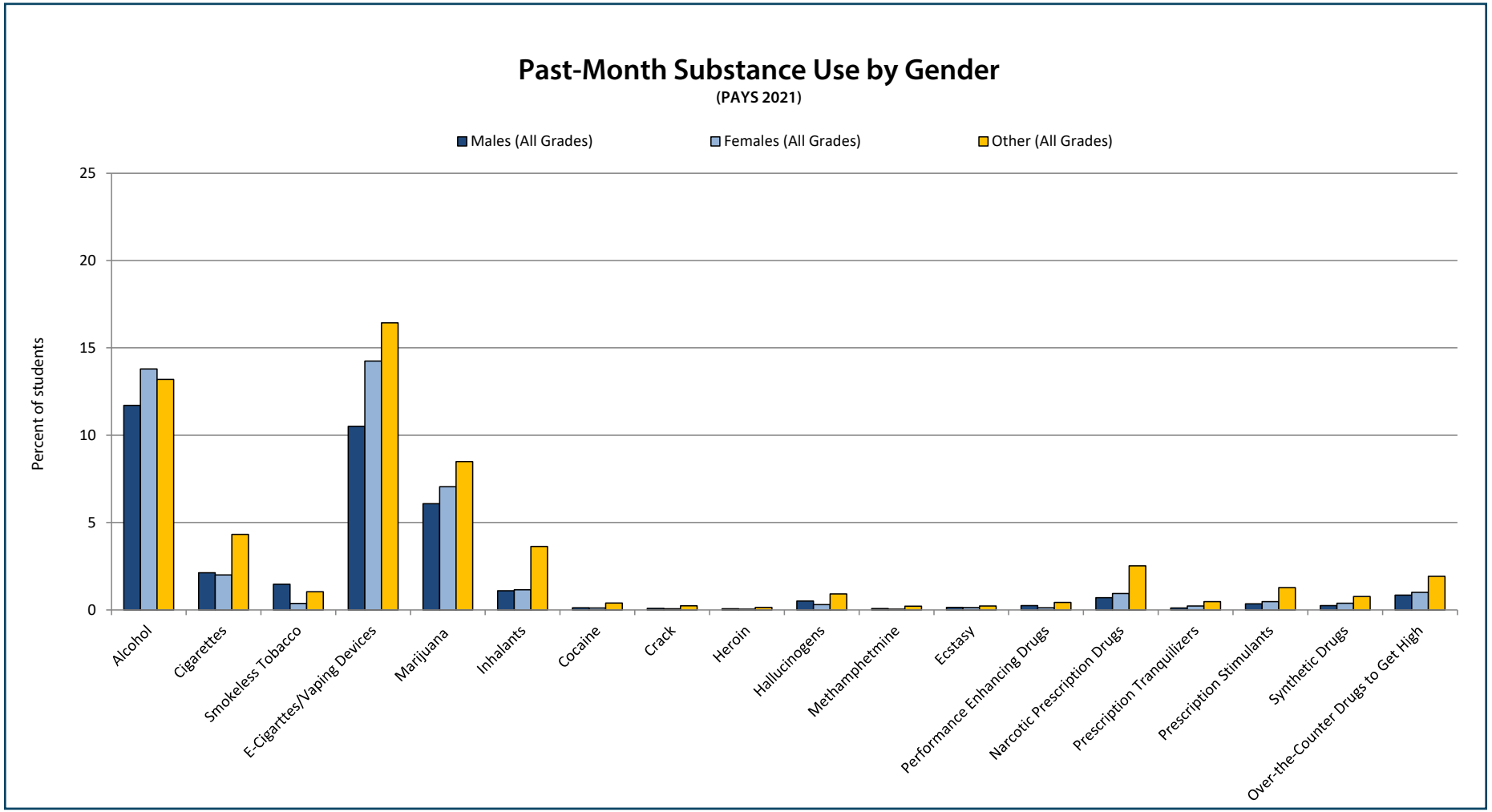
Table 3.8-3

Past Month Substance Use by Gender: Students Marking "Other" for Gender

Grade	Alcohol State 2021	Cigarettes State 2021	Smokeless Tobacco State 2021	E-Cigarttes/Vaping Devices State 2021	Marijuana State 2021	Inhalants State 2021	Cocaine State 2021	Crack State 2021	Heroin State 2021
6th	5.6	2.2	0.8	8.2	1.3	3.8	0.2	0.3	0.1
8th	10.7	3.3	0.7	14.9	5.0	4.3	0.1	0.0	0.1
10th	17.8	5.3	1.3	20.1	12.2	3.8	0.7	0.5	0.2
12th	24.1	8.5	1.8	27.6	22.3	1.5	0.9	0.3	0.3
All	13.2	4.3	1.0	16.4	8.5	3.6	0.4	0.2	0.1

Grade	Hallucinogens State 2021	Methamphet-amine State 2021	Ecstasy State 2021	Performance Enhancing Drugs State 2021	Prescription pain Relievers State 2021	Prescription Tranquilizers State 2021	Prescription Stimulants State 2021	Synthetic Drugs State 2021	Over-the-Counter Drugs to Get High State 2021
6th	0.2	0.2	0.1	0.5	2.9	0.3	1.1	1.4	1.9
8th	0.6	0.0	0.0	0.3	3.0	0.5	1.4	0.7	1.7
10th	1.3	0.2	0.5	0.5	2.1	0.6	1.2	0.5	2.1
12th	2.2	0.6	0.4	0.7	1.3	0.5	1.4	0.2	2.2
All	0.9	0.2	0.2	0.4	2.5	0.5	1.3	0.8	1.9

Figure 3.8-1


Past-Month Substance Use by Gender
(PAYS 2021)
Males (All Grades)
Females (All Grades)
Other (All Grades)
Percent of students
25
20
15
10
5
0
Alcohol
Cigarettes
Smokeless Tobacco
E-Cigarttes/Vaping Devices
Marijuana
Inhalants
Cocaine
Crack
Heroin
Hallucinogens
Methamphetmine
Ecstasy
Performance Enhancing Drugs
Narcotic Prescription Drugs
Prescription Tranquilizers
Prescription Stimulants
Synthetic Drugs
Over-the-Counter Drugs to Get High

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 seven substance use categories, students perceived the greatest risk in using prescription drugs not prescribed to them (83.7% perceived moderate or great risk overall) and smoking one or more packs of cigarettes per day (80.0% perceived moderate or great risk overall). Of the seven categories, students perceived the least amount of risk in trying marijuana once or twice (41.5% of students perceived moderate or great risk) and using marijuana once or twice a week (58.8% 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 smoking regularly, binge drinking, drinking, and using marijuana regularly; while 10th graders indicated the highest perceived risk of using prescription drugs. In general, all questions regarding perceived risks associated with marijuana use decreased as students advanced in grade level. For example, 72.0% of 6th graders perceived moderate or great risk in using marijuana once or twice a week. By the 12th grade, only 41.2% of students perceived a risk in this regular weekly use.

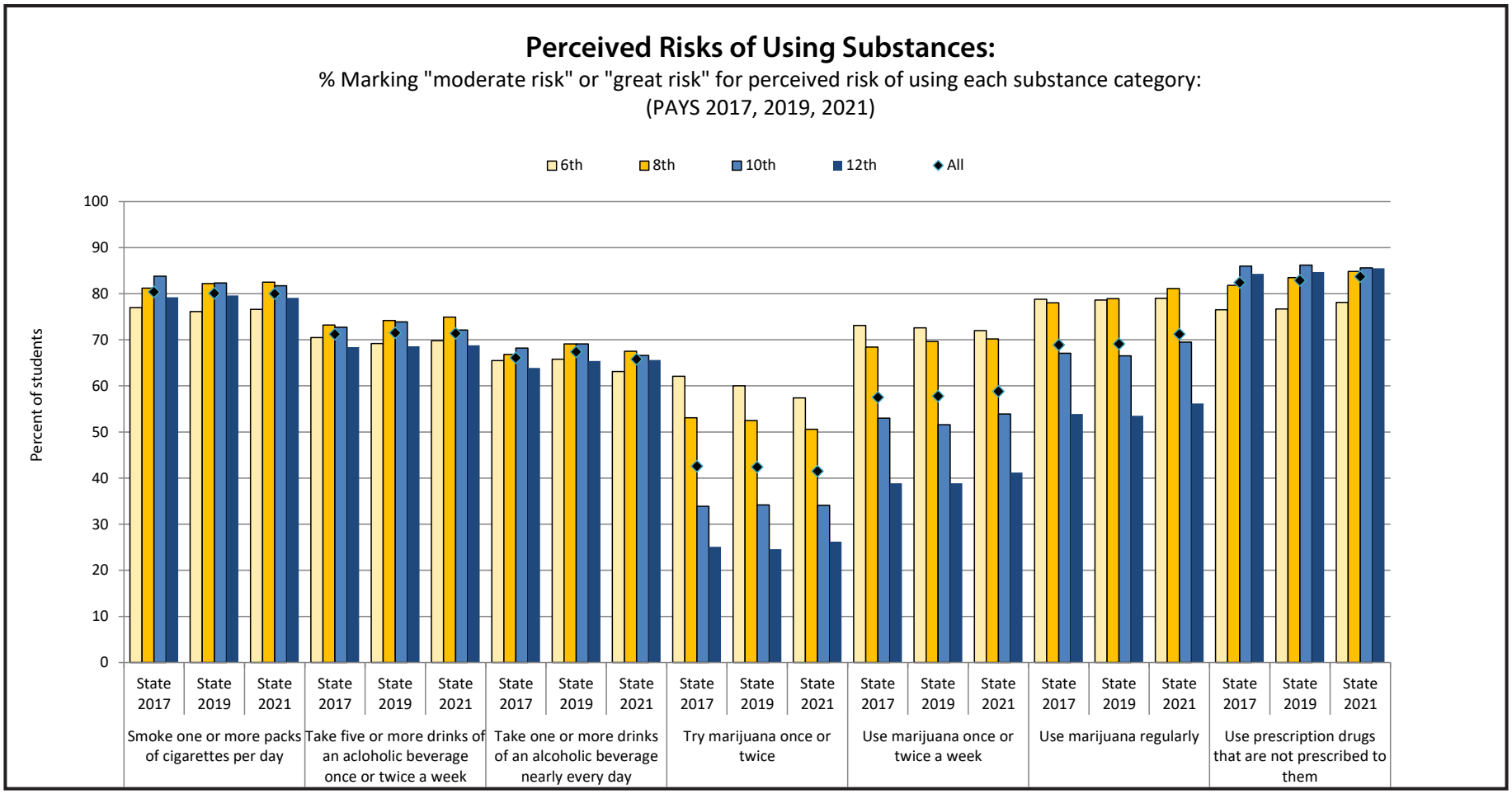
In comparing the 2019 and 2021 survey data, perceived harmfulness of using marijuana regularly increased 0.4 percentage points to 3.0 percentage points in each grade. Rates in other areas remained largely unchanged from 2019 to 2021.

Table 3.9-1

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

Grade	Smoke one or more packs of cigarettes per day			Take five or more drinks of an alcoholic beverage once or twice a week			Take one or more drinks of an alcoholic beverage nearly every day			Try marijuana once or twice			Use marijuana once or twice a week			Use marijuana regularly			Use prescription drugs that are not prescribed to them		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	77.0	76.1	76.6	70.5	69.2	69.8	65.5	65.8	63.1	62.1	60.0	57.4	73.1	72.6	72.0	78.8	78.6	79.0	76.5	76.7	78.1
8th	81.2	82.2	82.5	73.2	74.2	74.9	66.8	69.1	67.5	53.1	52.5	50.6	68.4	69.6	70.2	78.0	78.9	81.1	81.8	83.5	84.8
10th	83.8	82.3	81.7	72.7	73.9	72.1	68.2	69.1	66.6	33.9	34.2	34.1	53.0	51.6	53.9	67.1	66.5	69.5	86.0	86.2	85.6
12th	79.2	79.6	79.1	68.4	68.6	68.8	63.9	65.4	65.6	25.1	24.6	26.2	38.9	38.9	41.2	53.9	53.5	56.2	84.3	84.7	85.5
All	80.4	80.1	80.0	71.2	71.5	71.4	66.1	67.4	65.8	42.6	42.4	41.5	57.5	57.8	58.8	68.9	69.1	71.2	82.4	82.9	83.7

Figure 3.9-1


Perceived Risks of Using Substances:
% Marking "moderate risk" or "great risk" for perceived risk of using each substance category:
(PAYS 2017, 2019, 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
Smoke one or more packs of cigarettes per day
Take five or more drinks of an acloholic beverage once or twice a week
Take one or more drinks of an alcoholic beverage nearly every day
Try marijuana once or twice
Use marijuana once or twice a week
Use marijuana regularly
Use prescription drugs that are not prescribed to them

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.

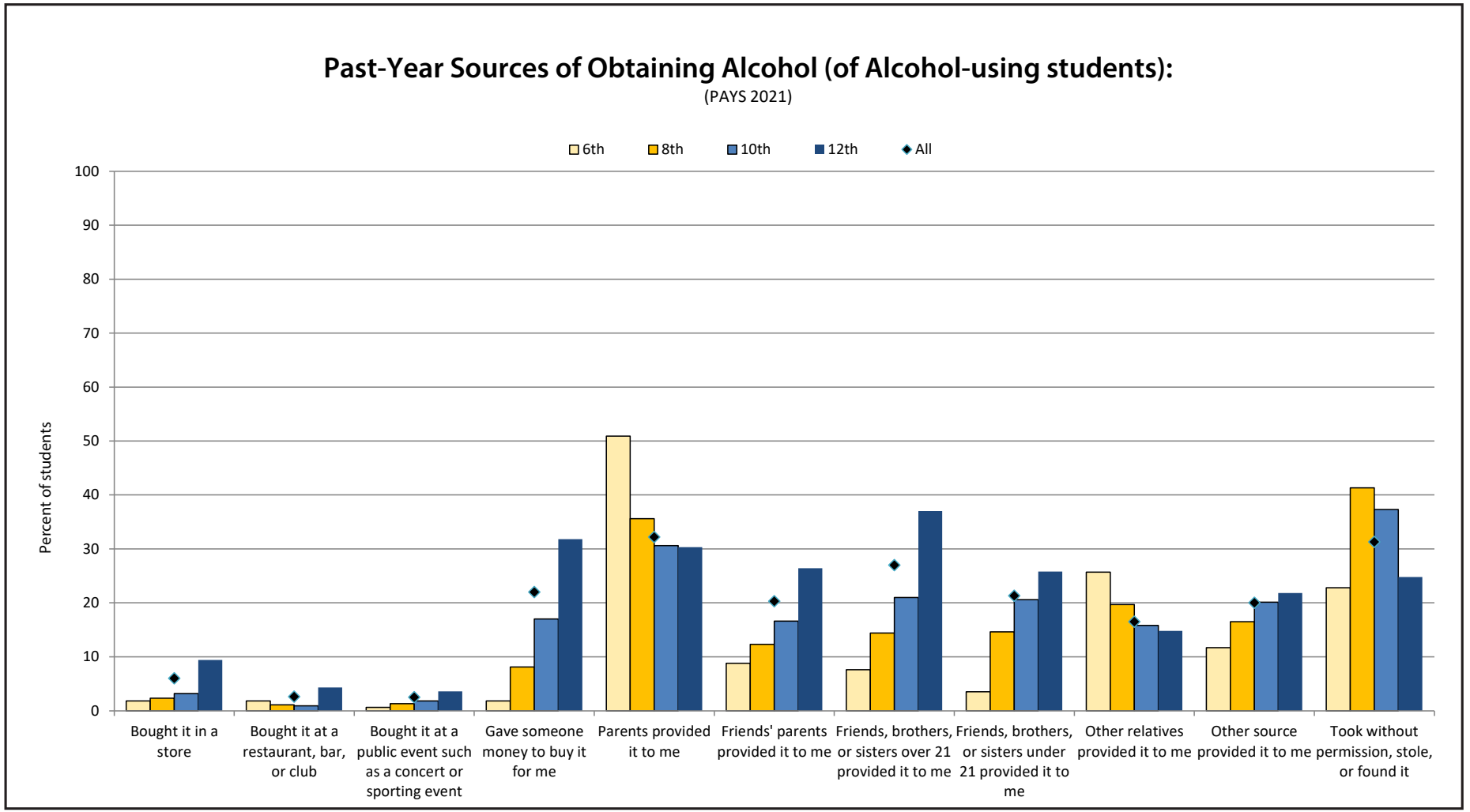
For all grades combined, 32.2% of alcohol-using youth indicated their parents provided it; 31.3% took the alcohol without permission, stole it, or found it; 27.0% indicated that friends or siblings over 21 bought it for them; 22.0% gave someone money to buy it for them; 21.3% indicated friends or siblings under the age of 21 provided it; 20.3% indicated their friends' parents provided it; 16.5% indicated other relatives provided it; 6.0% bought it at a store; 2.6% bought it at a restaurant, bar, or club; 2.5% bought it at a public event such as a concert or sporting event; and 20.0% 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)*

	Bought it in a store			Bought it at a restaurant, bar, or club			Bought it at a public event such as a concert or sporting event			Gave someone money to buy it for me			Parents provided it to me			Friends' parents provided it to me			Friends, brothers, or sisters over 21 bought it for me			Friends, brothers, or sisters under 21 provided it to me			Other relatives provided it to me			Other source provided it to me			Took without permission, stole, or found it		
Grade	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021
6th	5.8	5.5	1.8	3.6	4.3	1.8	4.5	2.7	0.6	9.4	7.4	1.8	37.7	36.3	50.9	8.5	4.3	8.8	6.3	7.4	7.6	9.0	5.1	3.5	15.2	19.1	25.7	19.7	18.4	11.7	24.2	27.7	22.8
8th	4.3	3.0	2.3	2.5	2.3	1.1	2.9	2.7	1.3	12.3	10.1	8.1	30.3	29.0	35.6	14.8	13.7	12.3	13.2	14.7	14.4	13.9	13.3	14.6	19.6	16.1	19.7	22.1	22.1	16.5	42.6	40.4	41.3
10th	2.7	3.4	3.2	2.0	1.9	0.9	2.2	2.3	1.8	25.4	23.8	17.0	19.9	22.7	30.6	16.7	18.4	16.6	23.0	21.4	21.0	16.9	16.9	20.6	13.3	13.6	15.8	25.8	23.5	20.1	40.4	41.1	37.3
12th	6.0	5.5	9.4	4.0	3.4	4.3	4.3	3.9	3.6	41.5	38.1	31.8	20.8	25.4	30.3	21.6	20.8	26.4	33.8	31.5	37.0	20.4	17.4	25.8	12.2	13.3	14.8	25.3	24.8	21.8	25.8	26.9	24.8
All	4.7	4.3	6.0	3.1	2.7	2.6	3.4	3.1	2.5	29.6	26.7	22.0	23.1	25.7	32.2	18.2	17.9	20.3	25.4	23.8	27.0	17.6	15.9	21.3	14.1	14.2	16.5	24.6	23.6	20.0	33.3	34.3	31.3

Figure 3.10-1


Past-Year Sources of Obtaining Alcohol (of Alcohol-using students):
(PAYS 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Bought it in a store
Bought it at a restaurant, bar, or club
Bought it at a public event such as a concert or sporting event
Gave someone money to buy it for me
Parents provided it to me
Friends' parents provided it to me
Friends, brothers, or sisters over 21 provided it to me
Friends, brothers, or sisters under 21 provided it to me
Other relatives provided it to me
Other source provided it to me
Took without permission, stole, or found it

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, 47.8% of prescription-drug-using students indicated taking the drugs from a family member living in their home, 40.8% indicated that a friend or family member gave them to the student, 19.5% indicated that they bought them from someone, 12.7% indicated they took them from relatives who were not living in their home, 12.0% indicated they took them from someone not related to them, and 10.9% indicated they ordered them over the Internet.

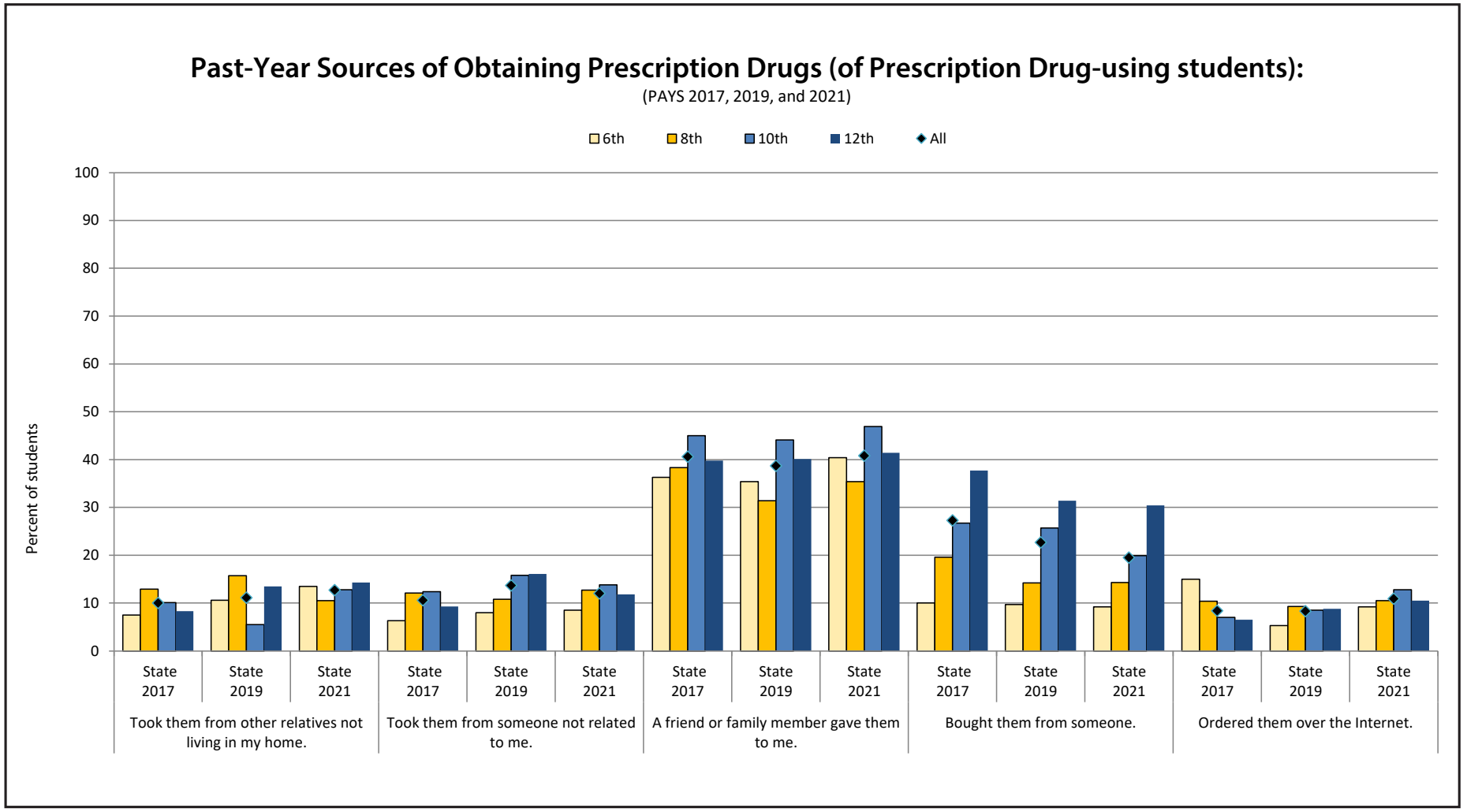
In general, as students got older, they were less likely to take prescriptions from a family member living in the home, but more likely to buy them from someone or have a friend or family member give the drugs to them.

Table 3.11-1

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

Grade	Took them from a family member living in my home			Took them from other relatives not living in my home			Took them from someone not related to me			A friend or family member gave them to me			Bought them from someone			Ordered them over the Internet		
	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021	2017	2019	2021
6th	47.5	45.1	53.2	7.5	10.6	13.5	6.3	8.0	8.5	36.3	35.4	40.4	10.0	9.7	9.2	15.0	5.3	9.2
8th	46.7	51.5	60.3	12.9	15.7	10.5	12.1	10.8	12.7	38.3	31.4	35.4	19.6	14.2	14.3	10.4	9.3	10.5
10th	40.3	34.2	39.3	10.1	5.5	12.8	12.4	15.8	13.8	45.0	44.1	46.9	26.7	25.7	19.9	7.0	8.5	12.8
12th	30.6	39.4	39.2	8.3	13.5	14.3	9.3	16.1	11.8	39.8	40.1	41.4	37.7	31.4	30.4	6.5	8.8	10.5
All	39.1	41.4	47.8	10.0	11.1	12.7	10.6	13.7	12.0	40.6	38.7	40.8	27.3	22.7	19.5	8.4	8.3	10.9

Figure 3.11-1


Past-Year Sources of Obtaining Prescription Drugs (of Prescription Drug-using students):
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
Took them from other relatives not living in my home.
Took them from someone not related to me.
A friend or family member gave them to me.
Bought them from someone.
Ordered them over the Internet.

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 17 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.

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, 6.7% reported being suspended from school in the past year; while 6.8% of 8th grade students reported attacking someone with the intent of seriously harming them in the past year. Just under one in ten (9.0%) of high school seniors reported being drunk or high at school in the past year.

In comparison to the BH Norm (used to provide a comparison to a more national average), Pennsylvania youth indicate antisocial behavior rates that are lower than this national average. Rates of attacking someone to seriously harm them are 2.1 percentage points to 3.2 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 (4.4% for Pennsylvania, all grades combined; 8.8% for the BH Norm).

Desirable decreases since 2019 were found in the 12th grade, with antisocial behavior rates declining up to 3.0 percentage points for most of the measures in Table 4.1-1. Significant decreases were seen in students reporting being drunk or high at school with a 3.6 percentage point decrease in the 10th grade and 3.0 percentage point decrease in the 12th grade.

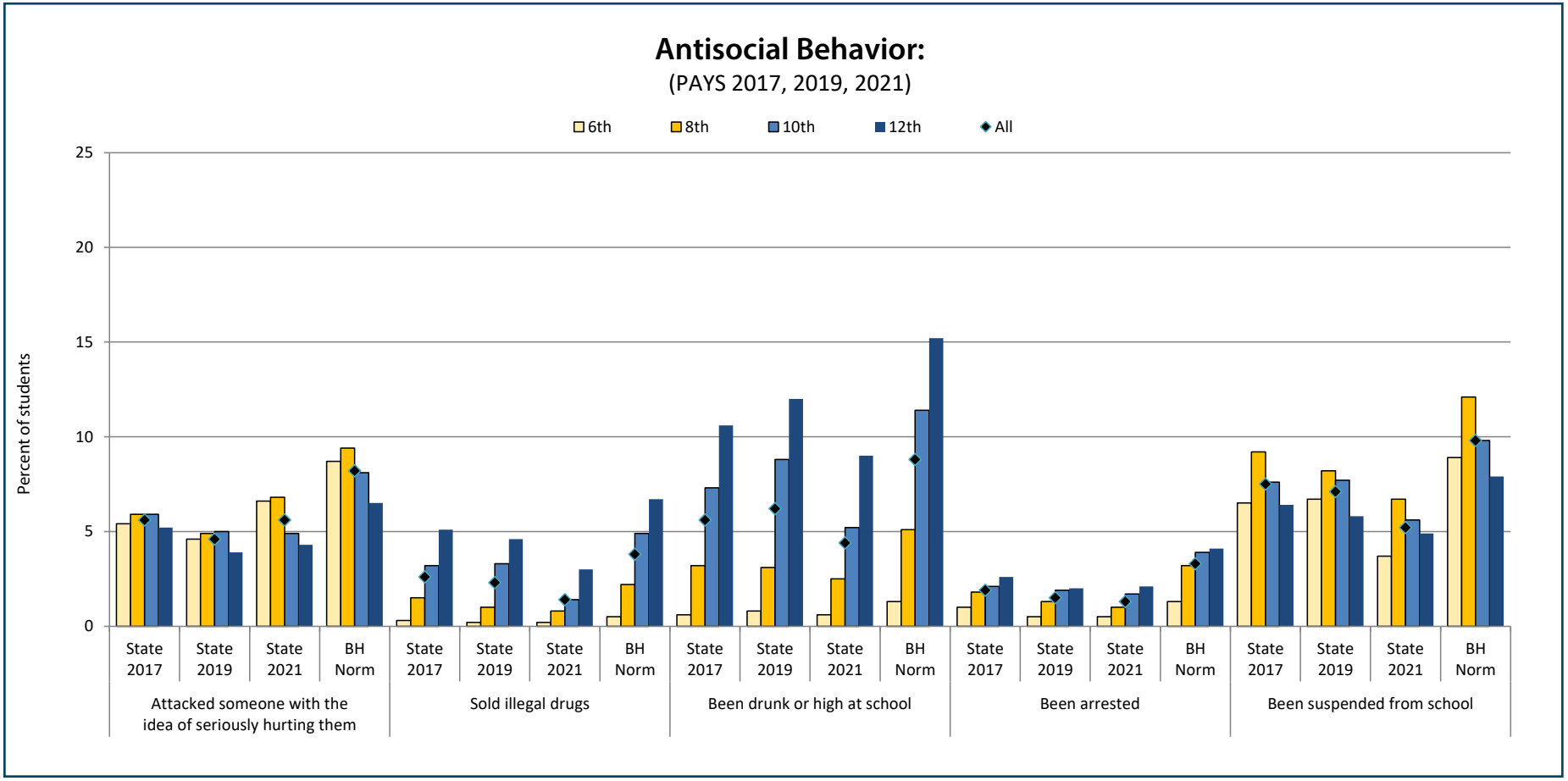
For data regarding antisocial behaviors by county and grade, please refer to the reports provided on the PAYS Portal at www.pays.pa.gov.

Table 4.1-1

Other Antisocial Behaviors *(Past year)*

Grade	Attacked someone with the idea of seriously hurting them				Sold illegal drugs				Been drunk or high at school				Been arrested				Been suspended from school			
	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm	State 2017	State 2019	State 2021	BH Norm
6th	5.4	4.6	6.6	8.7	0.3	0.2	0.2	0.5	0.6	0.8	0.6	1.3	1.0	0.5	0.5	1.3	6.5	6.7	3.7	8.9
8th	5.9	4.9	6.8	9.4	1.5	1.0	0.8	2.2	3.2	3.1	2.5	5.1	1.8	1.3	1.0	3.2	9.2	8.2	6.7	12.1
10th	5.9	5.0	4.9	8.1	3.2	3.3	1.4	4.9	7.3	8.8	5.2	11.4	2.1	1.9	1.7	3.9	7.6	7.7	5.6	9.8
12th	5.2	3.9	4.3	6.5	5.1	4.6	3.0	6.7	10.6	12.0	9.0	15.2	2.6	2.0	2.1	4.1	6.4	5.8	4.9	7.9
All	5.6	4.6	5.6	8.2	2.6	2.3	1.4	3.8	5.6	6.2	4.4	8.8	1.9	1.5	1.3	3.3	7.5	7.1	5.2	9.8

Figure 4.1-1


Antisocial Behavior:
(PAYS 2017, 2019, 2021)
6th
8th
10th
12th
All
Percent of students
25
20
15
10
5
0
State 2017
State 2019
State 2021
BH Norm
Attacked someone with the idea of seriously hurting them
Sold illegal drugs
Been drunk or high at school
Been arrested
Been suspended from school

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 2021 PAYS questionnaire by both grade and gender.

Although the data gathered from the 2021 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 binge drinking and 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 (3.9% for males and 4.3% for females compared to 7.0% for those indicating "other").

Table 4.2-1

Antisocial Behavior by Gender: Males

Grade	Binge Drinking			School Suspension			Illegal Drug Sales			Reported Arrest			Attacked Someone with the Intent of Harming Them			Drunk or High at School			Drove Vehicle after Drinking			Drove Vehicle after Smoking Marijuana		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	1.4	1.3	1.0	8.7	8.2	5.0	0.3	0.2	0.3	1.0	0.6	0.5	6.5	5.5	7.0	0.6	0.7	0.6	0.5	0.4	0.1	0.3	0.2	0.1
8th	2.7	2.8	1.6	11.8	10.1	9.4	1.5	1.2	1.1	2.3	1.7	1.1	7.6	5.8	8.2	2.8	2.6	2.0	1.2	0.8	0.3	0.9	0.6	0.2
10th	8.4	8.2	5.2	10.4	9.7	7.5	4.5	4.4	1.7	3.6	2.4	2.3	7.4	6.3	6.2	7.8	8.4	4.5	1.9	1.6	0.8	2.4	1.8	0.8
12th	18.8	18.4	10.8	8.7	7.1	6.2	7.3	6.0	3.4	4.0	2.7	2.8	6.4	5.3	5.3	13.2	12.7	8.9	6.3	5.4	2.6	12.6	11.5	6.0
All	7.4	7.7	4.4	10.0	8.8	7.2	3.3	3.0	1.6	2.7	1.9	1.7	7.0	5.7	6.8	5.9	6.1	3.9	2.4	2.1	0.9	3.9	3.5	1.6

Table 4.2-2

Antisocial Behavior by Gender: Females

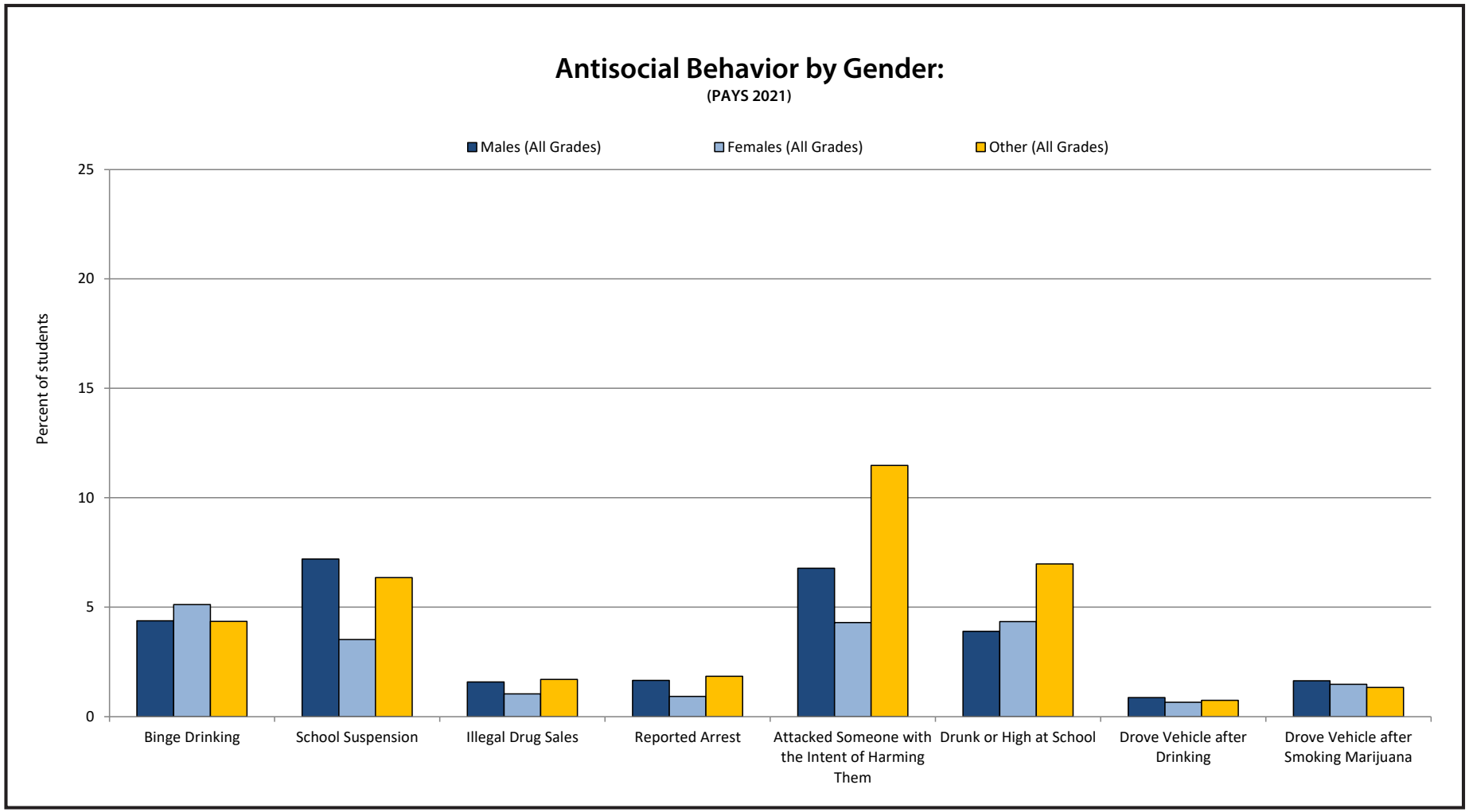
Grade	Binge Drinking			School Suspension			Illegal Drug Sales			Reported Arrest			Attacked Someone with the Intent of Harming Them			Drunk or High at School			Drove Vehicle after Drinking			Drove Vehicle after Smoking Marijuana		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.9	1.1	0.8	3.2	5.1	2.3	0.1	0.3	0.1	0.4	0.4	0.4	3.1	3.9	5.2	0.4	0.8	0.4	0.2	0.2	0.0	0.1	0.2	0.0
8th	3.1	3.1	2.5	6.0	6.0	4.3	0.8	0.7	0.5	1.4	1.0	0.8	5.0	4.1	5.3	3.0	3.6	2.9	0.6	0.4	0.2	0.5	0.4	0.2
10th	8.6	8.4	5.3	5.9	5.6	4.0	2.4	2.3	1.2	1.9	1.4	1.2	4.7	3.7	3.4	7.5	9.2	5.6	0.8	0.8	0.3	1.1	1.0	0.4
12th	15.5	15.8	12.9	4.8	4.5	3.3	3.3	3.1	2.3	1.8	1.2	1.3	3.6	2.5	3.0	9.4	11.2	8.7	3.7	2.6	2.4	8.7	8.2	5.8
All Grades	6.7	7.1	5.1	5.1	5.3	3.5	1.6	1.6	1.0	1.4	1.0	0.9	4.1	3.5	4.3	5.0	6.2	4.3	1.3	1.0	0.7	2.5	2.5	1.5

Table 4.2-3

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

Grade	Binge Drinking State 2021	School Suspension State 2021	Illegal Drug Sales State 2021	Reported Arrest State 2021	Attacked Someone with the Intent of Harming Them State 2021	Drunk or High at School State 2021	Drove Vehicle after Drinking State 2021	Drove Vehicle after Smoking Marijuana State 2021
6th	2.1	5.5	0.7	1.3	15.2	1.9	0.2	0.1
8th	3.3	7.9	1.0	1.7	13.3	5.2	0.6	0.3
10th	5.7	5.6	2.6	2.1	8.9	10.0	0.7	1.0
12th	8.2	5.4	3.5	2.5	5.7	14.1	2.2	6.6
All	4.3	6.4	1.7	1.8	11.5	7.0	0.7	1.3

Figure 4.2-1


Antisocial Behavior by Gender:
(PAYS 2021)
Males (All Grades)
Females (All Grades)
Other (All Grades)
Percent of students
25
20
15
10
5
0
Binge Drinking
School Suspension
Illegal Drug Sales
Reported Arrest
Attacked Someone with the Intent of Harming Them
Drunk or High at School
Drove Vehicle after Drinking
Drove Vehicle after Smoking Marijuana

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 6.1% of students in all grades have been offered drugs at least one time in the past 12 months. Of all students surveyed, 16.7% indicate having been threatened at school at least once in the past year, and 3.5% indicated having been threatened with a weapon at school in the past year. In regard to actual attacks, 6.6% of all students indicated having been attacked at school, and 1.1% indicated having been attacked with a weapon at school. In the past month, 0.8% of students in the state sample indicated that they brought a weapon (such as a gun, knife, or club) to school at least one time.

The 12th grade saw the highest rates of past-year reports of bringing a weapon to school (1.2%) and had the highest rate of being offered drugs at school (9.9%). However, 6th graders indicated the highest rates of being attacked at school in the past year (10.3%), and 8th graders indicated the highest rates of being threatened at school in the past year (21.1%) and being threatened with a weapon at school in the past year (4.0%).

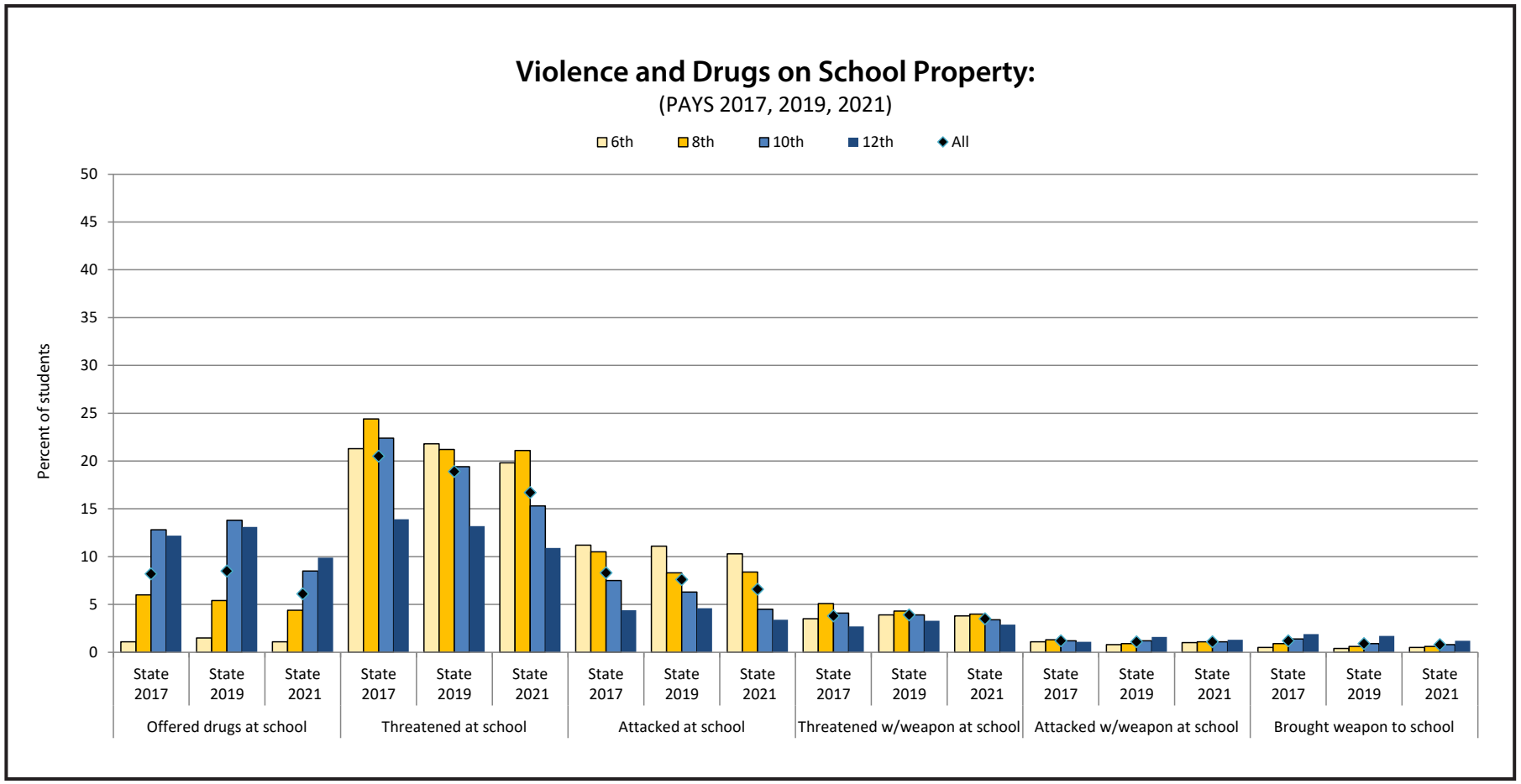
Since the 2019 survey, reports of being threatened at school decreased 2.2 percentage points for all grades (from 18.9% in 2019 to 16.7% in 2021). The 8th grade rate of being offered drugs at school noticeably decreased from 2019 to 2021 (from 5.4% in 2019 to 4.4% in 2021.

Table 4.3-1

Violence and Drugs on School Property

Grade	Offered drugs at school			Threatened at school			Attacked at school			Threatened w/weapon at school			Attacked w/weapon at school			Brought weapon to school		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	1.1	1.5	1.1	21.3	21.8	19.8	11.2	11.1	10.3	3.5	3.9	3.8	1.1	0.8	1.0	0.5	0.4	0.5
8th	6.0	5.4	4.4	24.4	21.2	21.1	10.5	8.3	8.4	5.1	4.3	4.0	1.3	0.9	1.1	0.9	0.6	0.6
10th	12.8	13.8	8.5	22.4	19.4	15.3	7.5	6.3	4.5	4.1	3.9	3.4	1.2	1.2	1.1	1.4	0.9	0.8
12th	12.2	13.1	9.9	13.9	13.2	10.9	4.4	4.6	3.4	2.7	3.3	2.9	1.1	1.6	1.3	1.9	1.7	1.2
All	8.2	8.5	6.1	20.5	18.9	16.7	8.3	7.6	6.6	3.8	3.9	3.5	1.2	1.1	1.1	1.2	0.9	0.8

Figure 4.3-1


Violence and Drugs on School Property:
(PAYS 2017, 2019, 2021)
6th
8th
10th
12th
All
Percent of students
50
45
40
35
30
25
20
15
10
5
0
State 2017
State 2019
State 2021
Offered drugs at school
Threatened at school
Attacked at school
Threatened w/weapon at school
Attacked w/weapon at school
Brought weapon to school

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 2021 questionnaire. Just under one in four (23.2% of all students) indicated they had been bullied in the past year, 14.6% reported having been electronically bullied, and 4.1% said they had stayed home from school in the past year due to worries about bullying. Rates of being electronically bullied were highest in the 8th grade (17.2% of 8th graders reported having been electronically bullied).

Students were also asked about inappropriate sexual contact through technology. Of all students, 19.9% marked "YES!" or "yes" to this question and 10th graders reported the highest response to this question (25.0% marked "YES!" or "yes").

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

Grade	Inappropriate sexual contact through technology* (% answering "YES!" or "yes")			Stayed home from school because worried about being bullied			Electronic bullying (% answering "YES!" or "yes")			Percentage of students indicating some bullying in the past 12 months			Adults at school stop bullying when they see/hear it/student tells them about it		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	7.8	9.5	10.5	4.2	4.8	4.6	14.1	13.9	17.4	32.2	31.3	29.0	80.7	72.4	73.1
8th	20.9	18.9	18.2	5.5	5.4	5.0	18.7	15.0	17.2	34.6	29.9	26.9	65.3	57.1	59.7
10th	31.5	28.6	25.0	4.8	4.4	4.1	17.9	14.9	13.7	31.2	26.4	21.3	55.9	47.1	47.2
12th	28.1	26.3	24.9	3.9	3.7	2.8	14.9	12.1	10.4	24.1	20.8	16.1	52.5	43.6	42.1
All	22.6	21.0	19.9	4.6	4.6	4.1	16.5	14.0	14.6	30.5	27.1	23.2	63.0	54.8	55.1

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

Grade	No (not bullied in the past 12 months)			Yes, very rarely			Yes, now and then			Yes, several times per month			Yes, several times per week			Yes, almost daily		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	67.8	68.7	71.0	14.7	14.9	13.3	10.3	9.9	9.5	2.2	2.2	2.6	2.1	1.4	1.5	2.9	2.9	2.1
8th	65.4	70.1	73.1	15.5	13.7	10.9	10.5	9.2	9.4	3.2	2.9	2.6	2.1	1.7	1.9	3.3	2.4	2.1
10th	68.8	73.6	78.7	14.8	12.7	10.2	10.3	8.4	7.0	2.6	2.2	1.9	1.8	1.5	0.9	1.7	1.6	1.3
12th	75.9	79.2	83.9	11.4	10.2	7.7	7.4	6.6	5.0	2.6	1.6	1.6	1.4	1.2	0.8	1.4	1.2	1.1
All	69.5	72.9	76.8	14.1	12.9	10.5	9.6	8.5	7.7	2.7	2.2	2.1	1.9	1.5	1.3	2.3	2.0	1.6

Figure 4.4-1

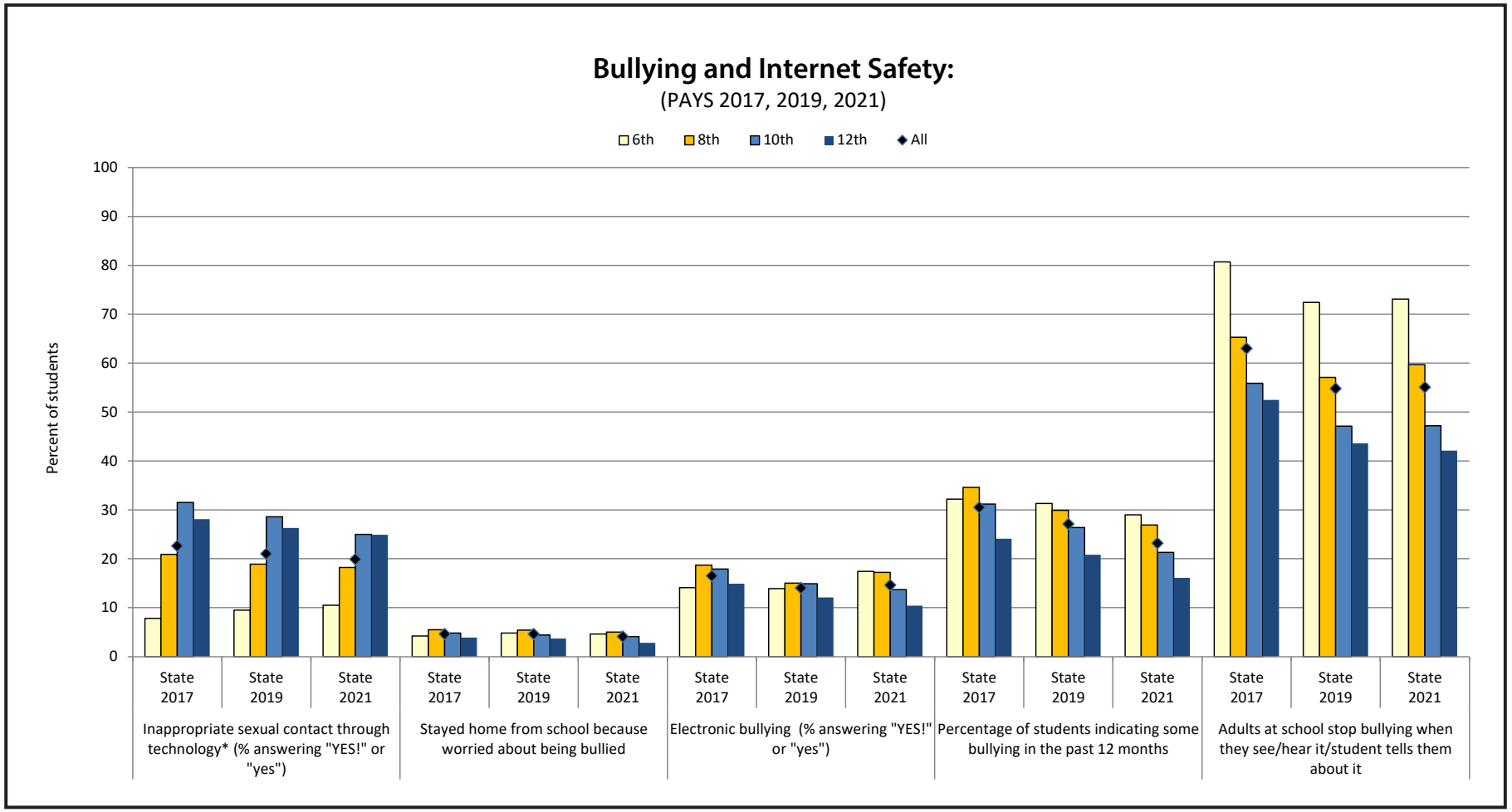
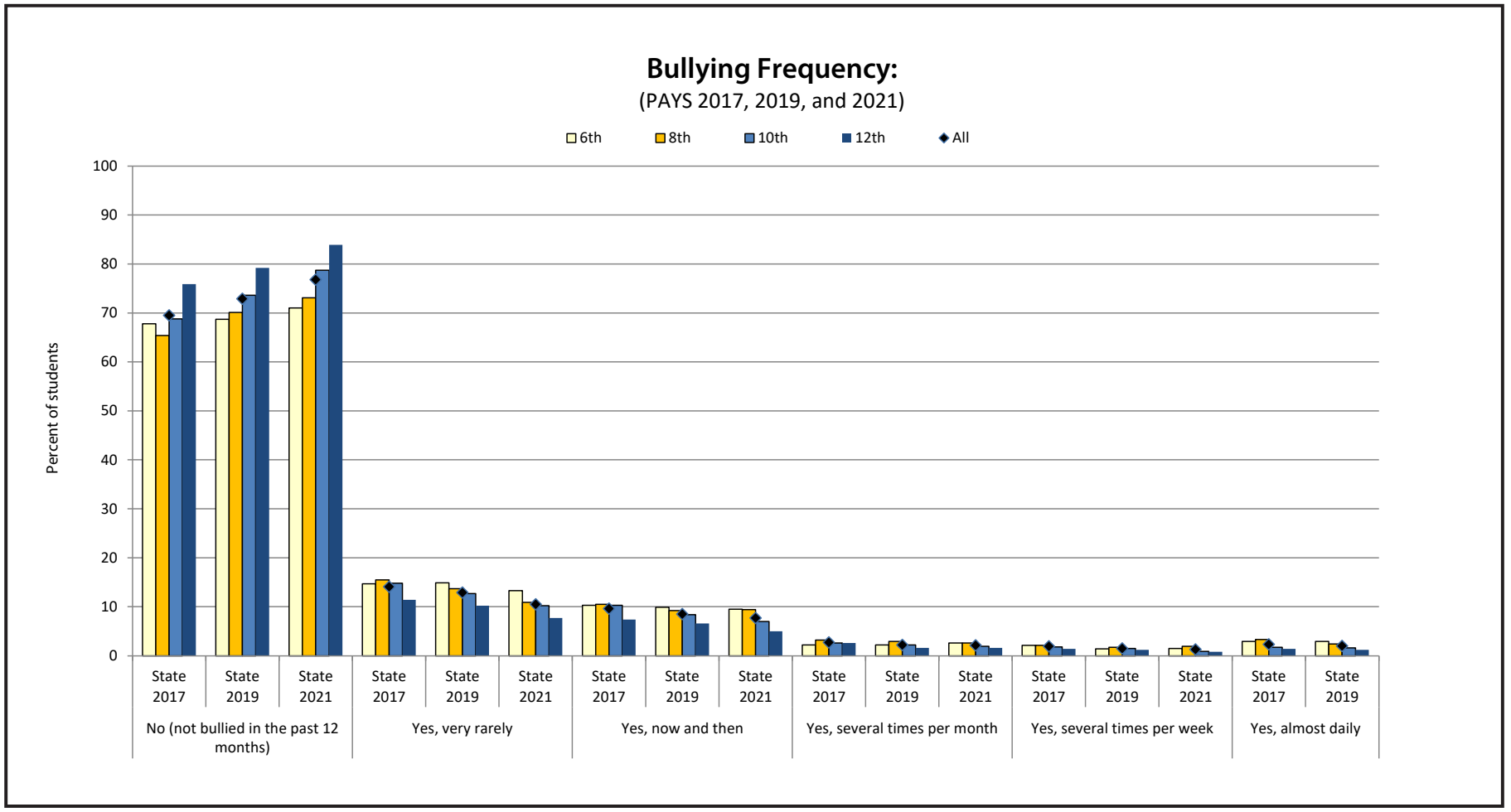

Bullying and Internet Safety:
(PAYS 2017, 2019, 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
Inappropriate sexual contact through technology* (% answering "YES!" or "yes")
Stayed home from school because worried about being bullied
Electronic bullying (% answering "YES!" or "yes")
Percentage of students indicating some bullying in the past 12 months
Adults at school stop bullying when they see/hear it/student tells them about it

Figure 4.4-2


Bullying Frequency:
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
No (not bullied in the past 12 months)
Yes, very rarely
Yes, now and then
Yes, several times per month
Yes, several times per week
Yes, almost daily

4.5 Additional Bullying Data

Additional bullying data were gathered through the 2021 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 78.5% of students report not being bullied in the past year, 16.1% reported being bullied on school property (18.7% of 6th graders, 19.8% of 8th graders, 14.8% of 10th graders, and 10.1% of 12th graders). The next highest locations were at home (7.2% experienced bullying here), in the community (5.0%), while going to or from school (4.0%), and at a school-sponsored event (2.6%).

Of students reporting they were bullied in the past year, the perceived reasons for being bullied were looks (i.e., clothing, hairstyle, etc.) (48.0%), size (height, weight, etc) (40.2%), social standing (19.2%), sexual orientation (17.6%), social conflict (14.5%), gender (12.9%), grades or school achievement (12.2%), family socioeconomic standing (8.9%), skin color (6.5%), religion (5.5%), country that family is from (2.8%), and country of birth (2.5%). A large number of students also reported that they "don't know why" they are bullied (31.5%) and that they were bullied for "some other reason" (36.9%).

Table 4.5-1

Bullying Locations *(of all students responding to the question)*

Grade	I was not bullied			On school property			At a school-sponsored event			While going to or from school			In the community			At home		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	68.2	69.2	73.8	22.7	24.0	18.7	2.9	2.9	1.8	6.7	6.2	5.6	5.2	5.3	5.4	7.9	7.7	8.4
8th	66.5	71.3	74.9	27.1	24.2	19.8	4.3	3.7	2.7	7.0	5.5	4.9	6.8	5.0	5.3	8.9	7.0	7.9
10th	70.1	74.3	80.8	23.1	21.0	14.8	4.4	4.3	3.3	4.3	3.9	3.4	6.2	4.7	4.7	9.1	7.3	6.9
12th	76.3	79.6	85.5	17.5	16.0	10.1	4.9	3.7	2.6	3.2	3.0	1.9	7.0	5.4	4.7	7.2	6.4	5.5
All	70.0	73.3	78.5	22.9	21.6	16.1	4.1	3.6	2.6	5.4	4.7	4.0	6.3	5.1	5.0	8.3	7.1	7.2

Table 4.5-2

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

Grade	I don't know why		The color of my skin		My religion		My size (height, weight, etc.)		My accent		The country I was born in		The country my family is from		The way I look (clothing, hairstyle, etc.)		How much money my family has or does not have		My gender		My grades or school		My social standing		Social conflict		My sexual orientation		I have a disability (learning or physical disability)		Some other reason	
	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021	State 2019	State 2021
6th	38.3	34.0	6.6	5.6	3.4	5.6	33.9	39.4	2.7	2.5	2.7	3.2	2.8	2.7	37.5	45.5	9.5	8.2	4.9	12.3	10.4	12.2	7.6	11.7	6.8	9.1	5.5	11.4	4.0	5.3	39.3	40.6
8th	33.3	32.5	7.1	6.3	4.8	4.9	35.8	43.3	3.2	2.7	2.5	1.9	3.9	2.8	42.5	52.0	10.4	9.4	5.3	13.0	11.6	12.2	15.7	19.6	10.6	12.2	11.3	19.0	6.1	6.6	39.5	36.6
10th	27.7	28.9	9.4	7.7	6.7	6.9	33.2	39.9	4.1	3.4	2.9	2.9	4.6	2.2	39.9	49.3	11.9	7.4	6.5	14.0	12.4	12.9	20.8	25.0	16.6	21.2	13.0	22.3	6.1	6.0	36.6	33.8
12th	28.3	28.5	8.5	7.1	6.7	5.1	28.6	34.9	4.5	3.5	3.5	2.3	4.2	3.8	34.2	41.9	10.2	10.8	6.9	12.0	12.6	11.5	21.2	23.7	20.3	20.4	12.0	19.2	7.0	9.3	33.7	35.0
All	32.5	31.5	7.8	6.5	5.2	5.5	33.5	40.2	3.5	2.9	2.8	2.5	3.8	2.8	39.1	48.0	10.5	8.9	5.7	12.9	11.6	12.2	15.6	19.2	12.6	14.5	10.2	17.6	5.7	6.5	37.8	36.9

Figure 4.5-1

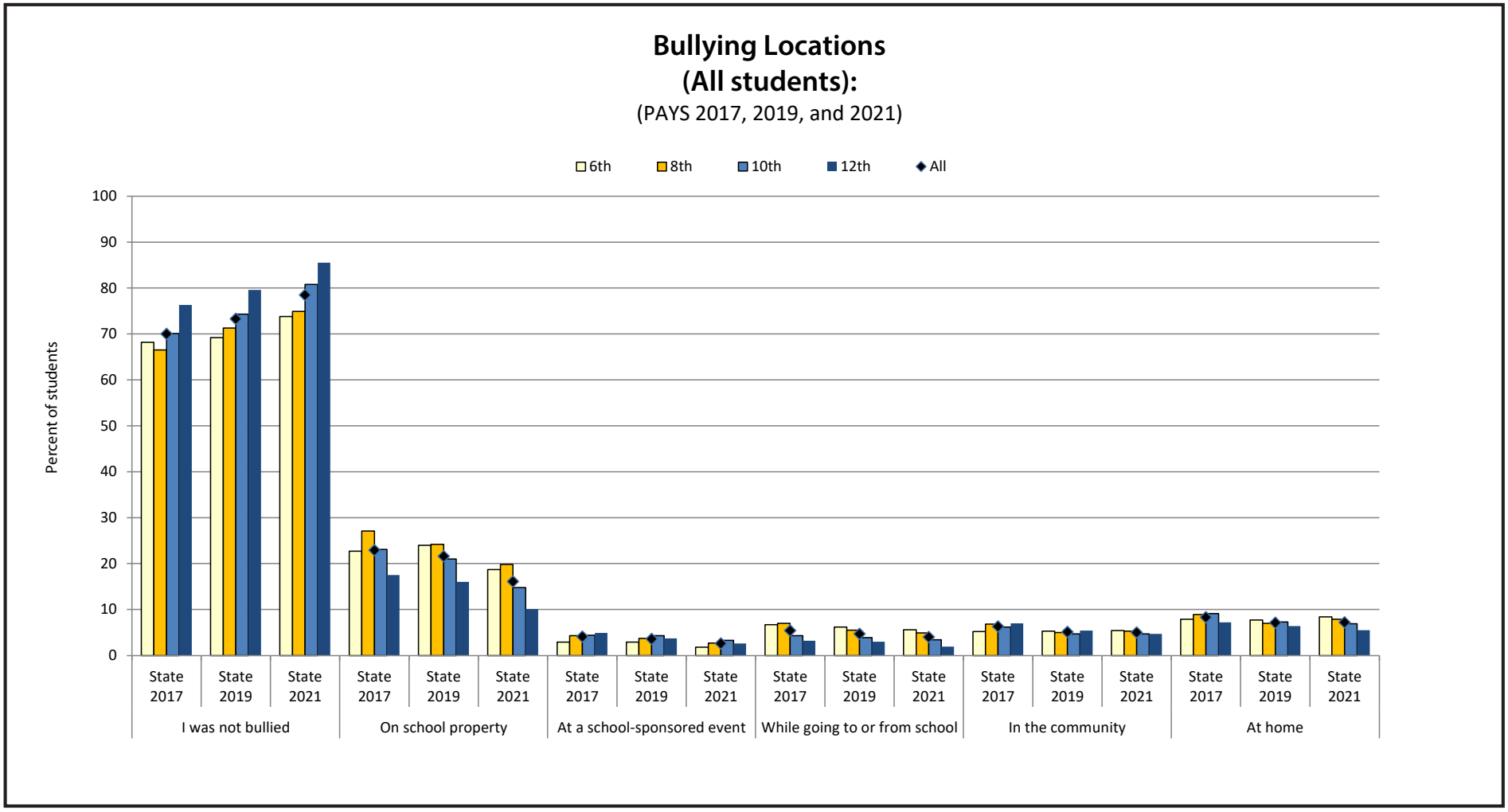
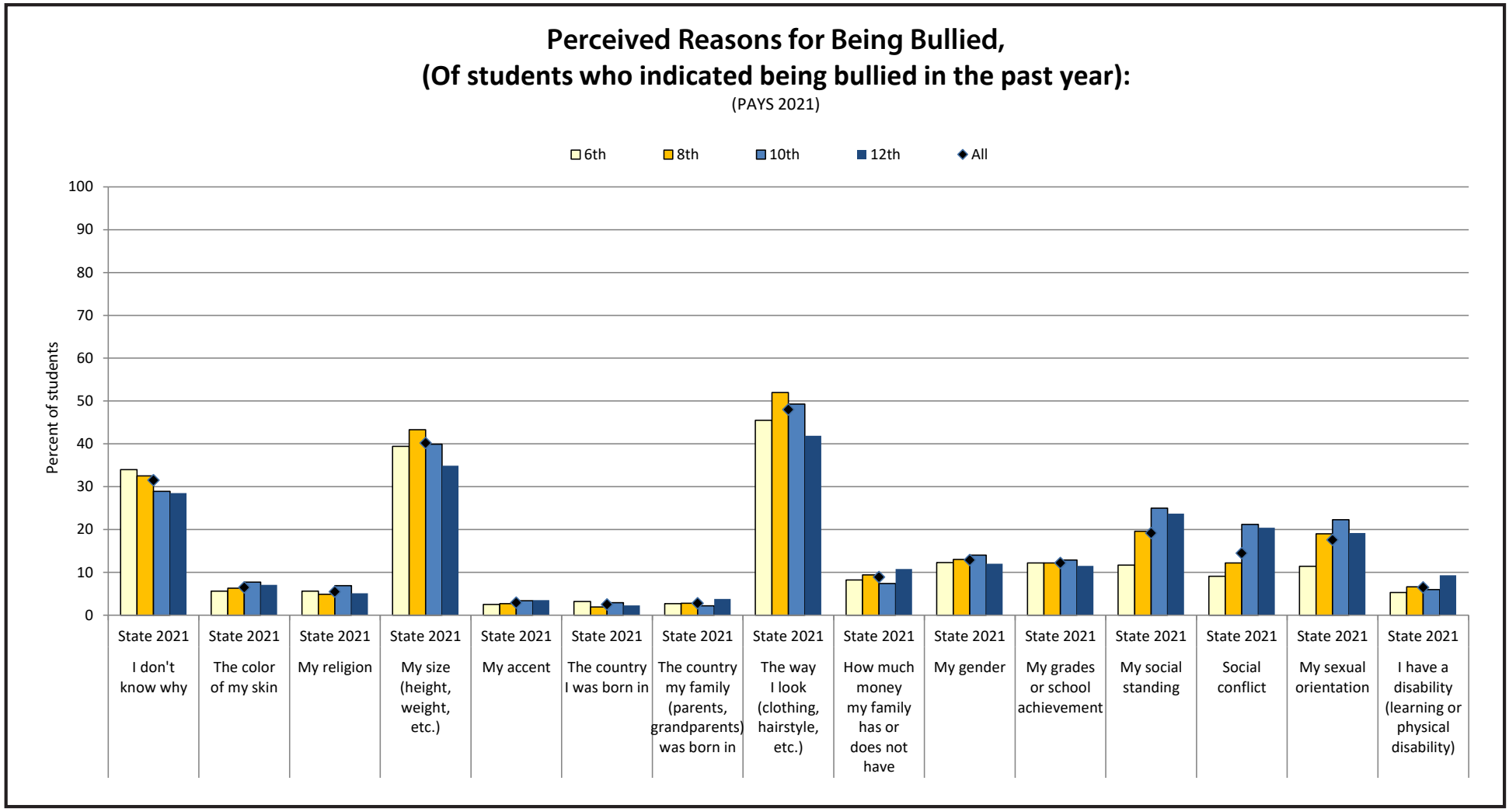

Bullying Locations
(All students):
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
I was not bullied
On school property
At a school-sponsored event
While going to or from school
In the community
At home

Figure 4.5-2


Perceived Reasons for Being Bullied,
(Of students who indicated being bullied in the past year):
(PAYS 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2021 I don't know why
State 2021 The color of my skin
State 2021 My religion
State 2021 My size (height, weight, etc.)
State 2021 My accent
State 2021 The country I was born in
State 2021 The country my family (parents, grandparents) was born in
State 2021 The way I look (clothing, hairstyle, etc.)
State 2021 How much money my family has or does not have
State 2021 My gender
State 2021 My grades or school achievement
State 2021 My social standing
State 2021 Social conflict
State 2021 My sexual orientation
State 2021 I have a disability (learning or physical disability)

4.6 Gang Involvement

A variety of risk and protective factors influence whether youth may join a gang. Many are the same factors influencing other problem behaviors such as substance misuse and delinquency. The National Gang Center highlights numerous risk factors such as conduct disorders, abuse/neglect, low parental supervision, impulsivity, mental health concerns, lived/living with a gang member, association with gang-involved peers/relatives, low school attachment, feeling unsafe at school and in neighborhood, and availability of firearms.

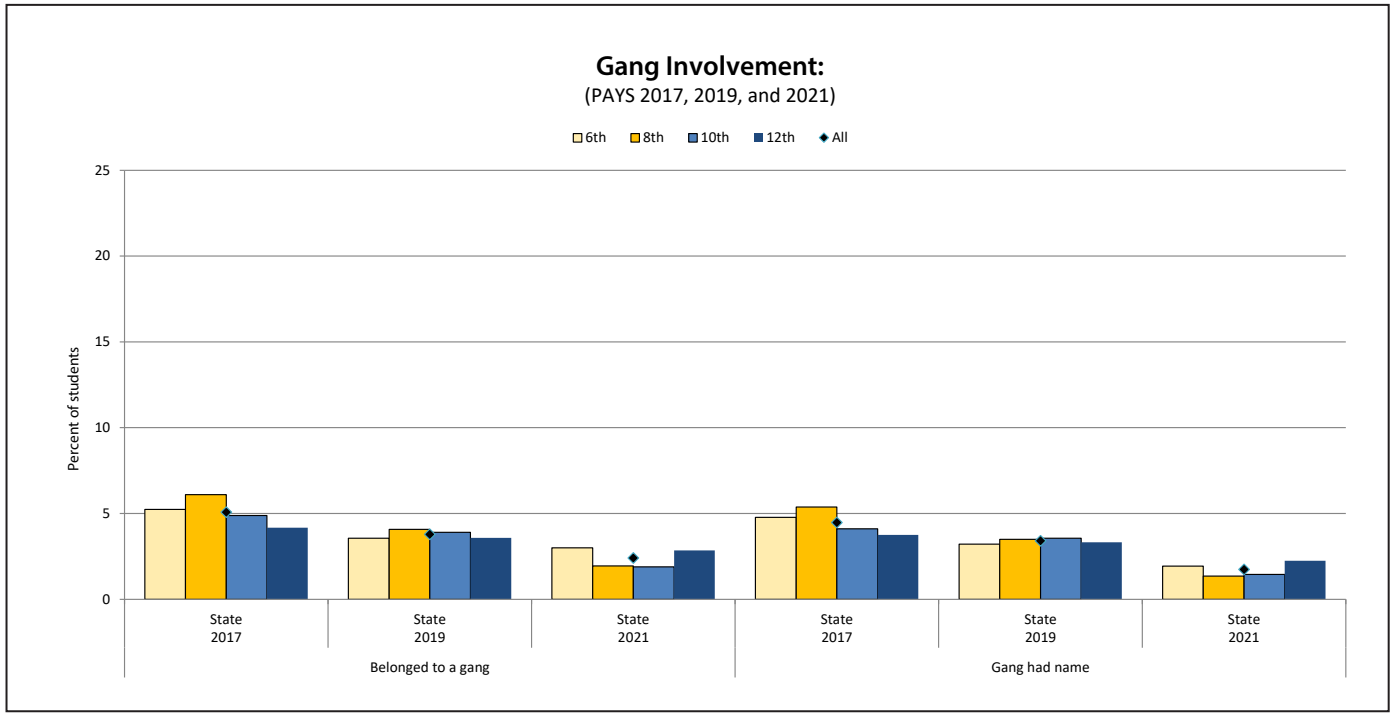
Some of the gang-related data gathered through the 2021 PAYS are provided in Table 4.6-1 and Figure 4.6-1. In 2021, 2.4% of all students indicated that they had belonged to a gang at some point in their life, and 1.7% indicated their gang had a name.

Table 4.6-1

Gang Involvement *(Lifetime)*

Grade	Belonged to a gang			Gang had name		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	5.2	3.6	3.0	4.8	3.2	1.9
8th	6.1	4.1	1.9	5.4	3.5	1.4
10th	4.9	3.9	1.9	4.1	3.6	1.4
12th	4.2	3.6	2.8	3.7	3.3	2.2
All	5.1	3.8	2.4	4.5	3.4	1.7

Figure 4.6-1



4.7 Gambling

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

About one in three students (30.4%) have gambled in their lifetime and just over one in twenty (5.9%) have gambled in the past month. Past-month gambling decreased 3.4 percentage points in all grades from 2019 (9.3%) to 2021 (5.9%).

The individual activities most often participated in during the past year were playing the lottery (18.3% of all students, a grade-level peak of 19.6% in the 6th grade), betting on personal games of skill (16.5% of all students, a grade-level peak of 17.8% in the 6th grade), and betting on poker or other card games (11.4% of all students, a grade-level peak of 12.9% in the 12th grade).

In response to the question "Have you ever felt the need to bet more and more money?" 2.8% 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?" 1.3% of students responded affirmatively.

Figure 4.7-1

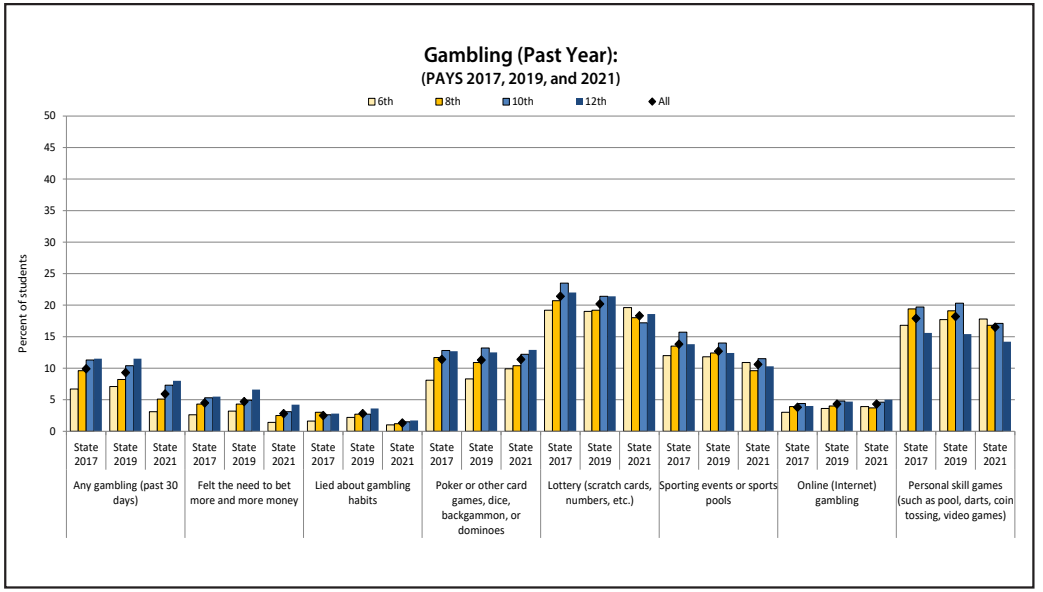


Table 4.7-1

Gambling in the Past Year

Grade	Any gambling (lifetime)			Any gambling (past 30 days)			Felt the need to bet more and more money			Lied about gambling habits			Poker or other card games, dice, backgammon, or dominoes			Lottery (scratch cards, numbers, etc.)			Sporting events or sports pools			Online (Internet) gambling			Personal skill games (such as pool, darts, coin tossing, video games)			Bet/gambled in some other way		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	21.8	20.3	20.2	6.7	7.1	3.1	2.6	3.2	1.4	1.6	2.2	1.0	8.1	8.3	9.9	19.2	19.0	19.6	12.0	11.8	10.9	3.0	3.6	3.9	16.8	17.7	17.8	7.0	7.9	8.1
8th	35.8	32.5	29.7	9.6	8.2	5.1	4.3	4.3	2.5	3.0	2.7	1.2	11.7	10.9	10.4	20.7	19.2	18.0	13.5	12.4	9.6	3.9	4.0	3.7	19.4	19.1	16.8	12.6	11.2	10.4
10th	43.2	41.4	35.3	11.3	10.4	7.3	5.3	4.9	3.1	2.6	2.7	1.5	12.8	13.2	12.2	23.5	21.4	17.2	15.7	14.0	11.5	4.4	4.8	4.6	19.7	20.3	17.1	15.0	12.6	11.2
12th	41.3	39.8	35.7	11.5	11.5	8.0	5.5	6.6	4.2	2.8	3.6	1.7	12.7	12.5	12.9	22.0	21.4	18.6	13.8	12.4	10.3	4.0	4.7	5.0	15.6	15.4	14.2	11.8	12.0	10.6
All	36.0	33.7	30.4	9.9	9.3	5.9	4.5	4.7	2.8	2.5	2.8	1.3	11.4	11.3	11.4	21.4	20.2	18.3	13.8	12.7	10.6	3.8	4.3	4.3	17.9	18.2	16.5	11.8	11.0	10.1

4.8 Dangerous Driving Behaviors

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

Driving under the influence of drugs and alcohol endangers everyone on the roadway. Alcohol and marijuana impair clear thinking and hand-eye coordination.

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. More students reported driving after smoking marijuana in the past year in 2021 (1.7% of the total survey sample population, and 5.9% of 12th grade respondents).

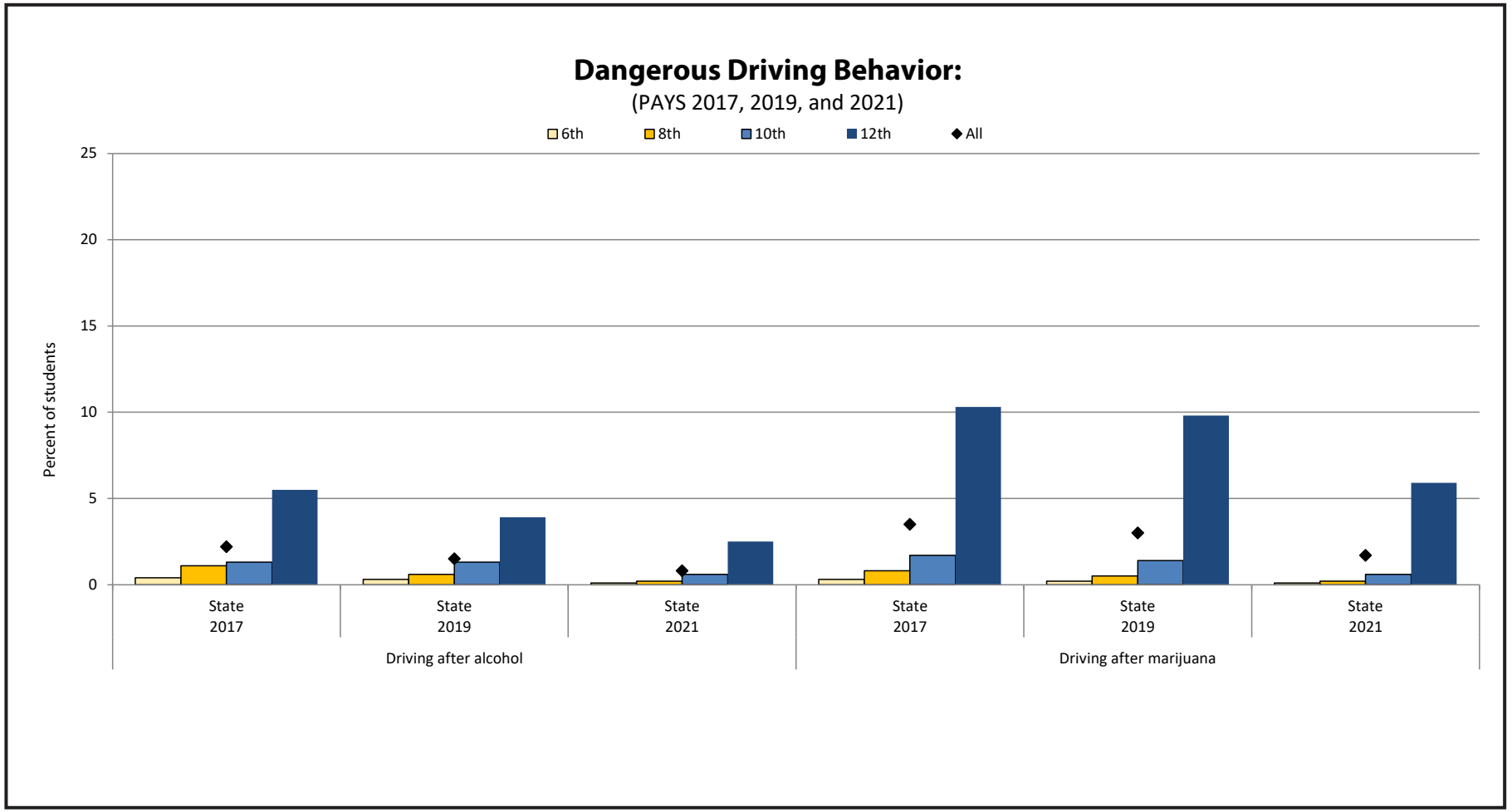
Four years of data are available for driving after drinking and driving after smoking marijuana. 2021 PAYS data show that the percent of Pennsylvania students reporting driving after drinking has decreased 1.6 percentage points since 2015 (rate of 2.4% in 2015, 2.2% in 2017, 1.5% in 2019, and 0.8% in 2021) and the percent of students reporting driving after consuming marijuana has decreased 1.8 percentage points (rate of 3.5% in 2015, and 3.5% in 2017, 3.0% in 2019, and 1.7% in 2021). Although 12th grade rates for these two items are quite high, the rates are significantly less than in previous administrations. The 12th grade rate of drinking then driving is down 3.0 percentage points since 2017, and the 12th grade rate of driving after smoking marijuana is down 4.4 percentage points since 2017.

Table 4.8-1

Dangerous Driving Behavior: Driving After Consuming Alcohol Or Marijuana

Grade	Driving after alcohol			Driving after marijuana		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	0.4	0.3	0.1	0.3	0.2	0.1
8th	1.1	0.6	0.2	0.8	0.5	0.2
10th	1.3	1.3	0.6	1.7	1.4	0.6
12th	5.5	3.9	2.5	10.3	9.8	5.9
All	2.2	1.5	0.8	3.5	3.0	1.7

Figure 4.8-1


Dangerous Driving Behavior:
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
25
20
15
10
5
0
State 2017
State 2019
State 2021
State 2017
State 2019
State 2021
Driving after alcohol
Driving after marijuana

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.

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 2021 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 40.1% of all students indicated (via responding "YES!" or "yes" to the statement) that they had felt depressed or sad most days in the past 12 months; 27.9% of all students indicated that they sometimes thought life is not worth it; 38.6% of all students indicated that "at times I think I am no good at all"; and 26.2% indicated that they felt that they were a failure. Further 17.6% 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 increase in reported rates of students thinking "I am no good at all" in the past year; an increase for all grades combined of 2.3 percentage points (36.3% in 2019 and 38.6% in 2021). The rate of students who reported "all in all, I am inclined to think I am failure" also increased for all grades combined from 23.4% in 2019 to 26.2% in 2021.
- In terms of sleep problems, 38.3% of all students indicated that slept less an 7 hours a night on an average school night, and 65.3% indicated they felt tired or sleeping during the day "every day" or "several times" during the past two weeks.
- 37.9% of students (all surveyed grades combined) indicated that they had experienced the death of a close family member or friend in the past year; 9.1% indicated having the stress of worrying that food at home would run out; and 5.0% indicated the stress of having to skip a meal due to a lack of money.
- 18.6% of students in all grades combined indicated that they had considered suicide in the past year. The grade-level rates for this question were as follows: 12.2% of 6th graders, 18.8% of 8th graders, 21.4% of 10th graders, and 21.3% of 12th graders indicated they had considered suicide in the past year. Suicide consideration increased for all grades since 2019.
- 14.7% 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: 9.9% of 6th graders, 15.2% of 8th graders, 17.1% of 10th graders, and 16.2% of 12th graders indicating they had created a suicide plan.
- In regard to those students who indicated they had attempted suicide in the past year, 7.8% of 6th graders, 11.2% of 8th graders, 12.2% of 10th graders, 12.2% of 12th graders, and 10.9% of all students indicated that they had attempted suicide at least one time in the past 12 months.

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

Table 5.1-1 **Symptoms of Depression** *(Percent of students marking 1 or more times)*

Grade	Felt depressed or sad MOST days in the past 12 months			Sometimes I think that life is not worth it			At times I think I am no good at all			All in all, I am inclined to think that I am a failure			Past-year Self-Harm		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	32.3	32.8	34.0	17.9	19.8	21.9	27.7	30.6	34.2	14.2	18.1	21.5	9.7	12.7	15.4
8th	36.9	33.9	38.2	24.5	23.0	27.5	34.3	32.9	37.1	20.7	21.5	25.3	15.3	14.9	20.1
10th	41.4	41.9	43.8	27.5	27.6	30.9	37.9	40.1	41.6	23.4	26.7	29.4	17.1	16.9	19.5
12th	40.8	43.1	43.7	28.4	29.4	30.7	39.5	41.2	41.0	23.1	27.0	28.0	13.4	13.2	15.1
All	38.1	38.0	40.1	24.8	25.0	27.9	35.1	36.3	38.6	20.6	23.4	26.2	14.0	14.4	17.6

Table 5.1-2 **Suicide Risk** *(Percent of students marking 1 or more times)*

Grade	Felt so sad or hopeless for at least 2 weeks in past year that stopped doing usual activities			Considered suicide			Planned suicide			Attempted suicide			Needed medical treatment for attempt		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	14.9	18.8	24.2	8.8	10.4	12.2	6.8	8.0	9.9	5.9	6.8	7.8	1.2	1.6	2.1
8th	21.5	21.9	29.4	16.2	15.3	18.8	13.2	12.1	15.2	10.1	9.3	11.2	2.1	2.3	2.4
10th	25.6	29.4	35.0	20.2	18.9	21.4	16.4	15.8	17.1	11.5	11.2	12.2	2.4	2.2	2.4
12th	27.9	30.6	34.7	19.9	19.9	21.3	16.2	15.4	16.2	12.0	11.4	12.2	2.2	1.9	2.0
All	22.8	25.2	31.0	16.5	16.2	18.6	13.4	12.9	14.7	10.0	9.7	10.9	2.0	2.0	2.2

Table 5.1-3 **Sleep Habits, Trauma, and Stress**

Grade	On average, sleeping less than 7 hours a night on school nights		Felt tired or sleepy during the day "every day" or "several times" during the past two weeks		Death of friend/family (past year)			Worried that food at home would run out before family got money to buy more			Skipped a meal because family didn't have enough money to buy food		
	State 2019	State 2021	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	18.0	19.5	43.6	46.4	43.1	40.5	40.1	12.2	12.1	9.9	4.3	4.8	4.0
8th	29.7	31.7	59.8	59.3	42.8	38.6	38.1	14.4	11.6	8.8	6.8	5.3	4.5
10th	46.6	46.2	75.5	75.0	39.7	40.4	38.1	13.8	11.6	8.5	7.2	6.8	5.0
12th	56.7	54.2	78.7	78.4	37.6	36.9	35.4	13.1	11.5	9.3	8.4	7.7	6.2
All	37.9	38.3	64.7	65.3	40.7	39.1	37.9	13.4	11.7	9.1	6.8	6.2	5.0

Figure 5.1-1

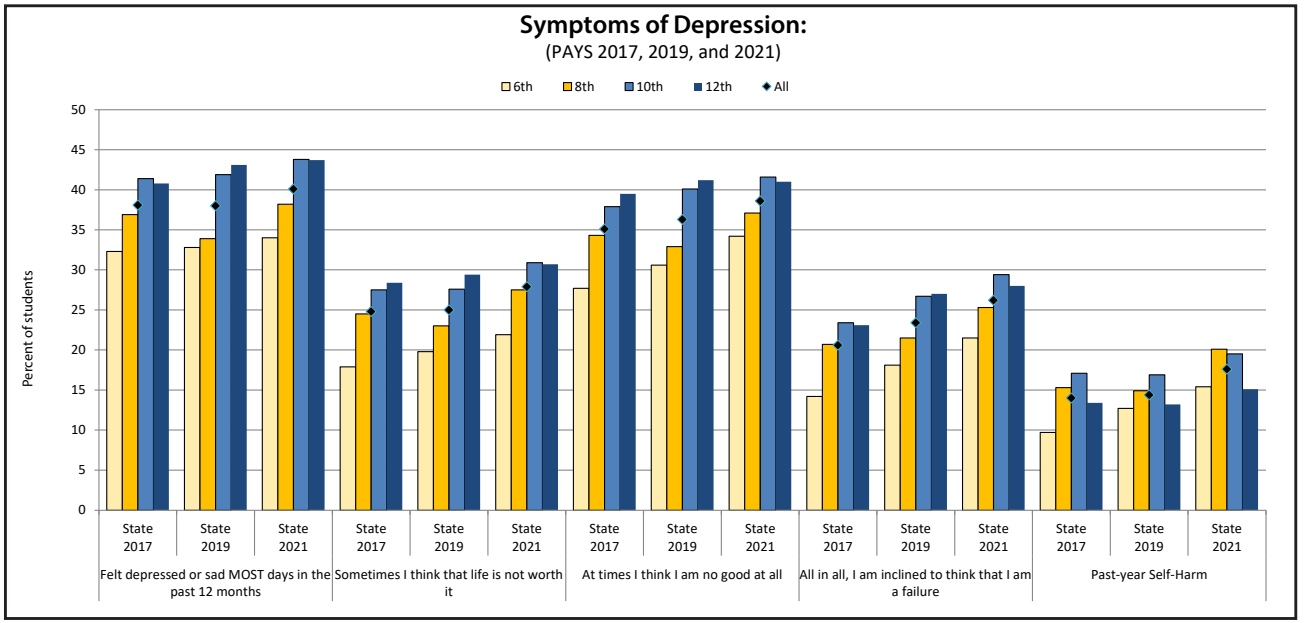


Figure 5.1-2

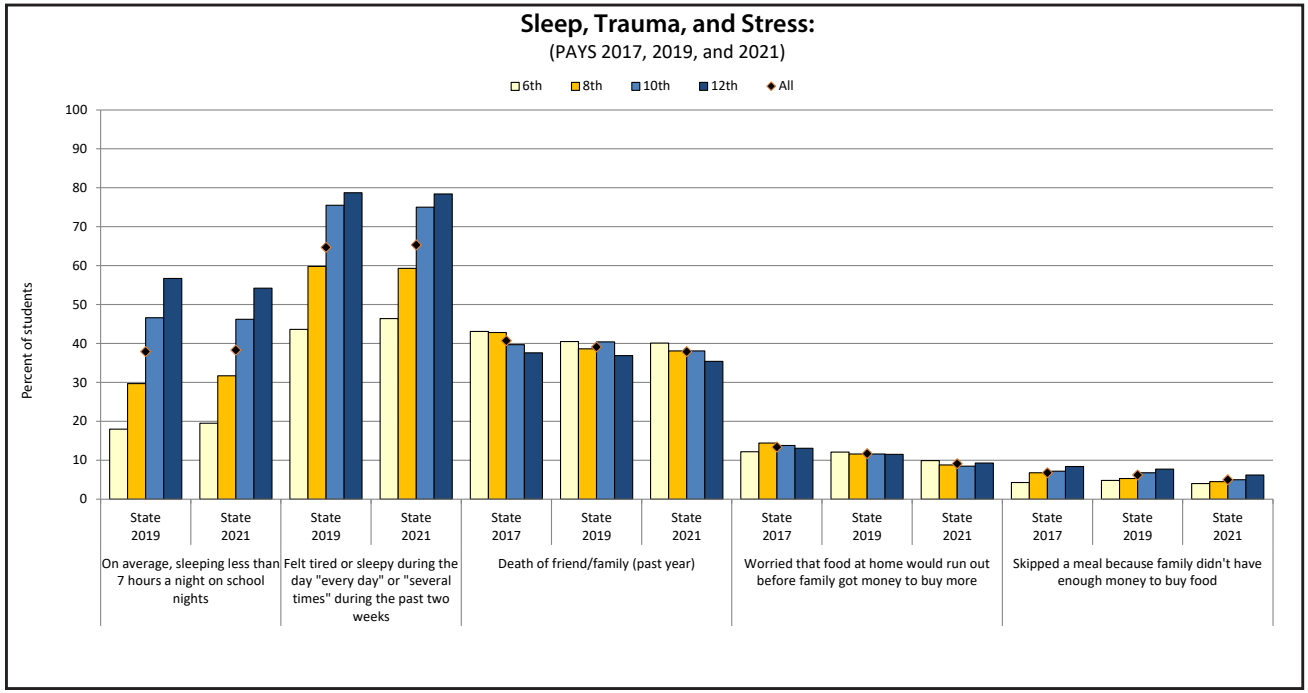
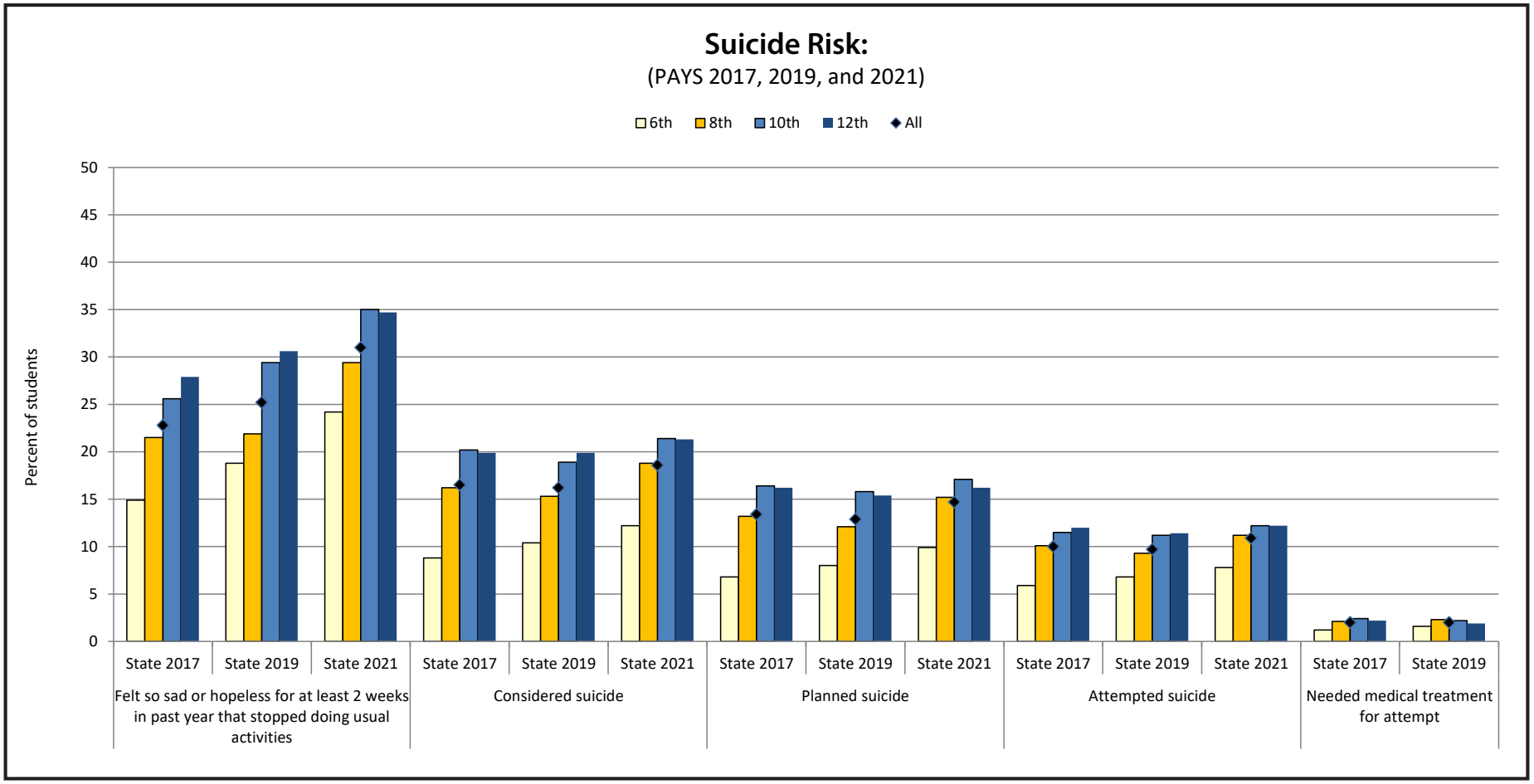


Figure 5.1-3


Suicide Risk:
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
50
45
40
35
30
25
20
15
10
5
0
State 2017
State 2019
State 2021
Felt so sad or hopeless for at least 2 weeks in past year that stopped doing usual activities
Considered suicide
Planned suicide
Attempted suicide
Needed medical treatment for attempt

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.

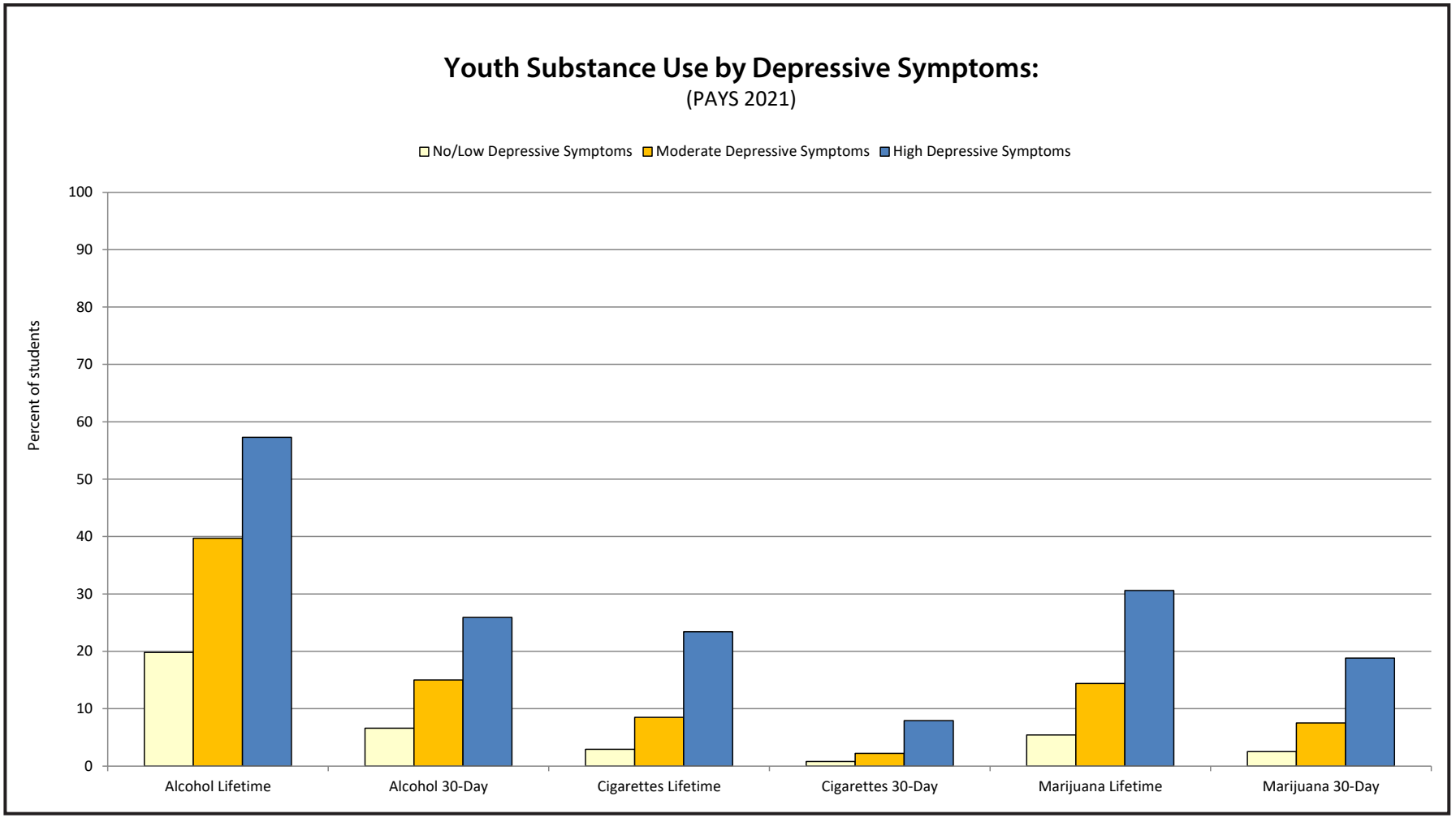
The results in Table 5.2-1 and Figure 5.2-1 show a strong link between youth who report depressive symptoms and ATOD use. When compared to the non-depressed group, the youth with high depressive symptoms indicate 30-day alcohol use rates that are four times higher than non-depressed students. Depressed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

Table 5.2-1

Depressive Symptoms and Youth Substance Use

% of students within each category	No/Low Depressive Symptoms	Moderate Depressive Symptoms	High Depressive Symptoms
Alcohol Lifetime	19.8	39.7	57.3
Alcohol 30-Day	6.6	15.0	25.9
Cigarettes Lifetime	2.9	8.5	23.4
Cigarettes 30-Day	0.8	2.2	7.9
Marijuana Lifetime	5.4	14.4	30.6
Marijuana 30-Day	2.5	7.5	18.8

Figure 5.2-1


Youth Substance Use by Depressive Symptoms:
(PAYS 2021)
No/Low Depressive Symptoms
Moderate Depressive Symptoms
High Depressive Symptoms
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Alcohol Lifetime
Alcohol 30-Day
Cigarettes Lifetime
Cigarettes 30-Day
Marijuana Lifetime
Marijuana 30-Day

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, 25.8% reported that they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Of students who indicated they had been bullied in the past year, 61.2% 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, 41.5% had considered suicide in the past year, 33.8% had made a suicide plan in the past year, and 30.1% had attempted suicide in the past year.

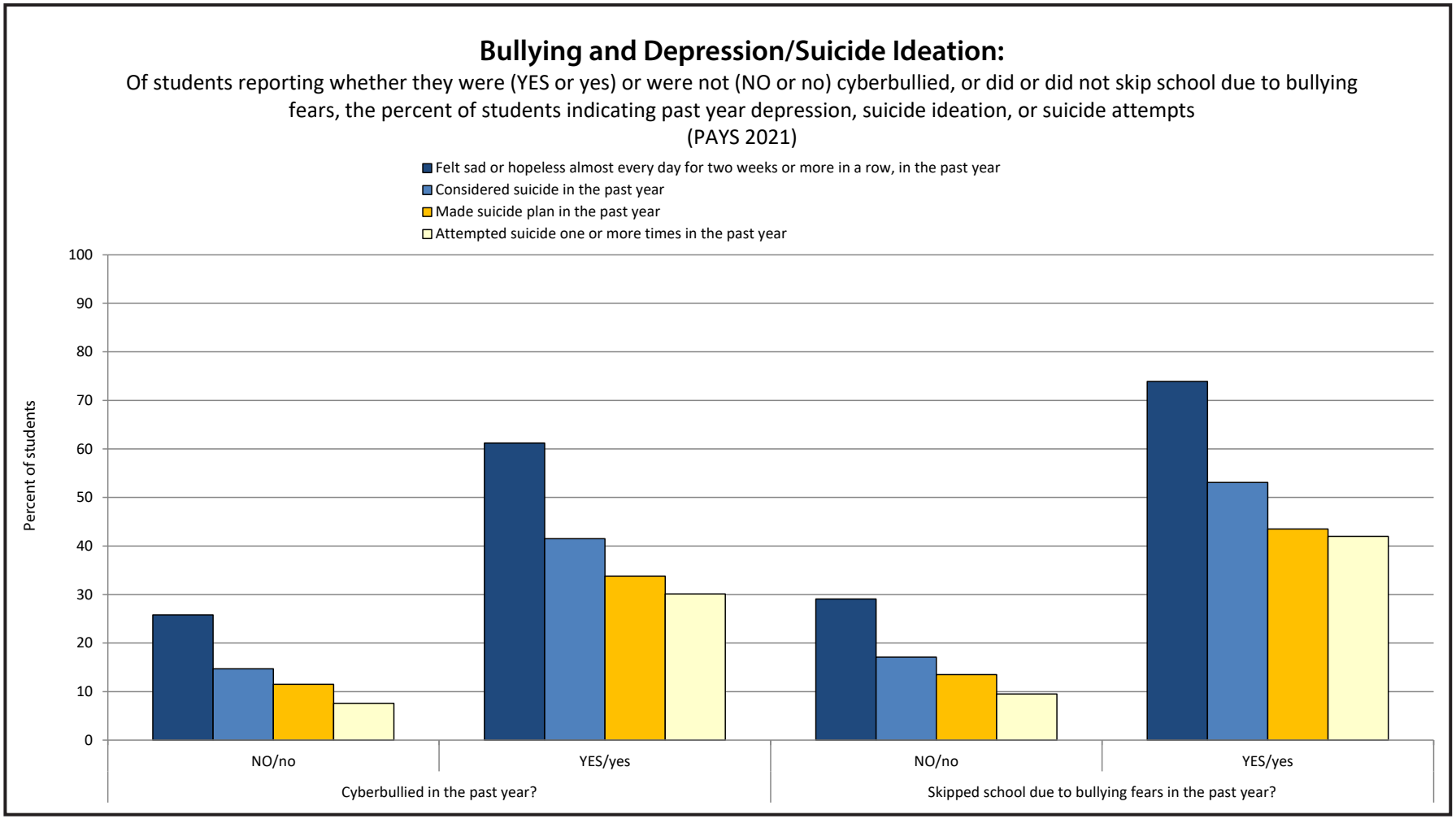
The same relationships exist for students who indicated they had skipped school due to bullying fears in the past year. Of those students, 73.9% had felt so sad or hopeless almost every day for at least two weeks in past year that they stopped doing usual activities, 53.1% had considered suicide, 43.5% had made a suicide plan, and 42.0% had attempted suicide.

Table 5.3-1

Bullying and Depression/Suicide Ideation

	Cyberbullied in the past year?		Skipped school due to bullying fears in the past year?	
	NO/no	YES/yes	NO/no	YES/yes
Felt sad or hopeless almost every day for two weeks or more in a row, in the past year	25.8	61.2	29.1	73.9
Considered suicide in the past year	14.7	41.5	17.1	53.1
Made suicide plan in the past year	11.5	33.8	13.5	43.5
Attempted suicide one or more times in the past year	7.6	30.1	9.5	42.0

Figure 5.3-1


Bullying and Depression/Suicide Ideation:
Of students reporting whether they were (YES or yes) or were not (NO or no) cyberbullied, or did or did not skip school due to bullying fears, the percent of students indicating past year depression, suicide ideation, or suicide attempts
(PAYS 2021)
Felt sad or hopeless almost every day for two weeks or more in a row, in the past year
Considered suicide in the past year
Made suicide plan in the past year
Attempted suicide one or more times in the past year
Percent of students
100
90
80
70
60
50
40
30
20
10
0
NO/no
YES/yes
NO/no
YES/yes
Cyberbullied in the past year?
Skipped school due to bullying fears in the past year?

Section 6: Additional Data Relationships

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

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

6.1 Parents' Rules and Expectations Regarding Substance Use

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

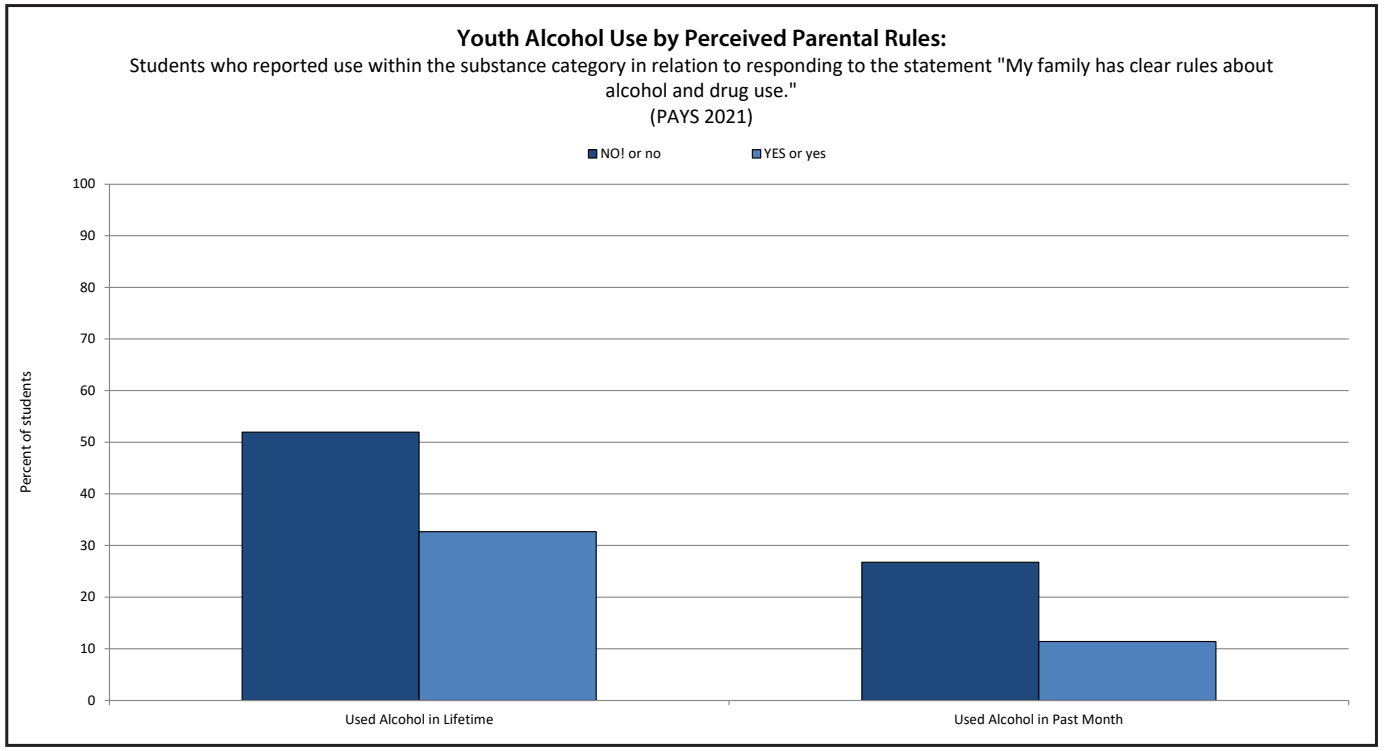
Of the students marking "YES!" or "yes" to the statement "My family has clear rules about alcohol and drug use," 32.7% indicated they had used alcohol in their lifetime and 11.4% indicated they had used alcohol in the past month. In contrast, of students who marked "NO!" or "no" to that statement, 52.0% indicated they had used alcohol in their lifetime and 26.7% 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	52.0	26.7
YES or yes	32.7	11.4

Figure 6.1-1



6.2 Academic Performance and Substance Use

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

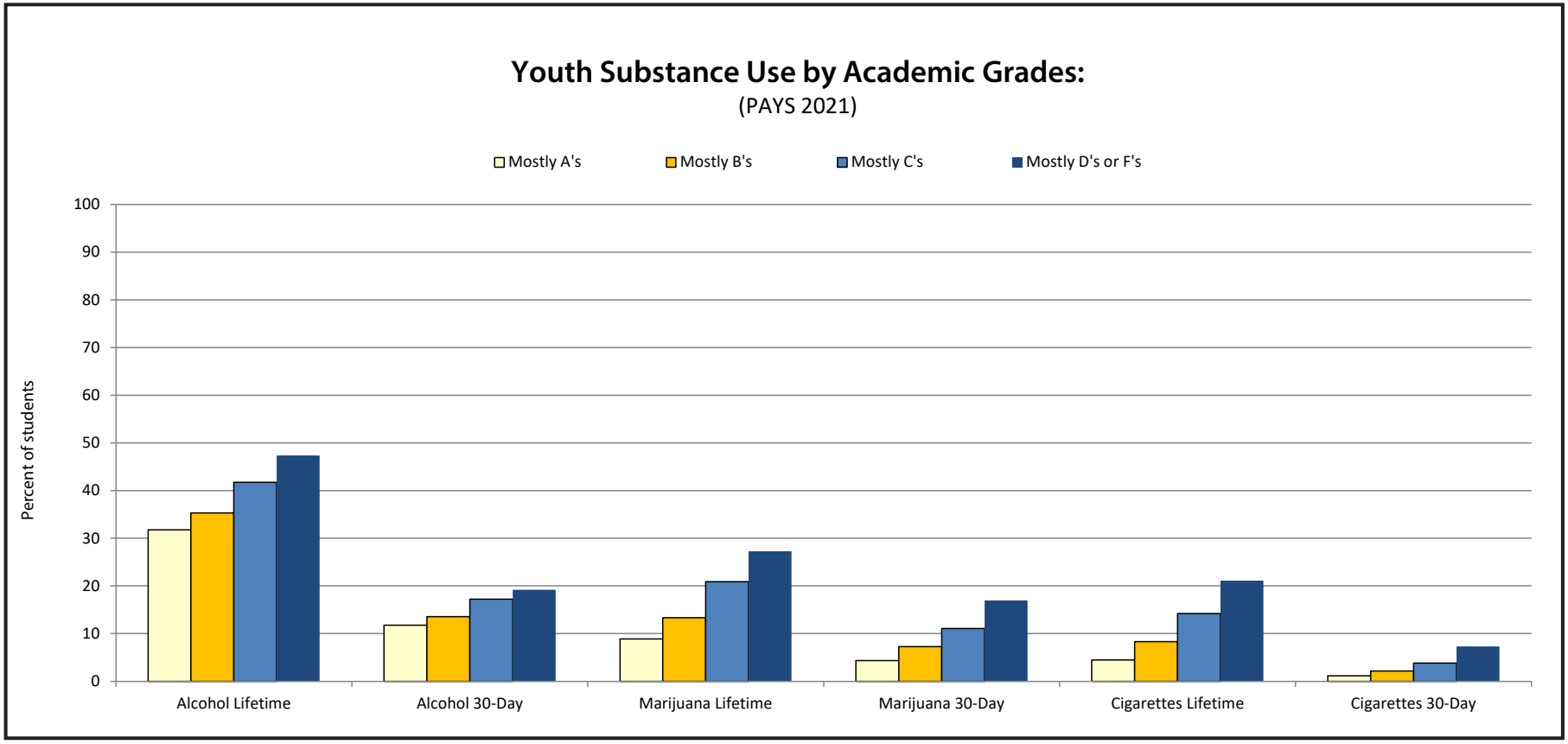
The data suggest that the youth getting A's are more invested in the education process and could be more bonded to school. The challenge of prevention programs is to develop methods of keeping all youth interested in learning and feeling attached to school. A survey of 1,000 youth on probation in Utah 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	31.8	35.3	41.7	47.4
Alcohol 30-Day	11.8	13.5	17.2	19.2
Marijuana Lifetime	8.9	13.3	20.9	27.3
Marijuana 30-Day	4.3	7.3	11.1	17.0
Cigarettes Lifetime	4.5	8.3	14.2	21.1
Cigarettes 30-Day	1.1	2.1	3.8	7.3

Figure 6.2-1


Youth Substance Use by Academic Grades:
(PAYS 2021)
Mostly A's
Mostly B's
Mostly C's
Mostly D's or F's
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Alcohol Lifetime
Alcohol 30-Day
Marijuana Lifetime
Marijuana 30-Day
Cigarettes Lifetime
Cigarettes 30-Day

6.3 Family Financial Stress and Substance Use

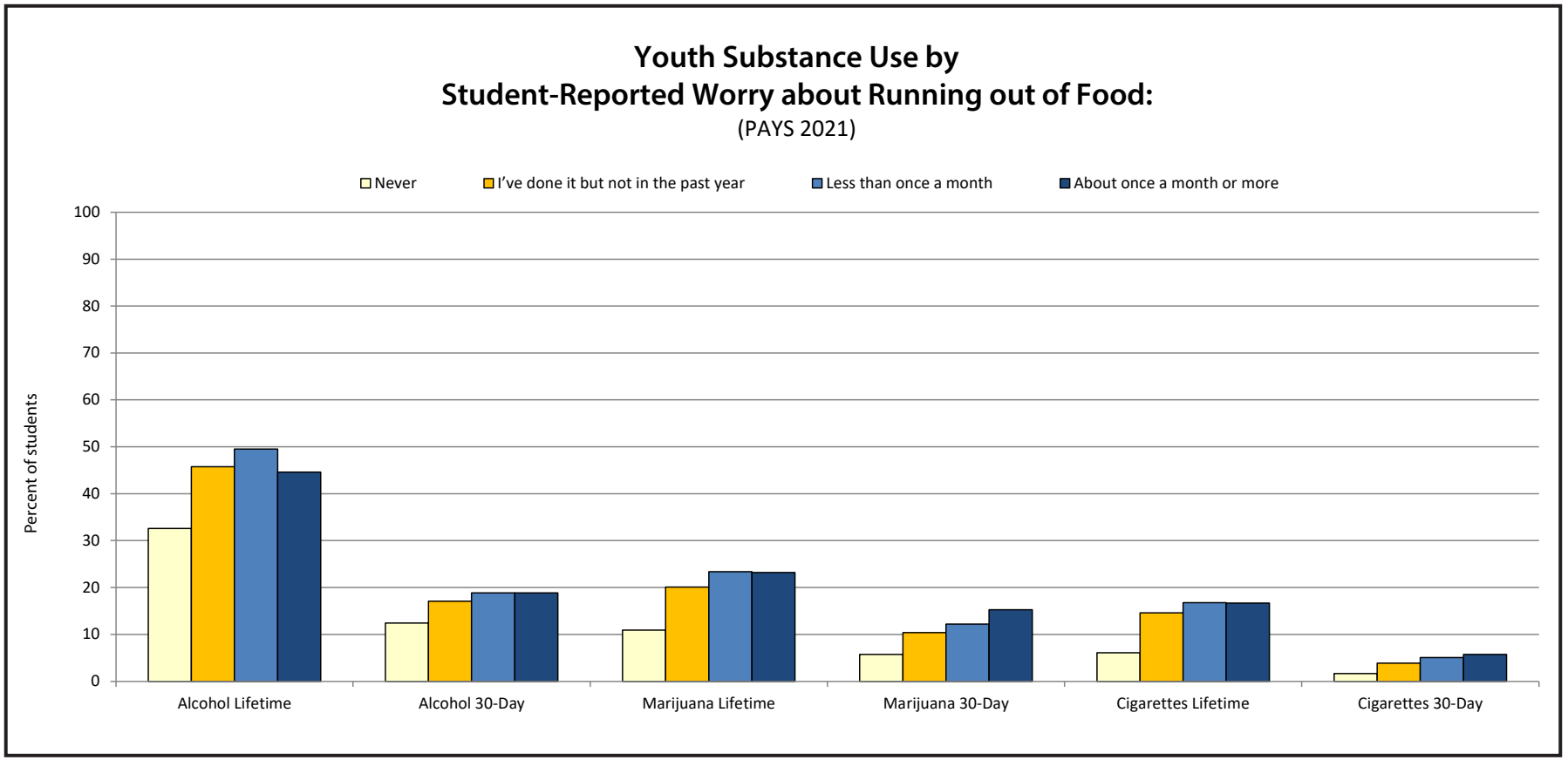
The 2021 PAYS questions asked students "How often do you worry that food at home will run out before your family gets money to buy more?" This question sheds light on the stressors that youth take on in situations of family financial distress. Looking at the responses to this question in relation to 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, 5.7% had used marijuana in the past month. Of youth who indicated that they had worried about food before, but not in the past year, slightly more of those students indicated past-month marijuana use (10.4%). Of youth who indicated they had worried about food less than once a month, past-month marijuana use increased to 12.2%. Of youth who indicated they worried about food once a month or more, 15.3% of those youth indicated regular marijuana use. Such a trend can be seen for each substance category in Table/Figure 6.3-1.

Table 6.3-1

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

	Never	I've done it but not in the past year	Less than once a month	About once a month or more
Alcohol Lifetime	32.6	45.7	49.5	44.6
Alcohol 30-Day	12.4	17.1	18.9	18.9
Marijuana Lifetime	10.9	20.1	23.4	23.2
Marijuana 30-Day	5.7	10.4	12.2	15.3
Cigarettes Lifetime	6.1	14.6	16.8	16.7
Cigarettes 30-Day	1.7	3.9	5.1	5.7

Figure 6.3-1


Youth Substance Use by
Student-Reported Worry about Running out of Food:
(PAYS 2021)
Never
I've done it but not in the past year
Less than once a month
About once a month or more
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Alcohol Lifetime
Alcohol 30-Day
Marijuana Lifetime
Marijuana 30-Day
Cigarettes Lifetime
Cigarettes 30-Day

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, 94.7% indicated their parents felt it was "Wrong" or "Very wrong" to use tobacco, 89.2% perceived parental disapproval of marijuana use, 88.0% perceived parental disapproval of having 1-2 drinks nearly every day use, and 93.1% 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 (6.2% lifetime, 2.7% 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 23.6% 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")*

Grade	Tobacco			Marijuana			Alcohol			Prescription drugs		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	96.2	96.0	96.2	96.6	96.1	96.4	93.3	92.3	90.0	93.1	92.9	91.6
8th	95.1	96.0	95.9	93.1	93.6	93.5	92.6	93.1	90.6	93.8	94.5	93.4
10th	94.8	94.9	95.2	88.4	87.3	88.5	89.5	88.5	88.4	94.1	94.2	93.8
12th	88.9	91.2	91.8	81.6	80.1	79.3	82.8	82.5	82.9	93.4	94.2	93.4
All	93.6	94.5	94.7	89.5	89.1	89.2	89.4	89.0	88.0	93.6	94.0	93.1

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 past 30 days
Not Wrong at All	39.5	28.8
A Little Bit Wrong	52.8	33.9
Wrong	23.6	10.9
Very wrong	6.2	2.7

Figure 6.4-1

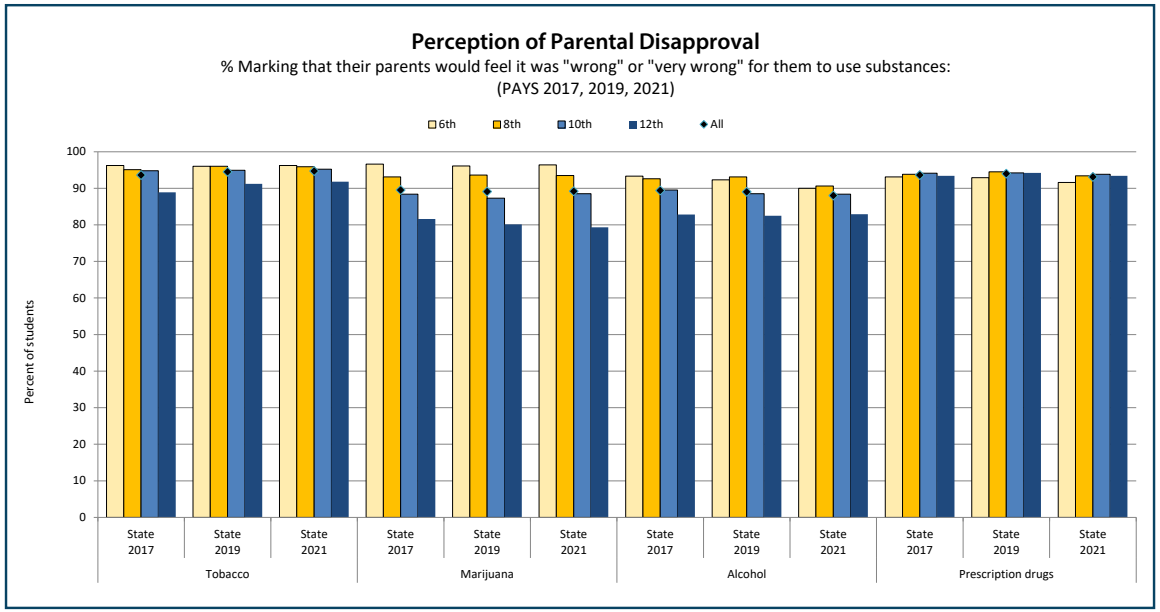
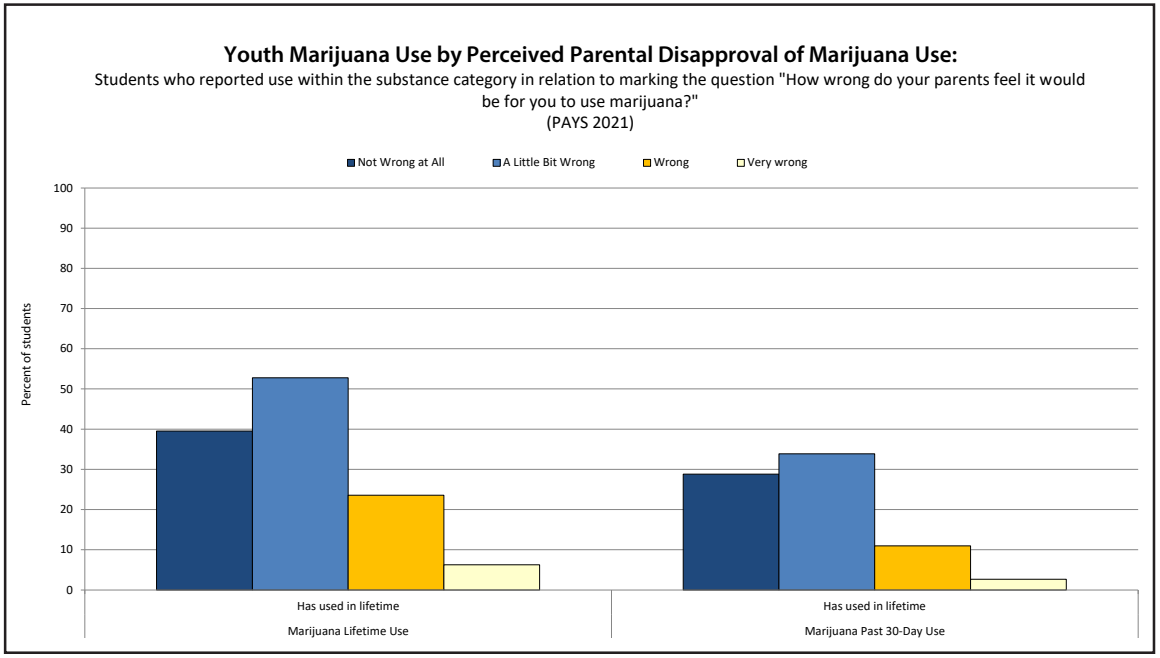


Figure 6.4-2



6.5 Perceived Peer Acceptability and Substance Use

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

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

When youth thought there was “No or very little chance” that they would be seen as cool if they used marijuana, only 6.2% had tried marijuana in their lifetime and only 2.8% had used it in the last month. However, when youth thought that there was even a “Little chance” that they would be seen as cool, marijuana use rates were over three times higher for lifetime use (23.8%) and over four times higher for past-month use (12.0%). Youth who thought that there was a “Very good chance” they would be seen as cool were nearly nine times more likely to use marijuana in the past month than youth who perceive that marijuana use was not cool.

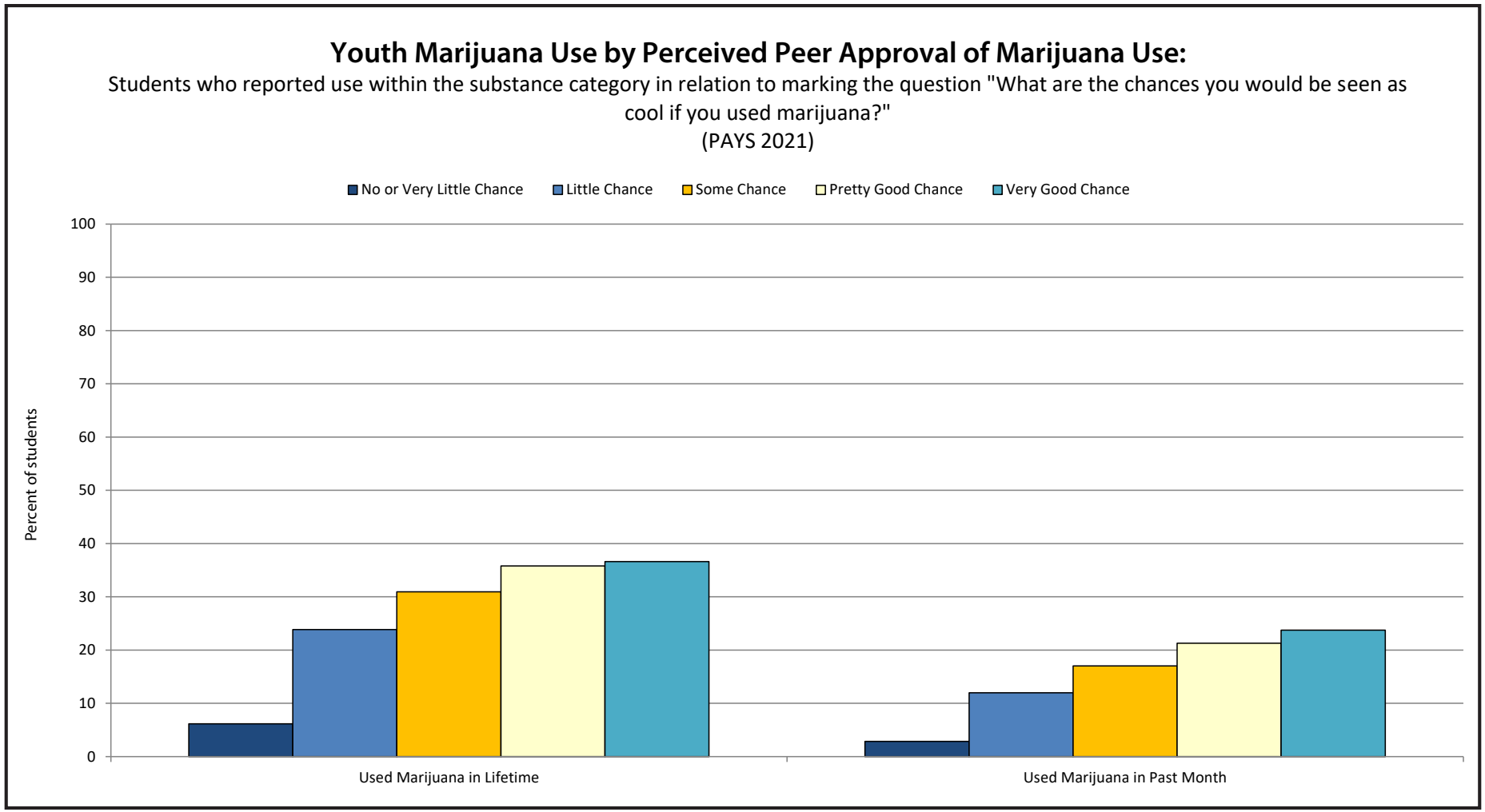
These results better illustrate how peer acceptability puts youth at risk for ATOD use, and suggests that a good way to decrease use is to get youth to decrease acceptability of drugs.

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	6.2	2.8
Little Chance	23.8	12.0
Some Chance	30.9	17.0
Pretty Good Chance	35.8	21.3
Very Good Chance	36.6	23.8

Figure 6.5-1


Youth Marijuana Use by Perceived Peer Approval of Marijuana Use:
Students who reported use within the substance category in relation to marking the question "What are the chances you would be seen as cool if you used marijuana?"
(PAYS 2021)
No or Very Little Chance
Little Chance
Some Chance
Pretty Good Chance
Very Good Chance
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Used Marijuana in Lifetime
Used Marijuana in Past Month

6.6 Transitions/Mobility and Substance Use

The 2021 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 2021 PAYS found that a majority of youth in the State had not moved in the past year or two years. Of all students, 11.5% indicated having moved one or two times in the past year, and 1.7% 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 4.9% 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, 11.8% of them had used marijuana in their lifetime, and 6.2% had used in the past month; whereas of the students who indicated they had moved 3 or more times in past three years, 22.7% had used marijuana in their lifetime, and 12.9% had used in the past month. Similar trends are seen for lifetime and past month use of all substances, with use rates gradually increasing upwards as the number of moves increases to 3 or more moves in the past three years.

Table 6.6-1 Transitions and Mobility

Grade	Changed homes 1 or 2 times in the past year			Changed homes 3 or more times in the past year			Changed homes 1 or 2 times in the past three years			Changed home 3 or more times in the past three years			Lived in a shelter, hotel, motel, car, campground, etc. due to loss of housing, lack of money, no other place to stay in the past year			Lived away from parents or guardians because you were kicked out, ran away, or were abandoned		
	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021	State 2017	State 2019	State 2021
6th	16.5	15.0	14.5	3.7	4.0	3.1	25.0	24.5	25.1	6.2	6.3	6.9	5.4	5.4	5.6	3.0	3.2	2.0
8th	13.7	12.6	11.8	2.1	2.2	1.5	22.6	23.3	23.3	6.0	5.4	5.0	4.2	3.7	3.8	4.7	3.6	3.4
10th	12.5	11.5	10.2	1.8	1.5	1.4	19.3	20.3	21.1	4.9	4.6	3.9	3.3	3.2	2.8	7.0	5.7	5.1
12th	10.0	9.5	9.8	1.5	1.4	1.1	17.1	17.0	17.2	4.2	3.9	4.1	3.3	3.2	3.0	9.2	7.3	7.4
All	13.0	12.1	11.5	2.2	2.3	1.7	20.8	21.3	21.6	5.3	5.0	4.9	4.0	3.9	3.7	6.1	5.0	4.5

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	34.2	35.5	41.7	41.4
Alcohol 30-Day	13.2	12.5	16.4	18.0
Marijuana Lifetime	11.8	14.3	18.9	22.7
Marijuana 30-Day	6.2	8.2	10.0	12.9
Cigarettes Lifetime	6.6	9.5	13.6	16.4
Cigarettes 30-Day	1.7	2.3	4.3	5.4

Figure 6.6-1

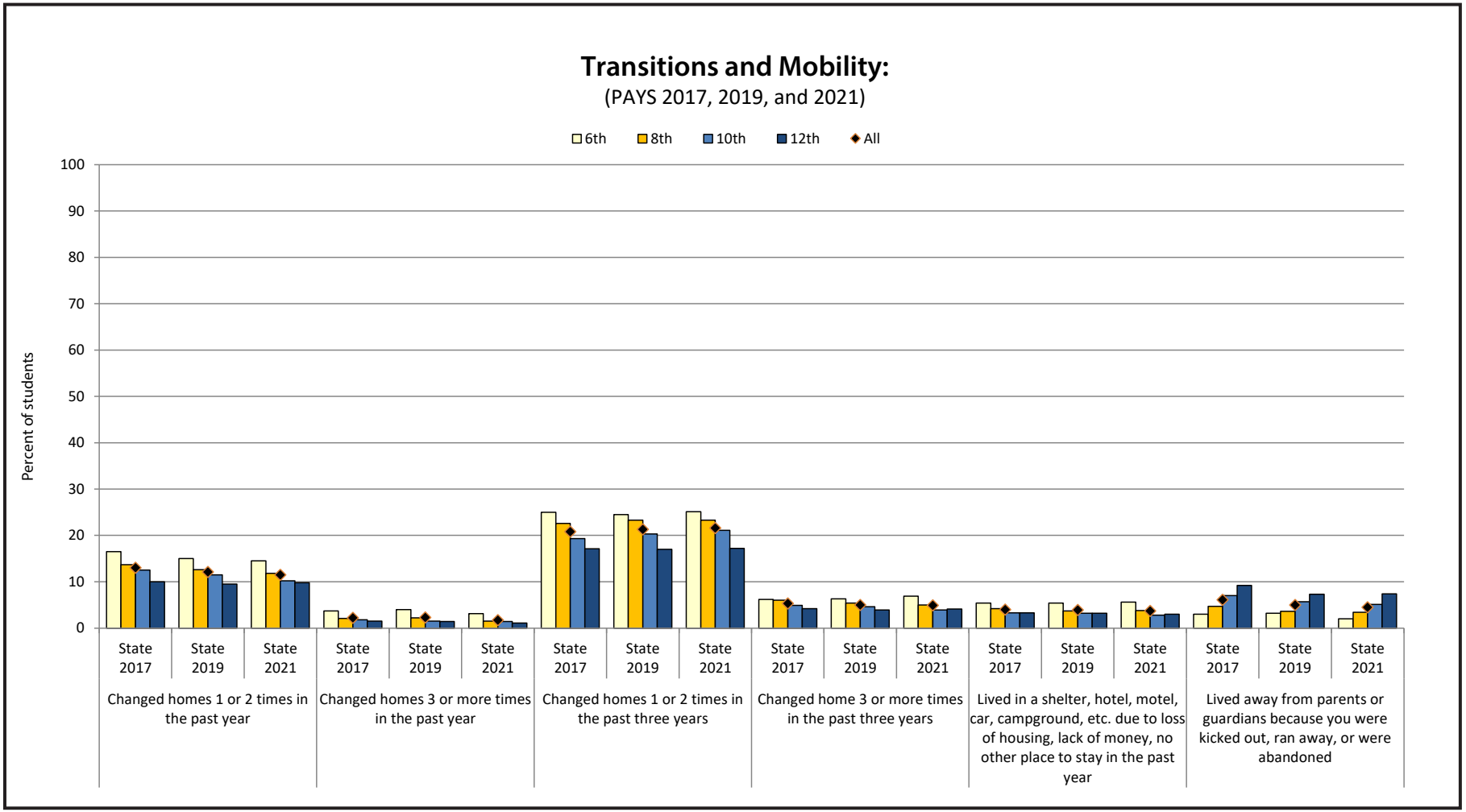
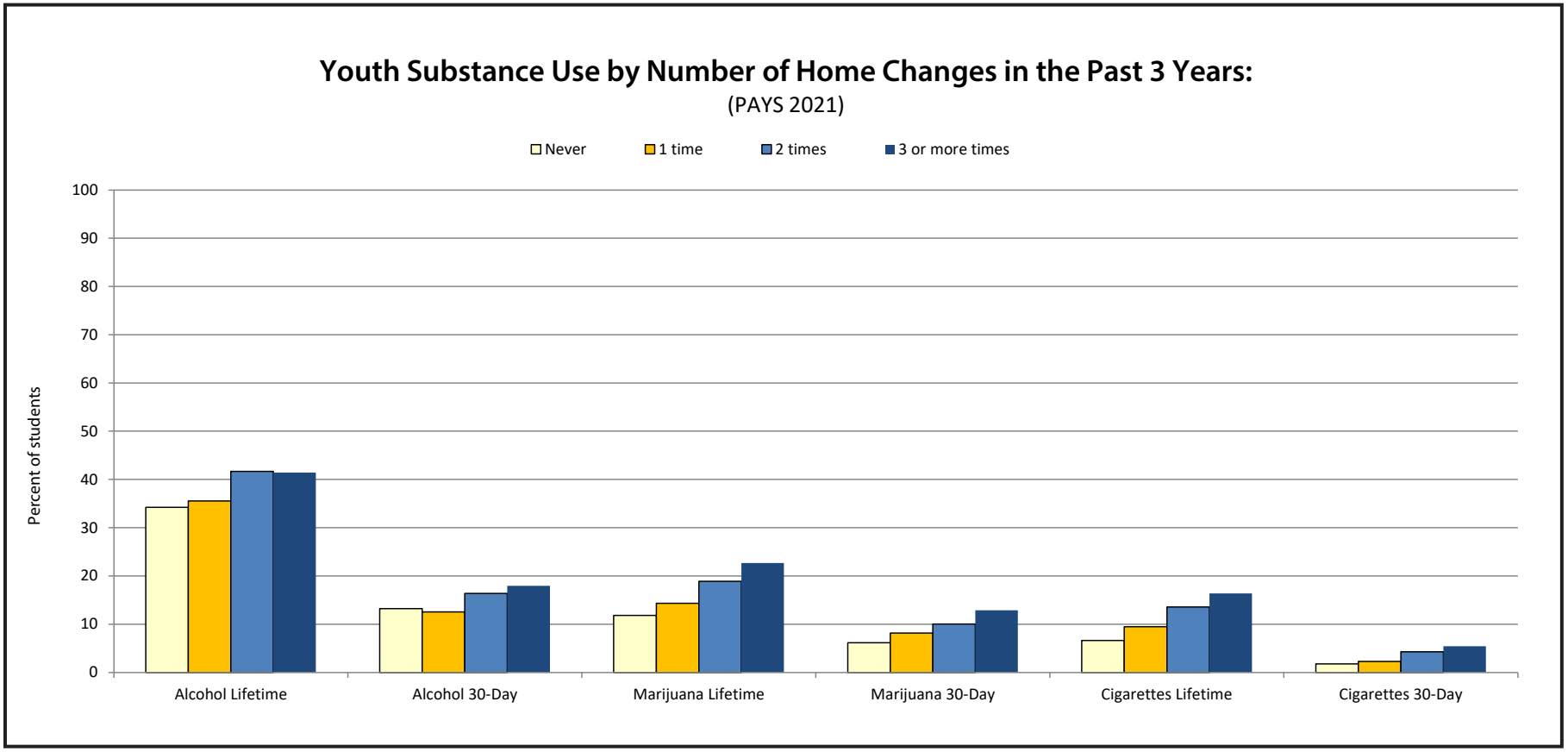

Transitions and Mobility:
(PAYS 2017, 2019, and 2021)
6th
8th
10th
12th
All
Percent of students
100
90
80
70
60
50
40
30
20
10
0
State 2017
State 2019
State 2021
Changed homes 1 or 2 times in the past year
Changed homes 3 or more times in the past year
Changed homes 1 or 2 times in the past three years
Changed home 3 or more times in the past three years
Lived in a shelter, hotel, motel, car, campground, etc. due to loss of housing, lack of money, no other place to stay in the past year
Lived away from parents or guardians because you were kicked out, ran away, or were abandoned

Figure 6.6-2


Youth Substance Use by Number of Home Changes in the Past 3 Years:
(PAYS 2021)
Never
1 time
2 times
3 or more times
Percent of students
100
90
80
70
60
50
40
30
20
10
0
Alcohol Lifetime
Alcohol 30-Day
Marijuana Lifetime
Marijuana 30-Day
Cigarettes Lifetime
Cigarettes 30-Day

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
	Community Disorganization	No Scale
	Transitions & Mobility	No Scale
	Laws and Norms Favorable to Drug Use, Firearms, and Crime	Laws and Norms Favorable to Drug Use
	Availability of Drugs and Firearms	Perceived Availability of Drugs Perceived Availability of Handguns
	Media Portrayals of Violence	No Scale
	Extreme Economic Deprivation	No Scale

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

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

Individual-Peer Protective Factors	**Protective Factor**	Associated Scales
	Religiosity	Religiosity
	Social Skills	No Scale
	Belief in the Moral Order	Belief in the Moral Order
	Prosocial Involvement	Prosocial Involvement
	Rewards for Prosocial Involvement	Rewards for Prosocial Involvement
	Interaction with Prosocial Peers	Interaction with Prosocial Peers
Individual-Peer Risk Factors	**Risk Factor**	Associated Scales
	Rebelliousness	Rebelliousness
	Early and Persistent Antisocial Behavior	Early Initiation of Drug Use Early Initiation of Antisocial Behavior
	Friends Who Engage in the Problem Behavior	Interaction with Antisocial Peers Friends' Use of Drugs Rewards for Antisocial Behavior
	Favorable Attitudes Towards the Problem Behavior	Attitudes Favorable Towards Antisocial Behavior Attitudes Favorable Towards Drug Use Perceived Risks of Drug Use Intention to Use
	Early Initiative of the Problem Behavior	Early Initiative of Drug Use Early Initiative of Antisocial Behavior
	Gang Involvement	Gang Involvement
	Constitutional Factors	Sensation Seeking Depressive Symptoms

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

Question	Response	%
X1 How old are you?	10	0.2
	11	18.3
	12	6.4
	13	18.6
	14	6.2
	15	18.7
	16	6.7
	17	17.8
	18	6.7
	19 or older	0.4
X2 What grade are you in?	6th	24.8
	8th	24.8
	10th	25.5
	12th	24.9
X3 Are you of Hispanic, Latino, or Spanish origin?	No, not of Hispanic, Latino, or Spanish origin	86.8
	Yes, Mexican, Mexican Am., Chicano	3.0
	Yes, Puerto Rican	5.1
	Yes, Cuban	0.4
	Yes, another Hispanic, Latino, or Spanish origin	4.7
X4a What is your race?	White, Caucasian	81.8
	Black, African American	12.6
	American Indian or Alaska Native	3.8
	Asian Indian, Japanese, Native Hawaiian, Chinese, Korean, Guamanian or Chamorro, Filipino, Vietnamese, Samoan, Other Asian, Other Pacific Islander	8.9

Question	Response	%
X5 Are you?	female	49.3
	male	50.7
X6 Think of where you live most of the time. Which of the following people live there with you?	Mother	90.9
	Stepmother	5.3
	Foster mother	0.4
	Grandmother	9.8
	Aunt	3.0
	Father	71.0
	Stepfather	12.1
	Foster father	0.3
	Grandfather	5.6
	Uncle	3.1
	Other Adults	2.8
	Older sister(s)	24.1
	Younger sister(s)	29.9
	Older stepsister(s)	2.3
	Younger stepsister(s	2.5
	Older brother(s)	26.3
	Younger brother(s)	30.2
	Older stepbrother(s)	2.1
	Younger stepbrother(s)	2.2
	Other children	3.5
X7 What is the language you use most often at home?	English	91.9
	Spanish	4.2
	Another language	3.9

Question	Response	%
X8a How wrong do your parents feel it would be for you to: Have one or two drinks of alcoholic beverage such as beer, wine, or hard liquor (vodka, whiskey, gin, or rum) nearly every day?	Not at all wrong	3.9
	A little bit wrong	7.0
	Wrong	18.8
	Very wrong	70.2
X8b How wrong do your parents feel it would be for you to: Use prescription drugs not prescribed to you?	Not at all wrong	3.4
	A little bit wrong	2.6
	Wrong	11.3
	Very wrong	82.6
X9a On how many occasions (if any) have you: Had beer, wine, or hard liquor in your lifetime	0 times	59.0
	1-2 times	16.0
	3-5 times	8.3
	6-9 times	4.6
	10-19 times	5.2
	20-39 times	3.0
	40 or more times	3.9
X9b On how many occasions (if any) have you: Used marijuana in your lifetime?	0 times	82.7
	1-2 times	4.7
	3-5 times	2.4
	6-9 times	1.5
	10-19 times	1.9
	20-39 times	1.5
	40 or more times	5.1
X9c On how many occasions (if any) have you: Sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high in your lifetime?	0 times	95.1
	1-2 times	2.8
	3-5 times	1.0
	6-9 times	0.4
	10-19 times	0.3
	20-39 times	0.1
	40 or more times	0.3

Question	Response	%
X9d On how many occasions (if any) have you: Used cocaine in your lifetime?	0 times	99.0
	1-2 times	0.6
	3-5 times	0.1
	6-9 times	0.1
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.1
X9e On how many occasions (if any) have you: Used crack in your lifetime?	0 times	99.6
	1-2 times	0.2
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.1
X9f On how many occasions (if any) have you: Used heroin in your lifetime?	0 times	99.8
	1-2 times	0.1
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.1
X9g On how many occasions (if any) have you: Used hallucinogens (acid, LSD, shrooms) in your lifetime?	0 times	97.3
	1-2 times	1.6
	3-5 times	0.6
	6-9 times	0.2
	10-19 times	0.2
	20-39 times	0.1
	40 or more times	0.1

Question	Response	%
X9h On how many occasions (if any) have you: Used methamphetamine (meth, crystal meth, crank) in your lifetime?	0 times	99.7
	1-2 times	0.2
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X9i On how many occasions (if any) have you: Used Ecstasy in your lifetime?	0 times	98.9
	1-2 times	0.7
	3-5 times	0.2
	6-9 times	0.1
	10-19 times	0.1
	20-39 times	0.0
	40 or more times	0.0
X9j On how many occasions (if any) have you: Used metaclorazoles (such as Magenta Zip, Czoles) in your lifetime?	0 times	100.0
	1-2 times	0.0
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X9k On how many occasions (if any) have you: Taken performance enhancing drugs (such as steroids, human growth hormone) without a doctor telling you to take them in your lifetime?	0 times	99.2
	1-2 times	0.4
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.1

Question	Response	%
X9l On how many occasions (if any) have you: Used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Tylox) without a doctor's orders, in your lifetime?	0 times	95.9
	1-2 times	2.3
	3-5 times	0.8
	6-9 times	0.3
	10-19 times	0.3
	20-39 times	0.1
	40 or more times	0.2
X9m On how many occasions (if any) have you: Used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor's orders, in your lifetime?	0 times	98.1
	1-2 times	1.0
	3-5 times	0.4
	6-9 times	0.2
	10-19 times	0.1
	20-39 times	0.1
	40 or more times	0.1
X9n On how many occasions (if any) have you: Used prescription stimulants (such as Ritalin or Adderall) without a doctor's orders, in your lifetime?	0 times	97.5
	1-2 times	1.3
	3-5 times	0.6
	6-9 times	0.3
	10-19 times	0.1
	20-39 times	0.1
	40 or more times	0.2
X9o On how many occasions (if any) have you: Used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze) in your lifetime?	0 times	98.5
	1-2 times	0.9
	3-5 times	0.3
	6-9 times	0.1
	10-19 times	0.1
	20-39 times	0.0
	40 or more times	0.1

Question	Response	%
X9p On how many occasions (if any) have you: Used over-the- counter medicine (cough syrup, cold medicine, etc.) in order to get high?	0 times	96.1
	1-2 times	1.9
	3-5 times	0.9
	6-9 times	0.4
	10-19 times	0.3
	20-39 times	0.2
	40 or more times	0.3
X10a On how many occasions (if any) have you had beer, wine, or hard liquor during the past 30 days?	0 times	83.2
	1-2 times	10.4
	3-5 times	3.6
	6-9 times	1.5
	10-19 times	0.9
	20-39 times	0.2
	40 or more times	0.2
X10b On how many occasions (if any) have you used marijuana during the past 30 days?	0 times	90.4
	1-2 times	3.6
	3-5 times	1.8
	6-9 times	0.9
	10-19 times	1.0
	20-39 times	0.9
	40 or more times	1.4
X10c On how many occasions (if any) have you: Sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high during the past 30 days?	0 times	98.6
	1-2 times	1.0
	3-5 times	0.3
	6-9 times	0.1
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.1

Question	Response	%
X10d On how many occasions (if any) have you: Used cocaine during the past 30 days?	0 times	99.8
	1-2 times	0.2
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10e On how many occasions (if any) have you: Used crack during the past 30 days?	0 times	99.9
	1-2 times	0.1
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	40 or more times	0.0
X10f On how many occasions (if any) have you: Used heroin during the past 30 days?	0 times	100.0
	1-2 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10g On how many occasions (if any) have you: Used hallucinogens (acid, LSD, shrooms) during the past 30 days?	0 times	99.3
	1-2 times	0.5
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	40 or more times	0.0
X10h On how many occasions (if any) have you: Used methamphetamine (meth, crystal meth, crank) during the past 30 days?	0 times	99.9
	1-2 times	0.0
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0

Question	Response	%
X10i On how many occasions (if any) have you: Used Ecstasy or Molly during the past 30 days?	0 times	99.8
	1-2 times	0.2
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
X10j On how many occasions (if any) have you: Used metaclorazoles (such as Magenta Zip, Czoles) during the past 30 days?	0 times	100.0
	1-2 times	0.0
	3-5 times	0.0
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10k On how many occasions (if any) have you: Taken performance enhancing drugs (such as steroids, human growth hormone) without a doctor's orders during the past 30 days?	0 times	99.8
	1-2 times	0.1
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10l On how many occasions (if any) have you: Used prescription pain relievers (such as Vicodin, OxyContin, Percocet, or Codeine) without a doctor's orders, during the past 30 days?	0 times	98.9
	1-2 times	0.8
	3-5 times	0.2
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0

Question	Response	%
X10m On how many occasions (if any) have you: Used prescription tranquilizers (such as Ambien, Lunesta, Valium, or Xanax) without a doctor's orders, during the past 30 days?	0 times	99.5
	1-2 times	0.4
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10n On how many occasions (if any) have you: Used prescription stimulants (such as Ritalin or Adderall) without a doctor's orders, during the past 30 days?	0 times	99.2
	1-2 times	0.5
	3-5 times	0.2
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10o On how many occasions (if any) have you used synthetic drugs (man-made drugs such as Bath Salts, K2, Spice, Mr. Smiley, Blaze) during the past 30 days?	0 times	99.5
	1-2 times	0.3
	3-5 times	0.1
	6-9 times	0.0
	10-19 times	0.0
	20-39 times	0.0
	40 or more times	0.0
X10p On how many occasions (if any) have you: Used over-the- counter medicine (cough syrup, cold medicine, etc.) in order to get high? in your lifetime?	0 times	98.7
	1-2 times	0.9
	3-5 times	0.2
	6-9 times	0.1
	10-19 times	0.1
	20-39 times	0.0
	40 or more times	0.0

Question	Response	%
X11 Have you ever smoked cigarettes?	Never	89.2
	Once or twice	6.4
	Once in a while but not regularly	2.6
	Regularly in the past	1.2
	Regularly now	0.7
X12 How frequently have you smoked cigarettes during the past 30 days?	Never	96.5
	Once or twice	2.1
	Once or twice per week	0.5
	About once a day	0.2
	More than once a day	0.6
X13 Have you ever used smokeless tobacco (chew, snuff, plug, dipping tobacco, or chewing tobacco)?	Never	94.5
	Once or twice	3.1
	Once in a while but not regularly	1.3
	Regularly in the past	0.5
	Regularly now	0.5
X14 How frequently have you used smokeless tobacco during the past 30 days?	Never	97.9
	Once or twice	1.1
	Once or twice per week	0.3
	About once a day	0.2
	More than once a day	0.4
X15 How frequently have you used an electronic vapor product such as: JUUL, Vuse, MarkTen, and blu or other e-cigarettes vapes vape pens e-cigars e-hookahs, hookah pens and mods during the past 30 days?	Never	81.0
	Once or twice	9.2
	Once or twice per week	2.9
	About once a day	1.5
	More than once a day	5.4

Question	Response	%
X16 If you used an electronic vapor product such as e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods during the past 12 months, with which substances did you use it?	I did not vape	76.3
	Just flavoring	11.2
	Nicotine	14.2
	Marijuana or hash oil	6.7
	Other substances	0.5
	I don't know	3.2
X17 If you wanted to get prescription drugs not prescribed to you, how easy would it be for you to get some?	Very hard	55.7
	Sort of hard	20.3
	Sort of easy	15.1
	Very easy	8.8
X18a How do you feel about someone your age having one or two drinks of an alcoholic beverage (beer, wine, hard liquor) nearly every day?	Strongly disapprove	58.8
	Somewhat disapprove	16.1
	Neither approve or disapprove	16.2
	Approve	2.5
	Don't know/ Can't say	6.4
X18b How do you feel about someone your age smoking one or more packs of cigarettes a day?	Strongly disapprove	81.5
	Somewhat disapprove	7.4
	Neither approve or disapprove	6.5
	Approve	0.6
	Don't know/ Can't say	4.0
X18c How do you feel about someone your age using marijuana once a month or more?	Strongly disapprove	56.4
	Somewhat disapprove	10.8
	Neither approve or disapprove	18.1
	Approve	9.8
	Don't know/ Can't say	5.0
X18d How do you feel about someone your age using prescription drugs not prescribed to them?	Strongly disapprove	75.8
	Somewhat disapprove	11.5
	Neither approve or disapprove	7.5
	Approve	0.6
	Don't know/ Can't say	4.6

Question	Response	%
X19 How many times have you had five or more alcoholic drinks in a row?	None	92.6
	Once	3.8
	Twice	1.9
	3-5 times	1.2
	6-9 times	0.3
	10 or more times	0.4
X20a How willing are you to try the drugs listed below before you are 21? These are not questions about current or past use of these drugs. ALCOHOL (beer, wine, coolers, hard liquor such as vodka, whiskey, gin, or rum)	I would never try it	43.3
	I probably wouldn't try it	15.1
	I'm not sure whether or not I would try it	17.1
	I would like to try it	16.8
	I would use it any chance I got	7.6
X20b How willing are you to try the drugs listed below before you are 21? These are not questions about current or past use of these drugs. MARIJUANA (pot, hash, cannabis, weed)	I would never try it	65.0
	I probably wouldn't try it	9.7
	I'm not sure whether or not I would try it	9.4
	I would like to try it	8.8
	I would use it any chance I got	7.0
A1 During the last four weeks, how many whole days of school have you missed because you skipped or cut?	None	82.8
	1 day	9.1
	2 days	3.6
	3 days	2.1
	4 to 5 days	1.5
	6 to 10 days	0.5
	11 or more days	0.4
A2 How important do you think the things you are learning in school are going to be for your later life?	Very important	28.5
	Quite important	21.6
	Fairly important	24.9
	Slightly important	18.5
	Not at all important	6.6

Question	Response	%
A3 How interesting are most of your courses to you?	Very interesting and stimulating	14.4
	Quite interesting	25.9
	Fairly interesting	33.3
	Slightly Dull	16.5
	Very Dull	10.0
A4 Putting them all together, what were your grades like last year?	Mostly A's	51.0
	Mostly B's	34.9
	Mostly C's	10.8
	Mostly D's	2.4
	Mostly F's	0.9
A5 How often do you feel that the school work you are assigned is meaningful and important?	Never	11.7
	Seldom	16.7
	Sometimes	35.7
	Often	21.4
	Almost Always	14.5
A6a Now thinking back over the past year in school, how often did you enjoy being in school?	Never	12.9
	Seldom	12.8
	Sometimes	35.7
	Often	25.7
	Almost Always	12.9
A6b Now thinking back over the past year in school, how often did you hate being in school?	Never	12.8
	Seldom	18.5
	Sometimes	34.0
	Often	20.5
	Almost Always	14.2
A6c Now thinking back over the past year in school, how often did you try to do best work in school?	Never	2.5
	Seldom	3.4
	Sometimes	14.2
	Often	29.6
	Almost Always	50.3

Question	Response	%
A7 Are most of your school grades better than the grades of most students in your class?	NO!	7.1
	no	27.2
	yes	48.9
	YES!	16.9
A8 Teachers ask me to work on special classroom projects	NO!	17.8
	no	48.8
	yes	25.8
	YES!	7.6
A9 There are lots of chances for students in my school to talk one-on-one with a teacher	NO!	6.6
	no	17.2
	yes	49.6
	YES!	26.7
A10 I have lots of chances to be part of class discussions or activities	NO!	4.3
	no	10.1
	yes	54.2
	YES!	31.4
A11 In my school, students have lots of chances to help decide things like class activities and rules	NO!	13.6
	no	34.7
	yes	38.5
	YES!	13.2
A12 There are lots of chances for students in my school to get involved in sports, clubs, and other school activities outside of class	NO!	3.5
	no	5.1
	yes	39.9
	YES!	51.5
A13 My teacher(s) notices when I am doing a good job and lets me know about it	NO!	8.7
	no	26.2
	yes	46.8
	YES!	18.3

Question	Response	%
A14 I feel safe at my school	NO!	6.3
	no	13.7
	yes	51.5
	YES!	28.5
A15 The school lets my parents know when I have done something well	NO!	20.5
	no	40.8
	yes	27.4
	YES!	11.3
A16 My teachers praise me when I work hard in school	NO!	13.9
	no	36.5
	yes	37.5
	YES!	12.1
A17 My neighbors notice when I am doing a good job and let me know	NO!	39.0
	no	40.1
	yes	15.4
	YES!	5.6
A18 There are people in my neighborhood who are proud of me when I do something well	NO!	31.9
	no	32.6
	yes	26.9
	YES!	8.5
A19 There are people in my neighborhood who encourage me to do my best	NO!	27.6
	no	27.9
	yes	32.2
	YES!	12.3
A20 I like my neighborhood	NO!	8.4
	no	13.6
	yes	48.6
	YES!	29.4

Question	Response	%
A21 I'd like to get out of my neighborhood	NO!	35.8
	no	35.8
	yes	17.9
	YES!	10.4
A22 If I had to move, I would miss the neighborhood I now live in	NO!	11.0
	no	19.4
	yes	36.3
	YES!	33.3
A23a How wrong do your friends feel it would be for YOU to have one or two drinks of an alcoholic beverage nearly every day?	Not Wrong at All	10.7
	A Little Bit Wrong	14.7
	Wrong	22.9
	Very wrong	51.7
A23b How wrong do your friends feel it would be for YOU to use tobacco?	Not Wrong at All	10.0
	A Little Bit Wrong	10.0
	Wrong	19.6
	Very wrong	60.3
A23c How wrong do your friends feel it would be for YOU to use marijuana?	Not Wrong at All	18.3
	A Little Bit Wrong	13.4
	Wrong	15.0
	Very wrong	53.4
A23d How wrong do your friends feel it would be for YOU to use prescription drugs not prescribed to you?	Not Wrong at All	6.4
	A Little Bit Wrong	6.6
	Wrong	17.7
	Very wrong	69.4
A24a How easy would it be for you to get any, if you wanted to get any, beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum)?	Very hard	41.6
	Sort of hard	17.7
	Sort of easy	20.5
	Very easy	20.2

Question	Response	%
A24b If you wanted to get any cigarettes, how easy would it be for you to get some?	Very hard	57.7
	Sort of hard	13.9
	Sort of easy	12.1
	Very easy	16.3
A24c If you wanted to get a handgun, how easy would it be for you to get one?	Very hard	75.1
	Sort of hard	12.1
	Sort of easy	6.4
	Very easy	6.5
A24d If you wanted to get a drug like cocaine, LSD, or amphetamines, how easy would it be for you to get some?	Very hard	80.5
	Sort of hard	9.9
	Sort of easy	5.1
	Very easy	4.5
A24e If you wanted to get any marijuana, how easy would it be for you to get some?	Very hard	60.3
	Sort of hard	10.5
	Sort of easy	11.1
	Very easy	18.1
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 by the police?	NO!	18.5
	no	45.1
	yes	23.4
	YES!	13.0
A26 If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?	NO!	18.4
	no	39.9
	yes	25.3
	YES!	16.4
A27a How wrong would most adults (over 21) in your neighborhood think it was for kids your age to drink alcohol?	Not Wrong at All	5.3
	A Little Bit Wrong	13.7
	Wrong	29.2
	Very wrong	51.7

Question	Response	%
A27b How wrong would most adults (over 21) in your neighborhood think it was for kids your age to smoke cigarettes?	Not Wrong at All	4.9
	A Little Bit Wrong	7.4
	Wrong	24.7
	Very wrong	63.0
A27c How wrong would most adults (over 21) in your neighborhood think it was for kids your age to use marijuana?	Not Wrong at All	5.6
	A Little Bit Wrong	8.9
	Wrong	21.9
	Very wrong	63.6
A28a Have you ever belonged to a gang?	Yes	3.8
	No	96.2
A28b If you have ever belonged to a gang, did that gang have a name?	Yes	3.4
	No	7.9
	I have never belonged to a gang	88.7
A29 How old were you when you first belonged to a gang?	Never	96.2
	10 or younger	1.2
	11	0.7
	12	0.6
	13	0.5
	14	0.3
	15	0.3
	16	0.2
	17 or Older	0.1
A30 In the past 12 months, how many of your best friends have been a member of a gang?	None	92.4
	1	3.4
	2	1.6
	3	0.7
	4	1.9

Question	Response	%
B1 My parents ask me what I think before most family decisions affecting me are made	NO!	12.0
	no	22.6
	yes	43.1
	YES!	22.3
B2 If I had a personal problem, I could ask my mom or dad for help	NO!	7.7
	no	10.7
	yes	37.8
	YES!	43.7
B3 My parents give me lots of chances to do fun things with them	NO!	6.1
	no	13.3
	yes	40.1
	YES!	40.5
B4 My parents notice when I am doing a good job and let me know about it	Never or Almost Never	9.0
	Sometimes	27.1
	Often	30.6
	All the time	33.3
B5 How often do your parents tell you they're proud of you for something you've done?	Never or Almost Never	10.2
	Sometimes	25.6
	Often	31.0
	All the time	33.2
B6a Do you feel very close to your mother?	NO!	5.3
	no	8.4
	yes	27.2
	YES!	59.0
B6b Do you feel very close to your father?	NO!	11.6
	no	13.5
	yes	29.2
	YES!	45.7

Question	Response	%
B7a Do you share your thoughts and feelings with your mother?	NO!	9.7
	no	19.3
	yes	34.0
	YES!	37.0
B7b Do you share your thoughts and feelings with your father?	NO!	17.5
	no	27.1
	yes	31.2
	YES!	24.2
B8a Do you enjoy spending time with your mother?	NO!	3.9
	no	5.0
	yes	33.7
	YES!	57.4
B8b Do you enjoy spending time with your father?	NO!	8.7
	no	7.0
	yes	32.8
	YES!	51.5
B9 When I am not at home, one of my parents knows where I am and who I am with.	NO!	2.6
	no	4.9
	yes	35.0
	YES!	57.6
B10 If you skipped school, would you be caught by your parents?	NO!	4.0
	no	7.4
	yes	28.4
	YES!	60.2
B11 My parents ask if I've gotten my homework done.	NO!	6.1
	no	13.3
	yes	33.0
	YES!	47.6

Question	Response	%
B12 Would your parents know if you did not come home on time?	NO!	3.7
	no	10.8
	yes	34.8
	YES!	50.7
B13 The rules in my family are clear.	NO!	3.3
	no	9.7
	yes	40.3
	YES!	46.7
B14 If you carried a handgun without your parents' permission, would you be caught by them?	NO!	4.3
	no	7.3
	yes	20.1
	YES!	68.3
B15 People in my family often insult or yell at each other.	NO!	28.3
	no	39.0
	yes	21.2
	YES!	11.6
B16 We argue about the same things in my family over and over.	NO!	26.3
	no	35.4
	yes	26.2
	YES!	12.1
B17 People in my family have serious arguments.	NO!	34.7
	no	37.2
	yes	18.1
	YES!	10.0
B18 If you drank some beer, wine, or hard liquor (such as vodka, whiskey, gin, or rum) without your parents' permission, would you be caught by them?	NO!	8.6
	no	20.2
	yes	23.2
	YES!	48.1

Question	Response	%
B19 My family has clear rules about alcohol and drug use.	NO!	3.9
	no	9.2
	yes	28.1
	YES!	58.8
B20a About how many adults (over 21) have you known personally who in the past year have: Gotten drunk or high?	None	45.9
	1	12.8
	2	11.2
	3 or 4	11.8
	5 or more	18.4
B20b About how many adults (over 21) have you known personally who in the past year have: Used marijuana, crack, cocaine, or other drugs?	None	74.3
	1	9.4
	2	5.7
	3 or 4	4.5
	5 or more	6.1
B20c About how many adults (over 21) have you known personally who in the past year have: Sold or dealt drugs?	None	88.0
	1	5.2
	2	2.5
	3 or 4	1.8
	5 or more	2.5
B20d About how many adults (over 21) have you known personally who in the past year have: Done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?	None	86.9
	1	6.0
	2	2.7
	3 or 4	1.8
	5 or more	2.6

Question	Response	%
B21a How many of your brothers or sisters ever: Drank beer, wine or hard liquor (for example, vodka, whiskey or gin)?	I don't have any	16.0
	None	61.2
	1	13.6
	2	5.5
	3 or 4	2.3
	5 or more	1.3
B21b How many of your brothers or sisters ever: Smoked cigarettes?	I don't have any	17.0
	None	69.8
	1	8.7
	2	2.7
	3 or 4	1.0
	5 or more	0.8
B21c How many of your brothers or sisters ever: Used marijuana?	I don't have any	17.0
	None	66.7
	1	10.1
	2	3.7
	3 or 4	1.5
	5 or more	1.0
B21d How many of your brothers or sisters ever: Took a handgun to school?	I don't have any	17.9
	None	81.6
	1	0.3
	2	0.1
	3 or 4	0.1
	5 or more	0.2
B21e How many of your brothers or sisters ever: Been suspended or expelled from school?	I don't have any	16.0
	None	68.5
	1	11.1
	2	2.7
	3 or 4	1.1
	5 or more	0.6

Question	Response	%
B22 Has anyone in your family ever had a severe alcohol or drug problem?	Yes	27.7
	No	72.3
B23a How wrong do your parents feel it would be for you to: Pick a fight with someone?	Not Wrong at All	4.5
	A Little Bit Wrong	18.8
	Wrong	34.9
	Very wrong	41.8
B23b How wrong do your parents feel it would be for you to: Steal anything worth more than $5	Not Wrong at All	2.9
	A Little Bit Wrong	4.0
	Wrong	24.1
	Very wrong	69.0
B23c How wrong do your parents feel it would be for you to: Draw graffiti, or write things or draw pictures on buildings or other property (without the owner's permission)?	Not Wrong at All	3.3
	A Little Bit Wrong	4.9
	Wrong	22.1
	Very wrong	69.7
B23d How wrong do your parents feel it would be for you to: Drink beer, wine or hard liquor (for example, vodka, whiskey, or gin) regularly?	Not Wrong at All	3.8
	A Little Bit Wrong	6.6
	Wrong	18.4
	Very wrong	71.2
B23e How wrong do your parents feel it would be for you to: Smoke cigarettes?	Not Wrong at All	3.2
	A Little Bit Wrong	2.3
	Wrong	12.4
	Very wrong	82.1
B23f How wrong do your parents feel it would be for you to: Use marijuana	Not Wrong at All	4.9
	A Little Bit Wrong	6.0
	Wrong	13.6
	Very wrong	75.5

Question	Response	%
B24a How many times have you? Worried that food at home would run out before your family got money to buy more?	Never	78.3
	I've done it, but not in the past year	10.0
	Less than once a month	4.3
	About once a month	2.9
	2 or 3 times a month	2.2
	Once a week or more	2.3
B24b How many times have you? Skipped a meal because your family didn't have enough money to buy food?	Never	88.4
	I've done it, but not in the past year	5.4
	Less than once a month	2.3
	About once a month	1.3
	2 or 3 times a month	1.2
	Once a week or more	1.4
C1 I like to see how much I can get away with.	Very false	55.8
	Somewhat false	23.8
	Somewhat true	16.5
	Very true	3.9
C2 I ignore the rules that get in my way.	Very false	60.7
	Somewhat false	24.1
	Somewhat true	12.3
	Very true	2.9
C3 I do the opposite of what people tell me, just to get them mad.	Very false	66.7
	Somewhat false	21.0
	Somewhat true	10.0
	Very true	2.3
C4 In the past 12 months, have you felt depressed or sad MOST days, even if you felt OK sometimes?	NO!	37.5
	no	24.5
	yes	24.1
	YES!	13.9

Question	Response	%
C5 Sometimes I think that life is not worth it.	NO!	53.2
	no	21.8
	yes	17.1
	YES!	7.9
C6 At times, I think I am no good at all.	NO!	42.0
	no	21.7
	yes	25.2
	YES!	11.2
C7 All in all, I am inclined to think that I am a failure.	NO!	50.3
	no	26.3
	yes	15.0
	YES!	8.4
C8a How much do you think people risk harming themselves if they take one or two drinks of an alcoholic beverage (beer, wine, hard liquor) nearly every day?	No risk	13.6
	Slight risk	19.0
	Moderate risk	30.3
	Great risk	37.1
C8b How much do you think people risk harming themselves if they take five or more drinks of an alcoholic beverage (beer, wine, hard liquor) once or twice a week?	No risk	12.8
	Slight risk	15.6
	Moderate risk	31.1
	Great risk	40.5
C8c How much do you think people risk harming themselves if they smoke one or more packs of cigarettes per day?	No risk	11.8
	Slight risk	8.0
	Moderate risk	17.4
	Great risk	62.8
C8d How much do you think people risk harming themselves if they try marijuana once or twice?	No risk	32.9
	Slight risk	24.7
	Moderate risk	17.0
	Great risk	25.4

Question	Response	%
C8e How much do you think people risk harming themselves if they use marijuana once or twice a week?	No risk	23.2
	Slight risk	19.0
	Moderate risk	23.9
	Great risk	34.0
C8f How much do you think people risk harming themselves if they use marijuana regularly?	No risk	18.5
	Slight risk	12.3
	Moderate risk	17.5
	Great risk	51.6
C8g How much do you think people risk harming themselves if they use prescription drugs that are not prescribed to them?	No risk	10.4
	Slight risk	6.7
	Moderate risk	20.4
	Great risk	62.6
C9 How often do you attend religious services or activities?	Never	32.8
	Rarely	30.2
	1-2 times a month	14.2
	Once a week or more	22.8
C10a How wrong do you think it is for someone your age to stay away from school all day when their parents think they are at school?	Not Wrong at All	4.6
	A Little Bit Wrong	15.1
	Wrong	32.7
	Very wrong	47.6
C10b How wrong do you think it is for someone your age to take a handgun to school?	Not Wrong at All	2.7
	A Little Bit Wrong	0.8
	Wrong	4.1
	Very wrong	92.4
C10c How wrong do you think it is for someone your age to steal anything worth more than $5?	Not Wrong at All	3.6
	A Little Bit Wrong	10.6
	Wrong	31.2
	Very wrong	54.6

Question	Response	%
C10d How wrong do you think it is for someone your age to pick a fight with someone?	Not Wrong at All	6.0
	A Little Bit Wrong	19.3
	Wrong	34.1
	Very wrong	40.7
C10e How wrong do you think it is for someone your age to attack someone with the idea of seriously hurting them?	Not Wrong at All	3.3
	A Little Bit Wrong	4.6
	Wrong	17.7
	Very wrong	74.4
C10f How wrong do you think it is for someone your age to drink beer, wine, or hard liquor (for example, vodka, whiskey, gin, or rum) regularly?	Not Wrong at All	5.0
	A Little Bit Wrong	11.2
	Wrong	22.3
	Very wrong	61.5
C10g How wrong do you think it is for someone your age to smoke cigarettes?	Not Wrong at All	4.2
	A Little Bit Wrong	6.9
	Wrong	18.9
	Very wrong	70.0
C10h How wrong do you think it is for someone your age to use LSD, cocaine, amphetamines or another illegal drug?	Not Wrong at All	3.3
	A Little Bit Wrong	3.6
	Wrong	11.2
	Very wrong	81.9
C10i How wrong do you think it is for someone your age to use marijuana?	Not Wrong at All	14.1
	A Little Bit Wrong	14.0
	Wrong	14.9
	Very wrong	57.0

Question	Response	%
C11a How many times have you done what feels good no matter what?	Never	53.4
	I've done it, but not in the past year	13.3
	Less than once a month	10.2
	About once a month	6.8
	2 or 3 times a month	7.0
	Once a week or more	9.4
C11b How many times have you done something dangerous because someone dared you to do it?	Never	63.3
	I've done it, but not in the past year	18.1
	Less than once a month	9.7
	About once a month	4.3
	2 or 3 times a month	2.7
	Once a week or more	1.9
C11c How many times have you done crazy things even if they are a little dangerous?	Never	50.3
	I've done it, but not in the past year	21.4
	Less than once a month	12.9
	About once a month	6.7
	2 or 3 times a month	4.9
	Once a week or more	3.9
C12a What are the chances you would be seen as cool if you: carried a handgun?	No or very little chance	86.9
	Little chance	7.1
	Some chance	3.1
	Pretty good chance	1.4
	Very good chance	1.5
C12b What are the chances you would be seen as cool if you: began drinking alcoholic beverages regularly, that is, at least once or twice a month?	No or very little chance	70.1
	Little chance	12.9
	Some chance	9.0
	Pretty good chance	5.3
	Very good chance	2.7

Question	Response	%
C12c What are the chances you would be seen as cool if you: smoked cigarettes?	No or very little chance	82.0
	Little chance	9.6
	Some chance	4.4
	Pretty good chance	2.2
	Very good chance	1.8
C12d What are the chances you would be seen as cool if you: used marijuana?	No or very little chance	65.7
	Little chance	11.5
	Some chance	9.8
	Pretty good chance	7.2
	Very good chance	5.7
C13 I think it is okay to take something without asking as long as you get away with it.	NO!	66.5
	no	29.1
	yes	3.4
	YES!	0.9
C14 It is alright to beat people up if they start the fight.	NO!	38.8
	no	22.0
	yes	24.5
	YES!	14.7
C15 I think sometimes it's okay to cheat at school.	NO!	48.2
	no	31.7
	yes	17.1
	YES!	3.0
C16 It is important to be honest with your parents, even if they become upset or you get punished.	NO!	12.9
	no	9.3
	yes	37.0
	YES!	40.7

Question	Response	%
C17a Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Been arrested?	None	93.8
	1	3.8
	2	1.3
	3	0.4
	4	0.7
C17b Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Dropped out of school?	None	95.8
	1	3.1
	2	0.6
	3	0.2
	4	0.2
C17c Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Stolen or tried to steal a motor vehicle such as a car or motorcycle?	None	97.4
	1	1.7
	2	0.5
	3	0.2
	4	0.3
C17d Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Been suspended from school?	None	81.1
	1	11.3
	2	4.0
	3	1.4
	4	2.2
C17e Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Carried a handgun?	None	96.9
	1	1.8
	2	0.6
	3	0.3
	4	0.5

Question	Response	%
C17f Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Tried beer, wine, or hard liquor when their parents didn't know about it?	None	66.3
	1	10.7
	2	8.2
	3	4.1
	4	10.8
C17g Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Smoked cigarettes?	None	86.6
	1	7.0
	2	3.3
	3	1.1
	4	2.0
C17h Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Sold illegal drugs?	None	92.6
	1	4.0
	2	1.7
	3	0.5
	4	1.2
C17i Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Used LSD, cocaine, amphetamines or another illegal drug?	None	94.1
	1	3.3
	2	1.3
	3	0.5
	4	0.8
C17j Think of up to four of your best friends (the friends you feel closest to). In the past 12 months, how many of your best friends have: Used marijuana?	None	72.6
	1	8.5
	2	6.1
	3	3.6
	4	9.2

Question	Response	%
D1a During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Table games like poker or other card games, dice, backgammon, or dominoes	Not at all	88.7
	Less than once a month	7.8
	1 to 3 times a month	2.2
	More than 3 times a month	1.3
D1b During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Lottery (scratch cards, numbers, etc.)	Not at all	79.8
	Less than once a month	14.6
	1 to 3 times a month	4.0
	More than 3 times a month	1.6
D1c During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Sporting events or sports pools	Not at all	87.3
	Less than once a month	6.9
	1 to 3 times a month	3.1
	More than 3 times a month	2.7
D1d During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Online (Internet) gambling	Not at all	95.7
	Less than once a month	2.2
	1 to 3 times a month	0.9
	More than 3 times a month	1.1
D1e During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Personal skill games (such as pool, darts, coin tossing, video games)	Not at all	81.8
	Less than once a month	9.7
	1 to 3 times a month	4.0
	More than 3 times a month	4.5

Question	Response	%
D1f During the past 12 months, how often have you bet/gambled, even casually, for money or valuables in the following ways: Bet/gambled in some other way	Not at all	89.0
	Less than once a month	7.5
	1 to 3 times a month	2.1
	More than 3 times a month	1.4
D2 How many times (if any) have you, in your lifetime bet/gambled for money or anything of value?	0	66.3
	1-2	14.4
	3-5	8.2
	6-9	4.0
	10-19	3.2
	20-39	1.6
	40 or more	2.3
D3 In the past 30 days, have you bet/gambled for money or anything of value?	Yes	9.3
	No	90.7
D4a Have you ever felt the need to: Bet more and more money?	Yes	4.7
	No	95.3
D4b Have you ever felt the need to: Lie to important people (such as your family/ friends) about how much you gamble?	Yes	2.8
	No	97.2
D5 If you drank alcohol during the past 12 months, how did you usually get it?	Did not drink any alcohol	76.7
	Bought it in a store	1.1
	Bought it at a restaurant, bar or club	0.7
	Bought it at a public event such as a concert or sporting event	0.8
	Gave someone money to buy it for me	6.8
	Parents provided it to me	6.2
	Friends' parents provided it to me	4.5
	Friends, brothers, or sisters over 21 provided it to me	6.0
	Friends, brothers, or sisters under 21 provided it to me	3.9
	Other relatives (uncles, aunts, cousins, grandparents, etc.) provided it to me	3.5
	Other source provided it to me	5.8
	Took without permission, stole, or found it (my home, friend's home, store, etc.)	8.2

Question	Response	%
D6 If you used any prescription drugs without a prescription during the last 12 months, how did you get them?	I did not take any prescription drugs without a doctor's prescription	96.2
	Took them from a family member living in my home	1.7
	Took them from other relatives not living in my home	0.5
	Took them from someone not related to me	0.6
	A friend or family member gave them to me	1.6
	Bought them from someone	1.0
	Ordered them over the Internet	0.4
D7a How often have you: Driven a motor vehicle while or shortly after drinking?	I don't drive/Never	97.6
	Before, but not in the past year	0.8
	About once or twice a year	1.0
	About once or twice a month	0.3
	About once or twice a week	0.1
	Almost every day	0.1
D7b How often have you: Driven a motor vehicle while or shortly after using marijuana (pot, hash, cannabis, weed)?	I don't drive/Never	96.3
	Before, but not in the past year	0.7
	About once or twice a year	1.3
	About once or twice a month	0.6
	About once or twice a week	0.6
	Almost every day	0.5
D8 On an average school night, how many hours of sleep do you get?	4 or less hours	8.1
	5 hours	10.4
	6 hours	19.4
	7 hours	24.9
	8 hours	23.1
	9 hours	9.9
	10 or more hours	4.1

Question	Response	%
D9 In the last two weeks, how often have you felt tired or sleepy during the day?	Everyday	32.2
	Several times	32.4
	Twice	15.4
	Once	12.1
	Never	7.8
E1a In the past 12 months, how often have you: Been threatened to be hit or beaten up on school property?	Never	81.1
	Once	9.6
	2 or 3 times	5.5
	4 or 5 times	1.6
	6 to 9 times	0.5
	10 or more times	1.7
E1b In the past 12 months, how often have you: Been attacked and hit by someone or beaten up on school property?	Never	92.4
	Once	4.6
	2 or 3 times	1.8
	4 or 5 times	0.4
	6 to 9 times	0.2
	10 or more times	0.6
E1c In the past 12 months, how often have you: Been threatened by someone with a weapon on school property?	Never	96.1
	Once	2.6
	2 or 3 times	0.7
	4 or 5 times	0.2
	6 to 9 times	0.1
	10 or more times	0.3
E1d In the past 12 months, how often have you: Been attacked by someone with a weapon on school property?	Never	98.9
	Once	0.6
	2 or 3 times	0.2
	4 or 5 times	0.1
	6 to 9 times	0.0
	10 or more times	0.2

Question	Response	%
E2 How many times in the past 12 months have you been offered, given, or sold an illegal drug on school property?	Never	91.5
	1 or 2 times	5.5
	3 to 5 times	1.7
	6 to 9 times	0.5
	10 or more times	0.9
E3 In the past 12 months, in which of the following activities did you participate?	Organized community activities (such as scouting, 4H, service clubs, YMCA, etc)	21.8
	Family supported activities or hobbies (such as dance, gymnastics, hiking, biking, skating, etc.)	43.6
	School sponsored activities (such as sports, music, clubs, after school programs, etc.)	60.0
	Faith-based activities (such as choir, youth group, mission, church leagues, etc)	21.9
	Job, employed	25.2
	Volunteer	27.0
	Other activities	29.3
	I do not participate	14.7
E4 How many times in your lifetime have you: Brought a weapon (such as a handgun, knife, etc.) to school?	0 times	96.4
	1 or 2 times	2.8
	3 to 5 times	0.3
	6 to 9 times	0.2
	10 to 19 times	0.1
	20 to 39 times	0.1
	40 or more times	0.2

Question	Response	%
E5 How many times in the last 30 days have you: Brought a weapon (such as a handgun, knife, etc.) to school?	Never	99.1
	1 or 2 times	0.5
	3 to 5 times	0.1
	6 to 9 times	0.1
	10 or more times	0.2
E6a How many times in the past 12 months have you: Attacked someone with the idea of seriously hurting them?	0 times	95.4
	1 or 2 times	3.5
	3 to 5 times	0.6
	6 to 9 times	0.2
	10 to 19 times	0.1
	20 to 39 times	0.0
	40 or more times	0.1
E6b How many times in the past 12 months have you: Been arrested?	0 times	98.5
	1 or 2 times	1.1
	3 to 5 times	0.2
	6 to 9 times	0.1
	10 to 19 times	0.0
	20 to 39 times	0.0
	40 or more times	0.1
E6c How many times in the past 12 months have you: Been drunk or high at school?	0 times	93.8
	1 or 2 times	3.0
	3 to 5 times	1.1
	6 to 9 times	0.5
	10 to 19 times	0.5
	20 to 39 times	0.4
	40 or more times	0.7
E6d How many times in the past 12 months have you: Been suspended from school?	0 times	92.9
	1 or 2 times	5.3
	3 to 5 times	0.9
	6 to 9 times	0.4
	10 to 19 times	0.3
	20 to 39 times	0.1
	40 or more times	0.1

Question	Response	%
E6e How many times in the past 12 months have you: Sold illegal drugs?	0 times	97.7
	1 or 2 times	1.0
	3 to 5 times	0.4
	6 to 9 times	0.3
	10 to 19 times	0.1
	20 to 39 times	0.1
	40 or more times	0.3
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 difficult to express verbally?	0 times	85.6
	1 or 2 times	6.8
	3 to 5 times	3.0
	6 to 9 times	1.5
	10 to 19 times	1.2
	20 to 39 times	0.8
	40 or more times	1.1
E7 In the past 12 months, have you or your family lived in a shelter, hotel, motel, car, campground, or someone else's home, etc. due to loss of housing, lack of money, or did not have another place to stay?	No	96.1
	Yes, but for less than a month	1.9
	Yes, but for more than a month	1.0
	Yes, for most of the year	0.9
E8 In the past 12 months, did you ever live away from your parents or guardians because you were kicked out, ran away, or were abandoned?	Yes	5.0
	No	95.0
E9a How many times have you changed homes in the past 12 months?	Never	85.6
	1	9.7
	2	2.4
	3 or more	2.3
E9b How many times have you changed homes including the last 12 months, in the last three years?	Never	73.7
	1	15.7
	2	5.5
	3 or more	5.0

Question	Response	%
F1a During the past 12 months, have you been bullied through texting and/or social media?	NO!	62.8
	no	23.3
	yes	10.1
	YES!	3.9
F1b Have you stayed home from school this year because you were worried about being bullied?	NO!	75.4
	no	20.0
	yes	2.9
	YES!	1.7
F1c Do adults at your school stop bullying when they see/hear it or when a student tells them about it?	NO!	23.9
	no	21.3
	yes	33.9
	YES!	20.9
F1d Please state whether you have been bullied during the past 12 months.	No	72.9
	Yes, very rarely	12.9
	Yes, now and then	8.5
	Yes, several times per month	2.2
	Yes, several times per week	1.5
	Yes, almost daily	2.0
F1e If you have been bullied in any way in the past 12 months, where were you bullied?	I was not bullied	73.5
	On school property	21.4
	At a school-sponsored event	3.7
	While going to or from school	4.7
	In the community	5.2
	At home	7.1

Question	Response	%
F1f If you have been bullied in the past 12 months by other students, why were you bullied?	I have not been made fun of by other students	69.9
	I don't know why	10.5
	The color of my skin	2.5
	My religion	1.7
	My size (height, weight, etc.)	10.8
	My accent	1.1
	The country I was born in	0.9
	The country my family (parents, grandparents) was born in	1.2
	The way I look (clothing, hairstyle, etc.)	12.6
	How much money my family has or does not have	3.4
	My gender	1.9
	My grades or school achievement	3.8
	My social standing	5.1
	Social conflict	4.2
	My sexual-orientation	3.3
	I have a disability (learning or physical disability)	1.8
	Some other reason	12.2
F2 If you were hurt or abused by another person in the past 12 months, how were you hurt or abused?	Physical injury	23.3
	Threats	21.1
	Emotional abuse, insults, name-calling	61.6
	Isolation from friends and family	13.2
	Control of what you were wearing	7.5
	Control with whom you socialized	11.8
	Other injury or abuse	12.7
F3 In the past 12 months, did anyone when using technology ever try to get you to talk online about sex, look at sexual pictures, or do something else sexual?	Yes	21.0
	No	79.0

Question	Response	%
F4a Did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	Yes	25.2
	No	74.8
F4b Did you ever seriously consider attempting suicide?	Yes	16.2
	No	83.8
F4c Did you make a plan about how you would attempt suicide?	Yes	12.9
	No	87.1
F4d How many times did you actually attempt suicide?	0 times	90.3
	1 time	4.9
	2 or 3 times	3.2
	4 or 5 times	0.9
	6 or more times	0.7
F4e If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning or overdose that had to be treated by a doctor or nurse?	I did not attempt suicide during the past 12 months	79.3
	Yes	2.0
	No	18.7
F5 In the past 12 months, have any of your friends or family members close to you died?	Yes	39.1
	No	60.9

Question	Response	%

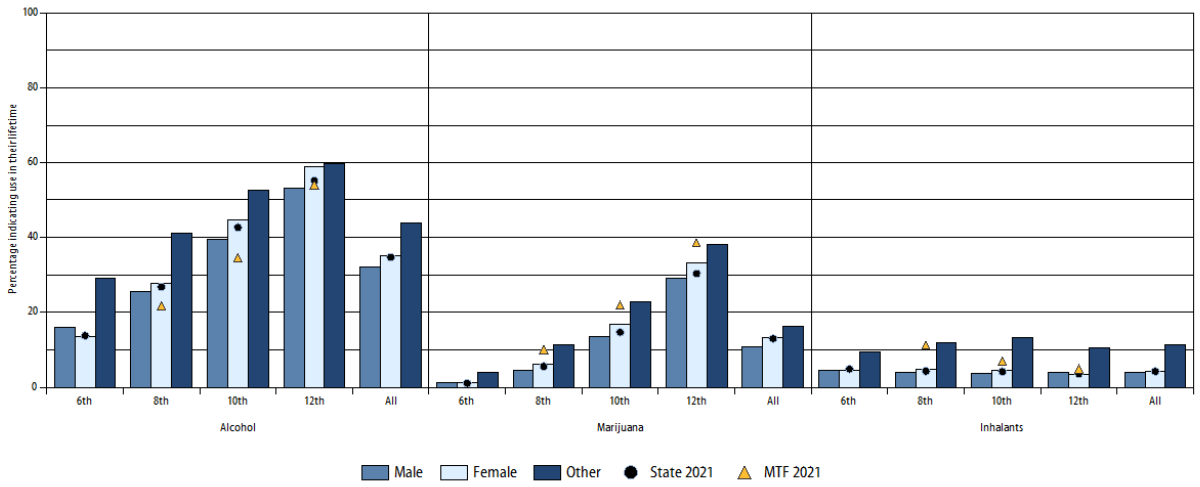
Appendix C: PAYS Summary Data by Gender

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

ATOD Use and Access by Gender

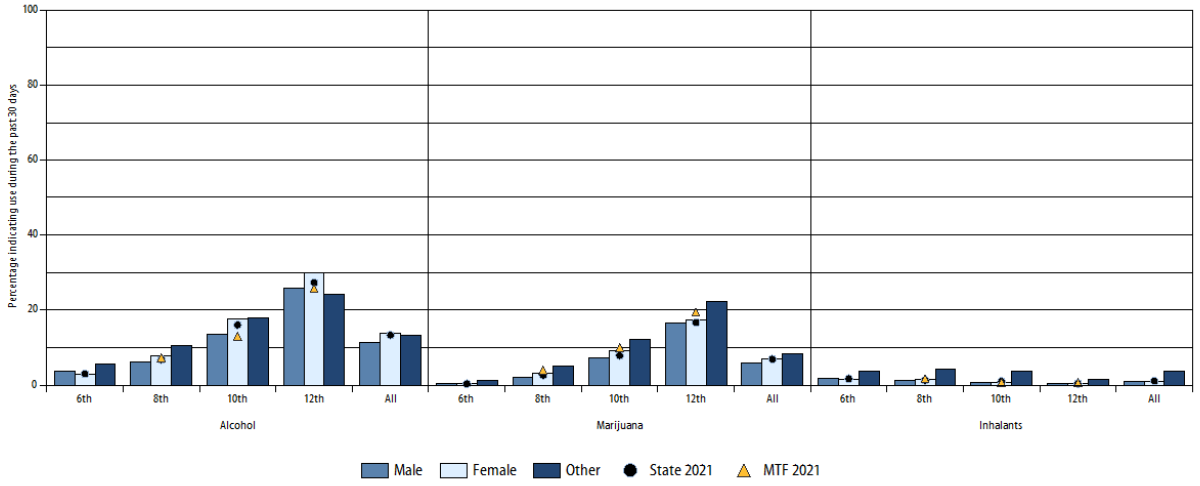
Early initiation and higher prevalence drugs - Lifetime use, Statewide Sample 2021 PAYS

Early initiation and higher prevalence drugs - Lifetime use
Students by Gender 2021 Pennsylvania Youth Survey



Early initiation and higher prevalence drugs - 30-day use, Statewide Sample 2021 PAYS

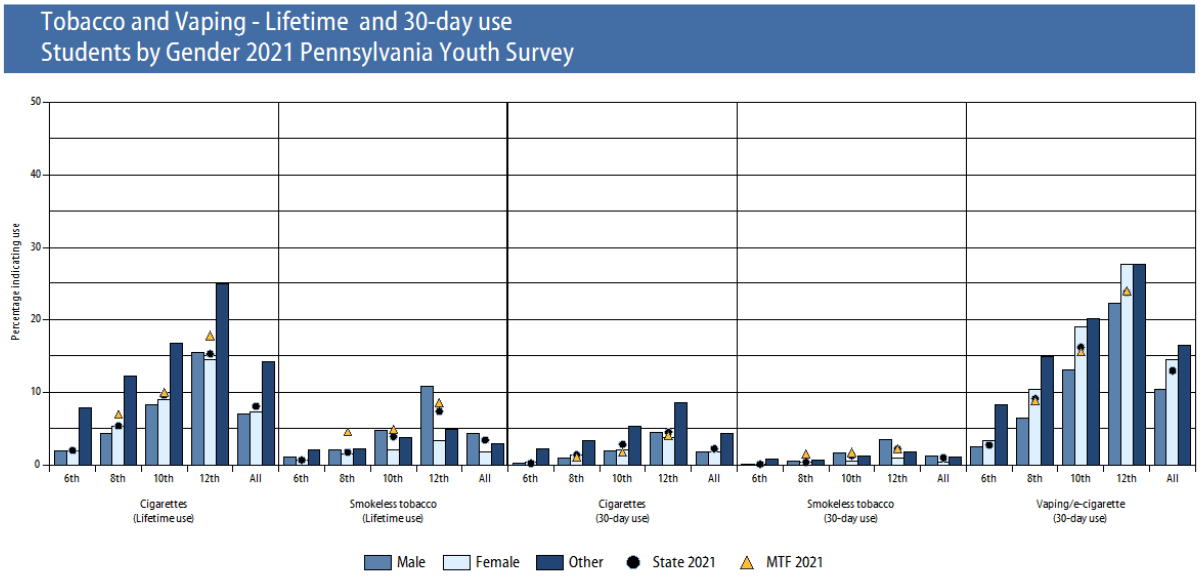
Early initiation and higher prevalence drugs - 30-day use
Students by Gender 2021 Pennsylvania Youth Survey



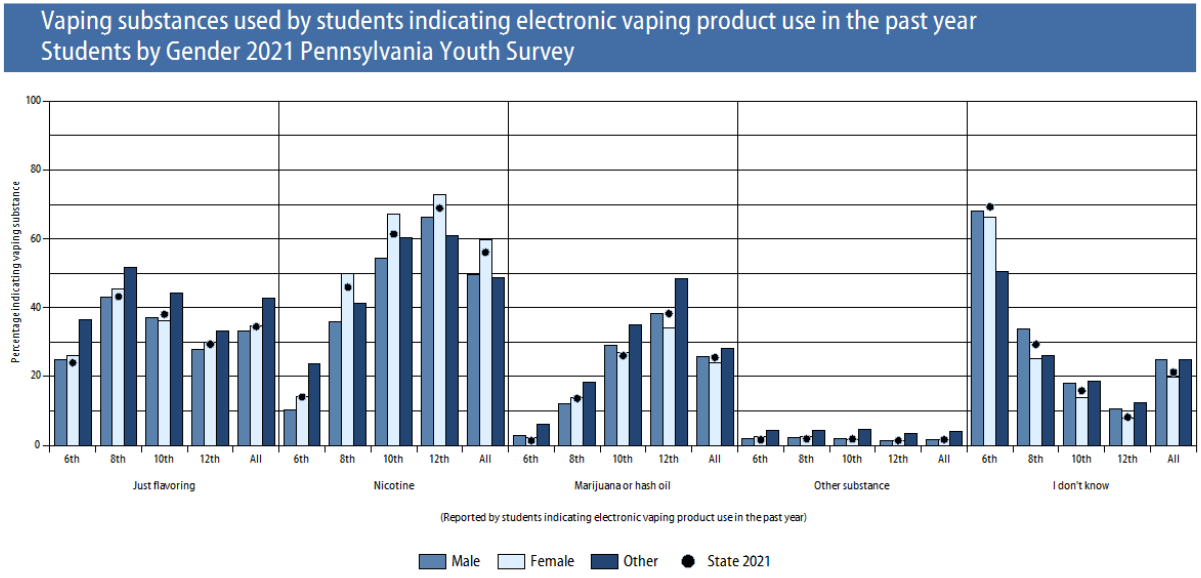
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

ATOD Use and Access by Gender

Tobacco and Vaping - Lifetime and 30-day use, Statewide Sample 2021 PAYS



Vaping Substances Used During the Past 12 Months (of past-year users), Statewide Sample 2021 PAYS

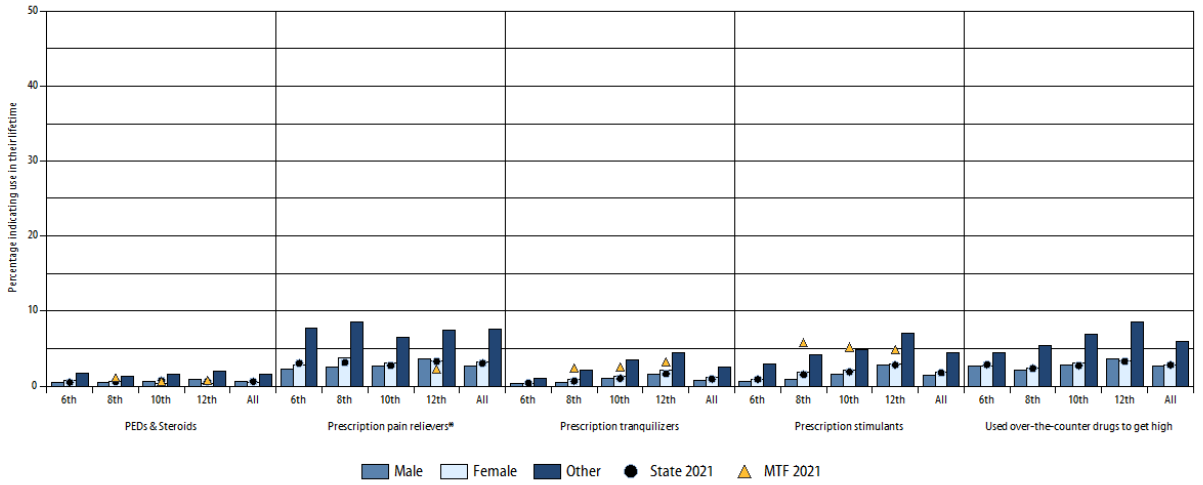


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

ATOD Use and Access by Gender

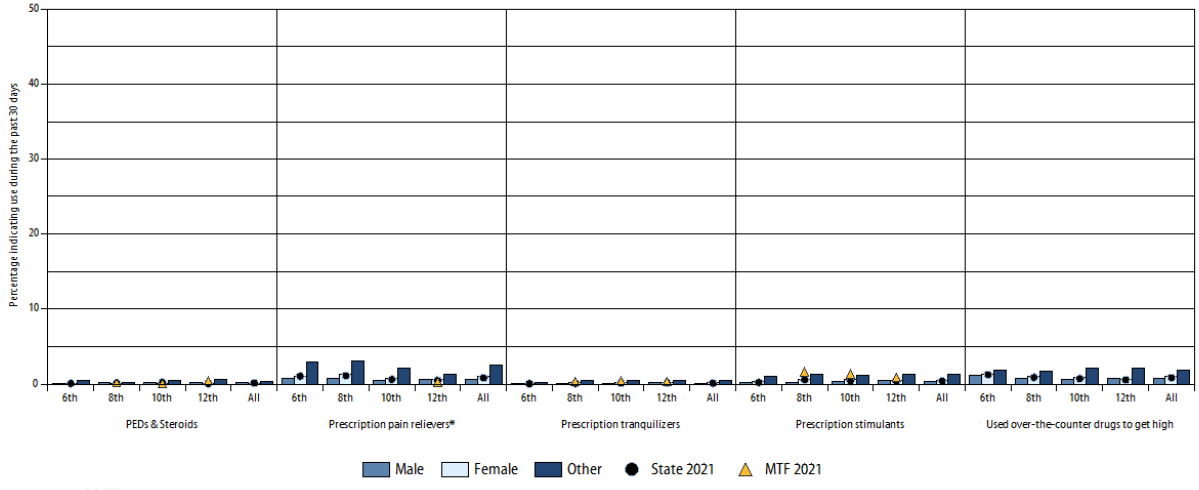
Prescription and over-the-counter drugs and medications - Lifetime, Statewide Sample 2021 PAYS

Prescription and over-the-counter drugs and medications - Lifetime use
Students by Gender 2021 Pennsylvania Youth Survey



Prescription and over-the-counter drugs and medications - 30-day use, Statewide Sample 2021 PAYS

Prescription and over-the-counter drugs and medications - 30-day use
Students by Gender 2021 Pennsylvania Youth Survey

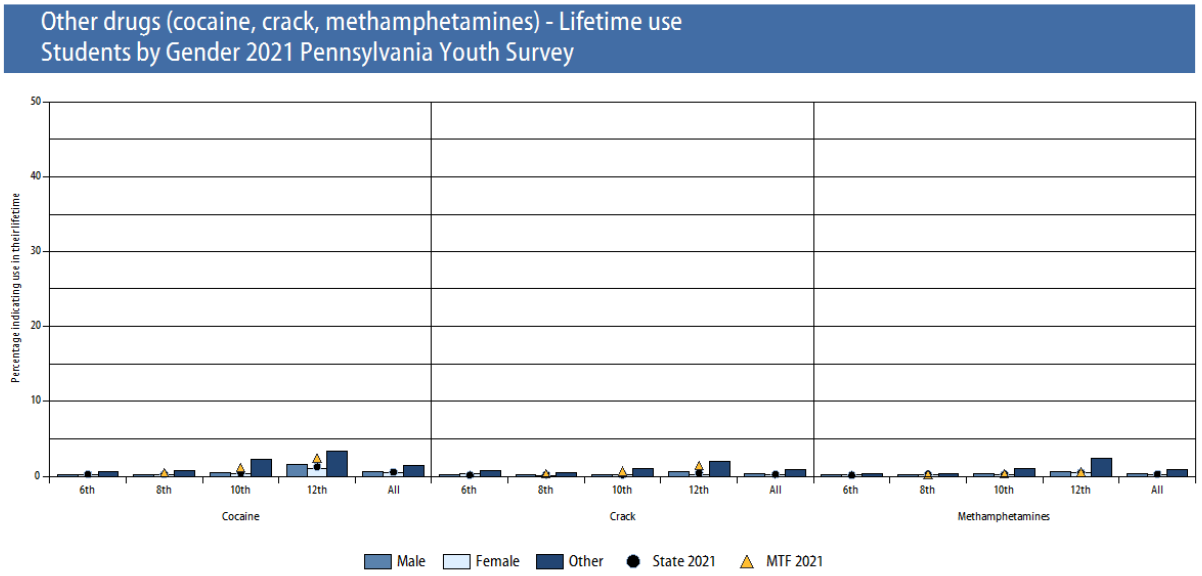


NOTE:
*The most recent national data available for lifetime narcotic prescription drug use in 8th and 10th graders are from the 2014 Monitoring the Future administration. (However, 12th grade data are from the 2017 administration.)

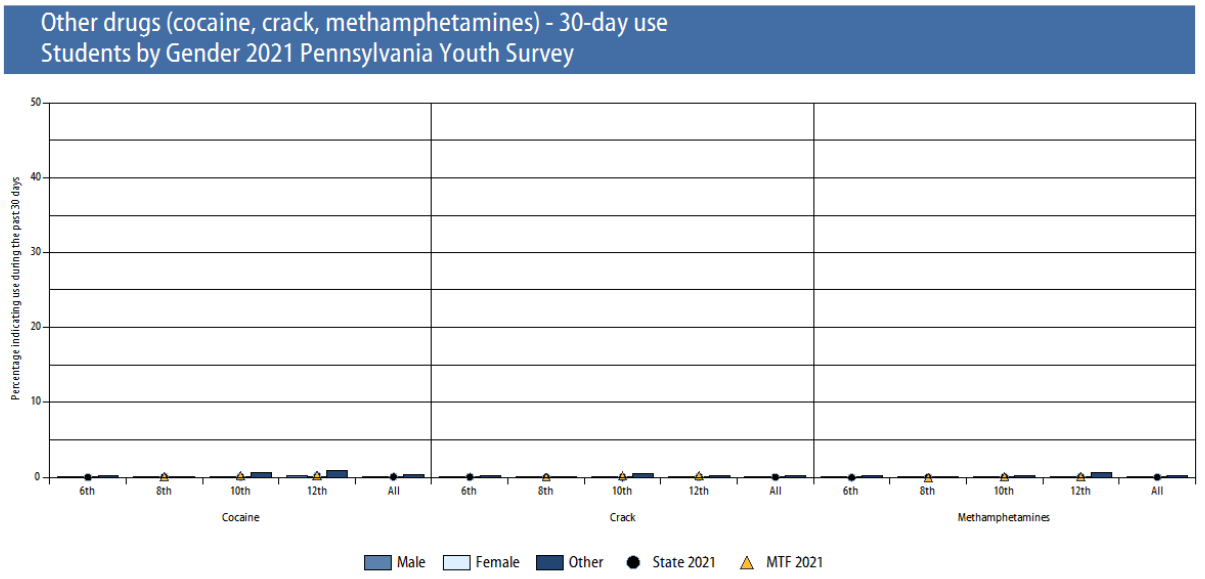
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

ATOD Use and Access by Gender

Other drugs (cocaine, crack, methamphetamines) - Lifetime, Statewide Sample 2021 PAYS



Other drugs (cocaine, crack, methamphetamines) - 30-day use, Statewide Sample 2021 PAYS

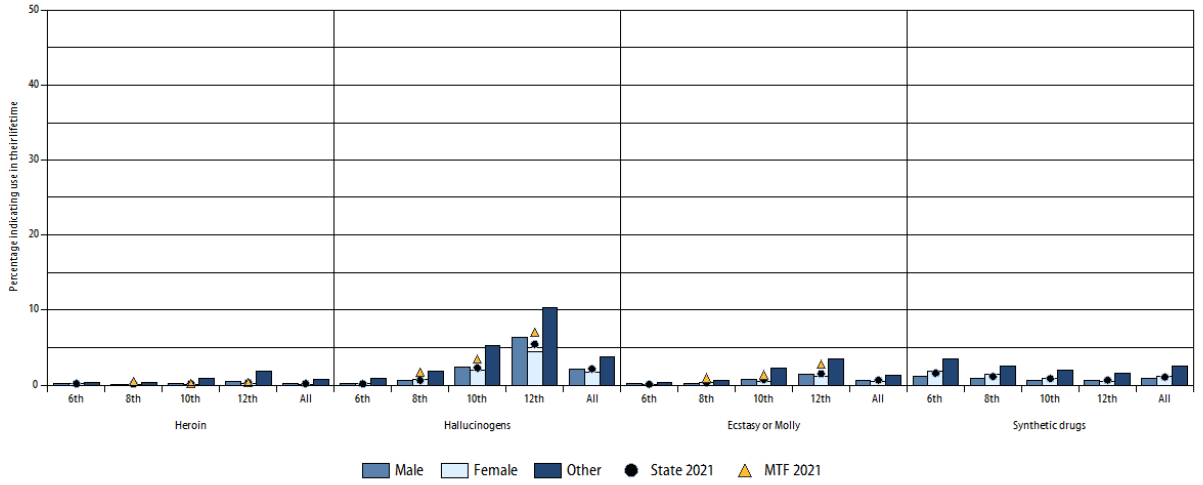


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

ATOD Use and Access by Gender

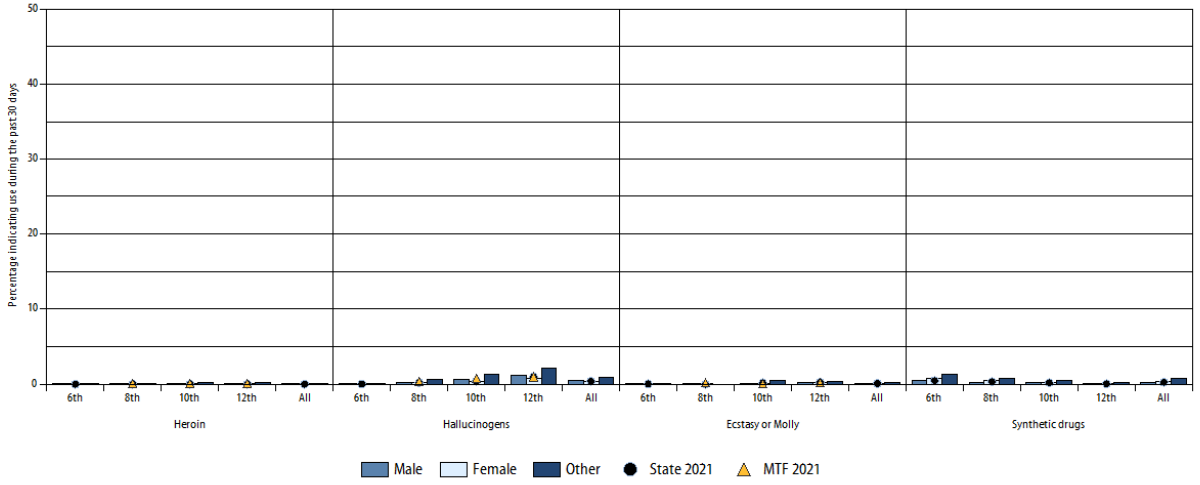
Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use, Statewide Sample 2021 PAYS

Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - Lifetime use
Students by Gender 2021 Pennsylvania Youth Survey



Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use, Statewide Sample 2021 PAYS

Other drugs (heroin, hallucinogens, ecstasy, and synthetic drugs) - 30-day use
Students by Gender 2021 Pennsylvania Youth Survey



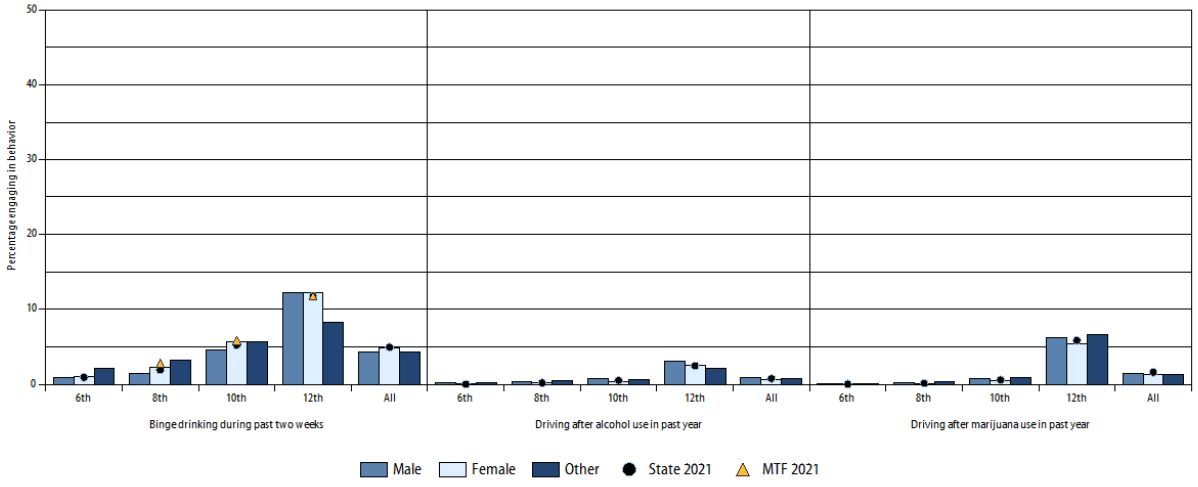
NOTE:
*The most recent national data available for 30-day synthetic drug use are from the 2014 Monitoring the Future administration.

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

ATOD Use and Access by Gender

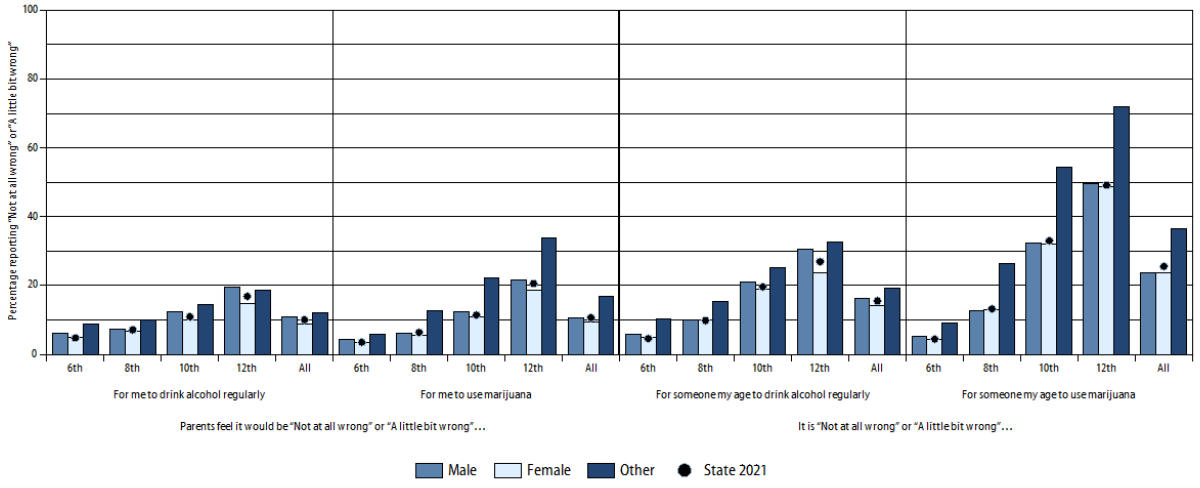
Risky substance use-related behavior, Statewide Sample 2021 PAYS

Risky substance use-related behavior
Students by Gender 2021 Pennsylvania Youth Survey



Access and willingness to use, Statewide Sample 2021 PAYS

Attitudes favorable toward drug use
Students by Gender 2021 Pennsylvania Youth Survey

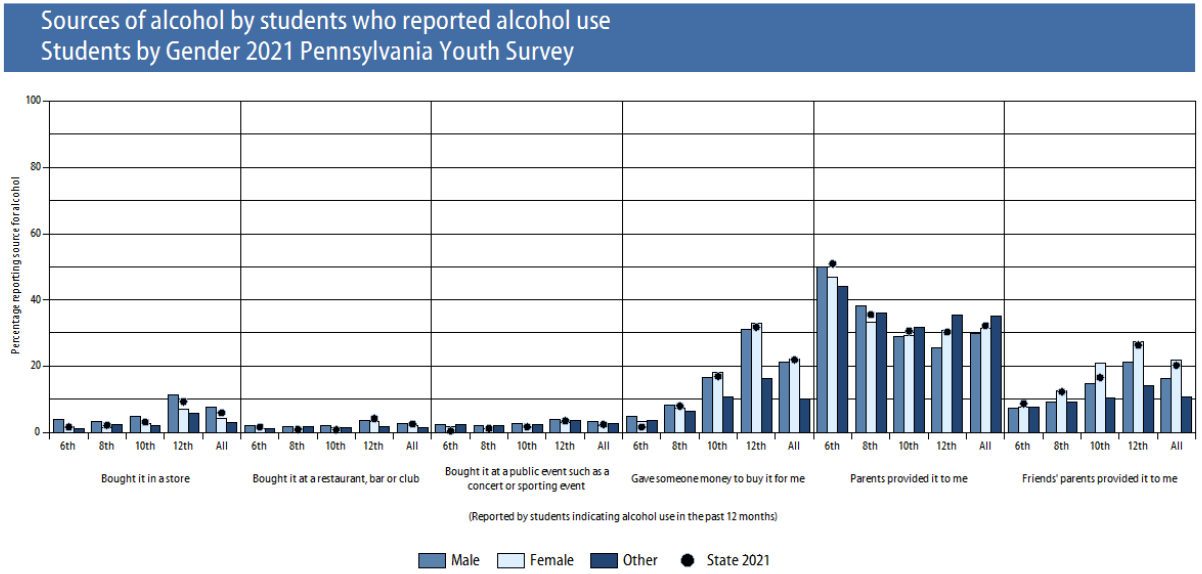


NOTE:
*Questions were revised in 2017 to add the qualifier "before you are 21." Rates reported in 2017 may be lower than previous years' data.

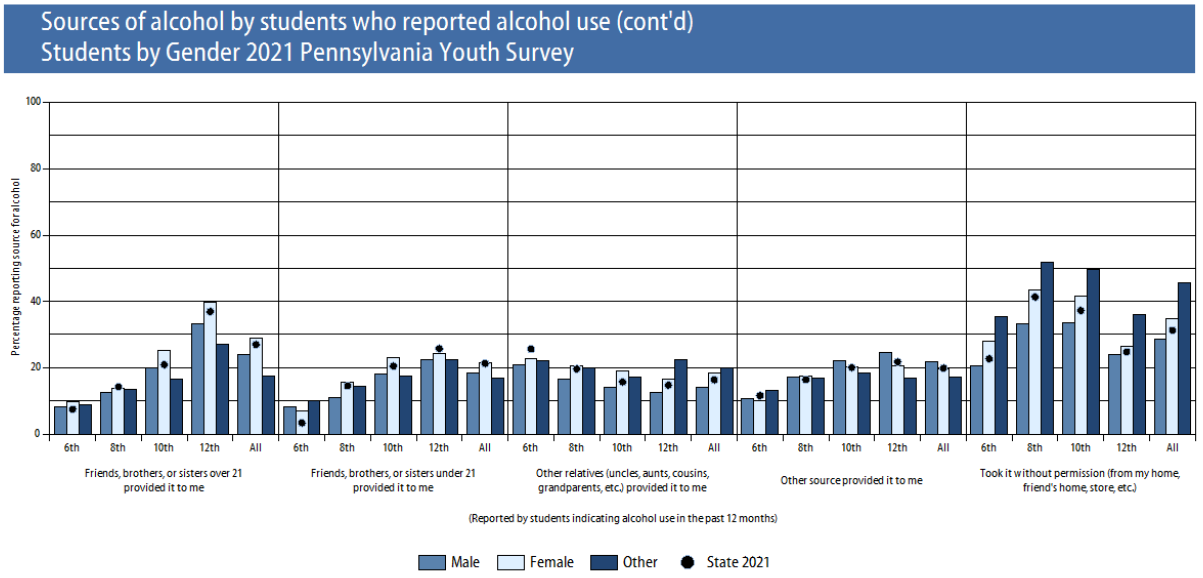
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

ATOD Use and Access by Gender

Sources of alcohol, Statewide Sample 2021 PAYS



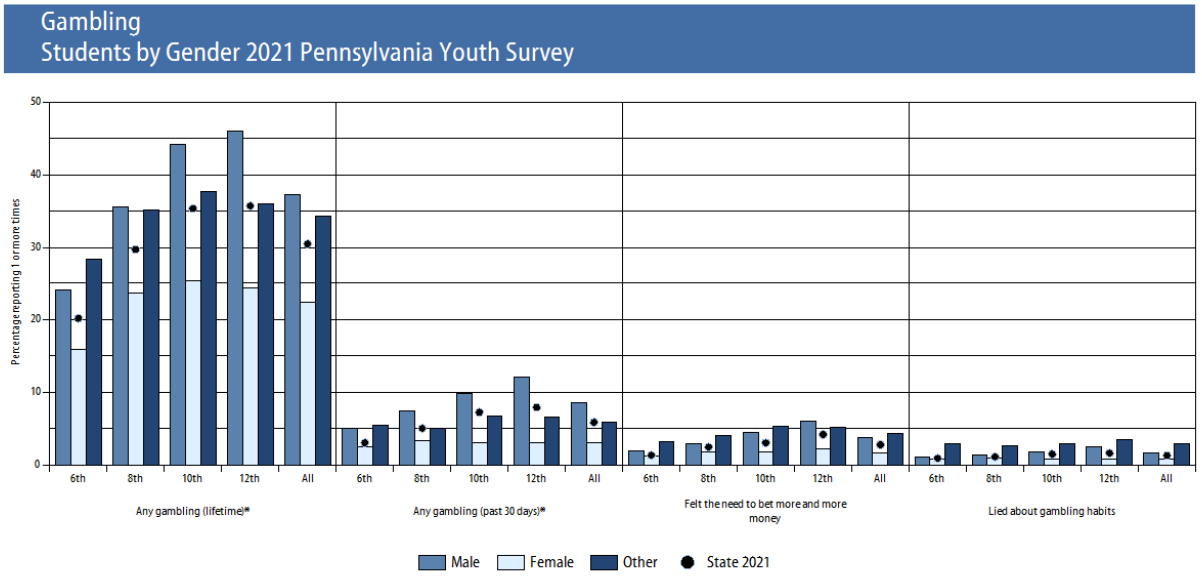
Sources of alcohol, continued, Statewide Sample 2021 PAYS



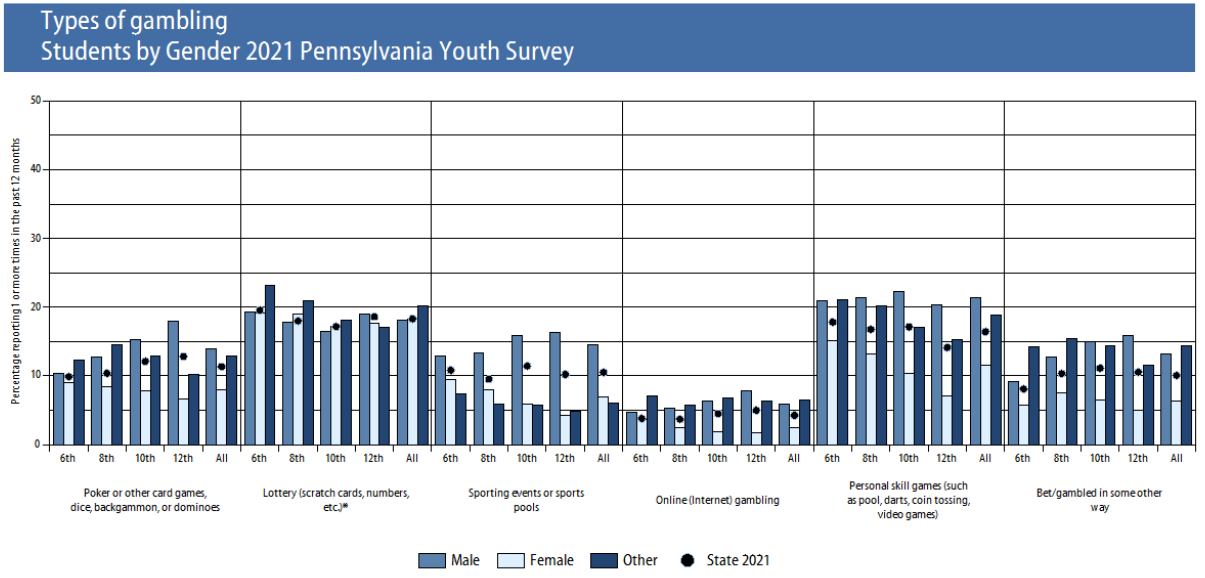
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Antisocial Behavior by Gender

Gambling, Statewide Sample 2021 PAYS



Types of gambling, Statewide Sample 2021 PAYS



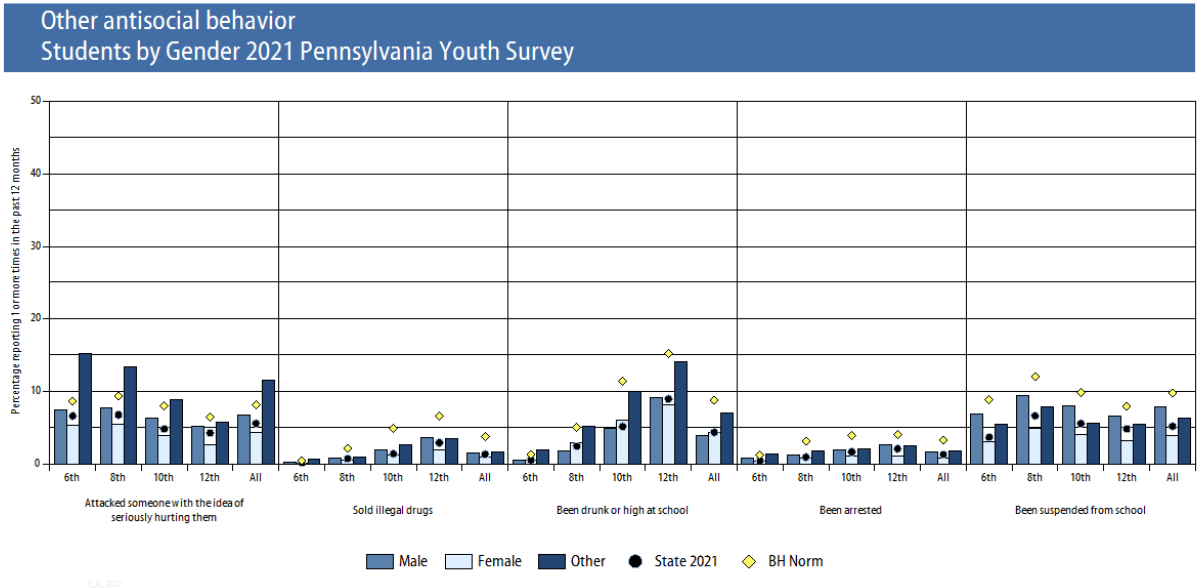
NOTE:
*Lifetime and 30 day gambling were not measured prior to 2017. (Previous PAYS administrations measured gambling over the past 12 months.)

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

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

Antisocial Behavior by Gender

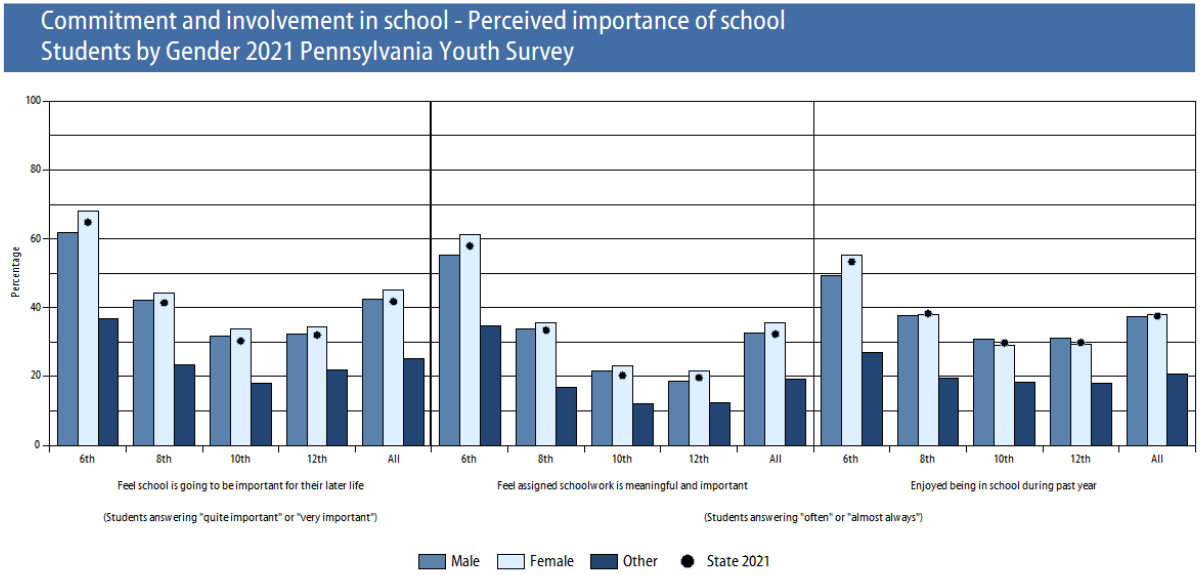
Other Antisocial behavior, Statewide Sample 2021 PAYS



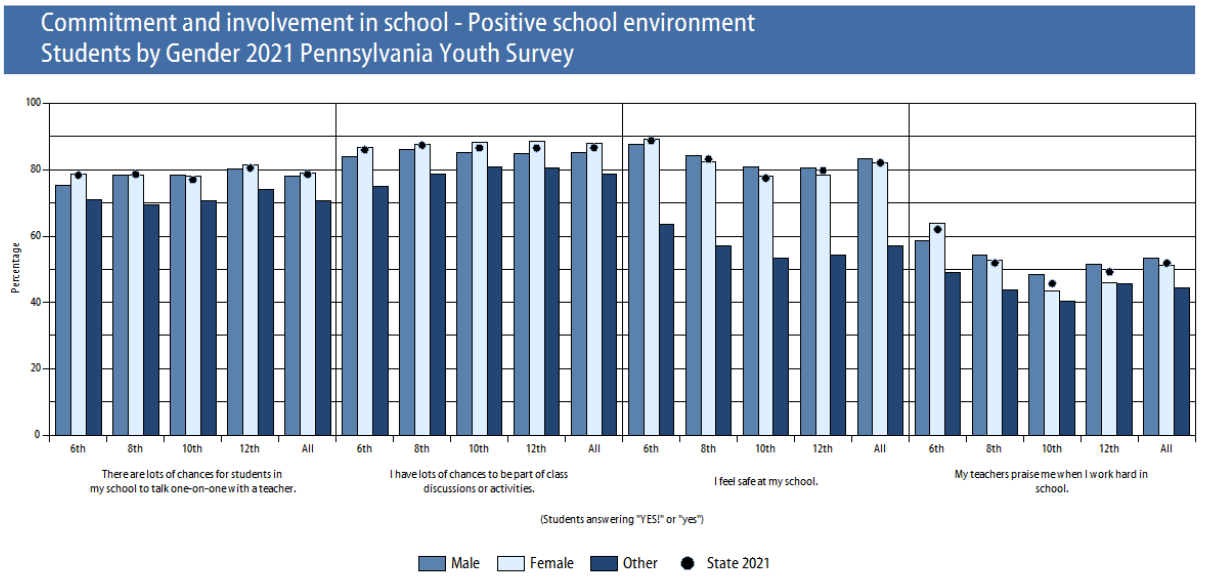
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Perceived importance of school, Statewide Sample 2021 PAYS



Positive school environment, Statewide Sample 2021 PAYS

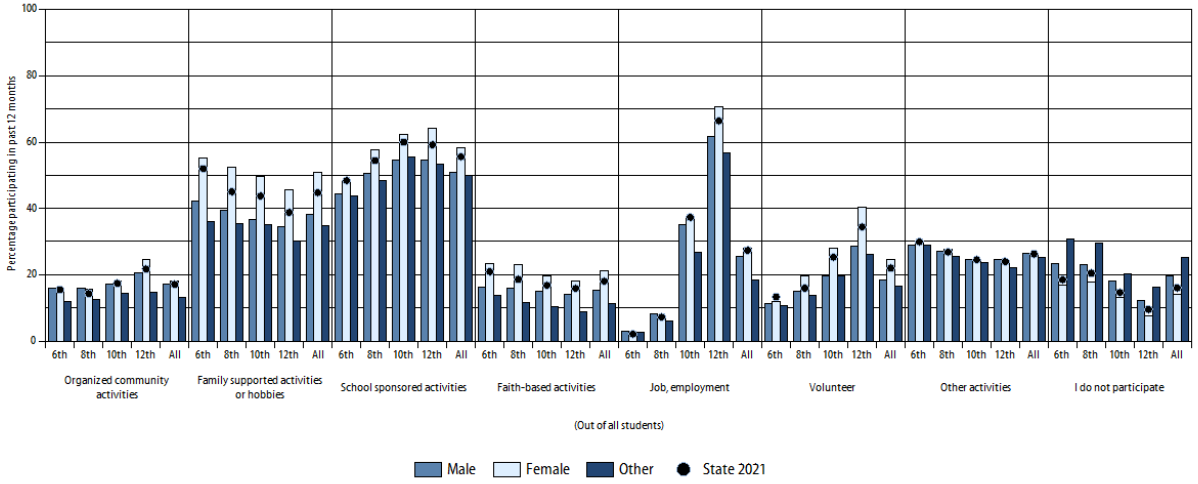


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

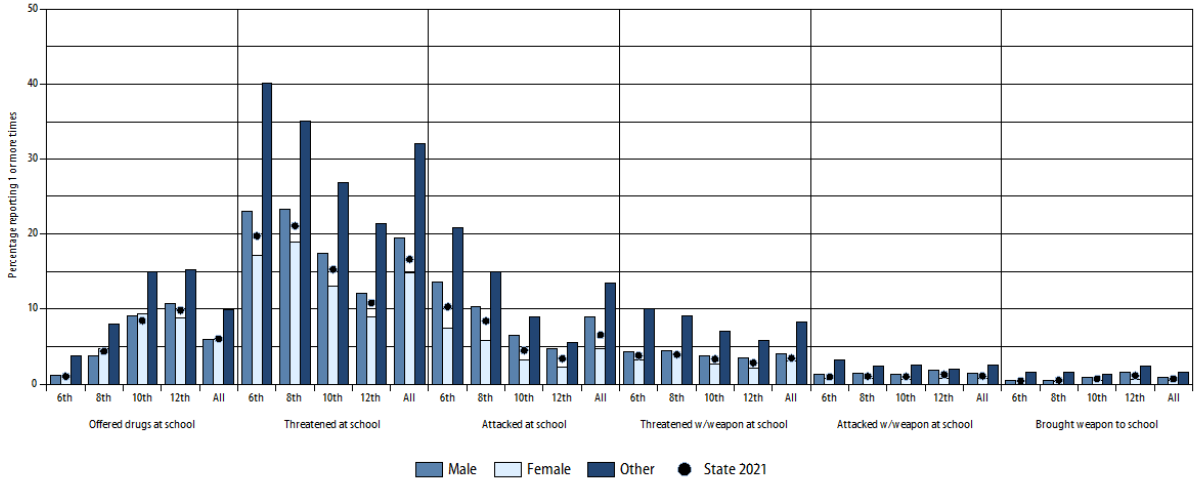
Involvement in after-school and community activities, Statewide Sample 2021 PAYS

Involvement in pro-social activities
Students by Gender 2021 Pennsylvania Youth Survey



Violence and drugs on school property, Statewide Sample 2021 PAYS

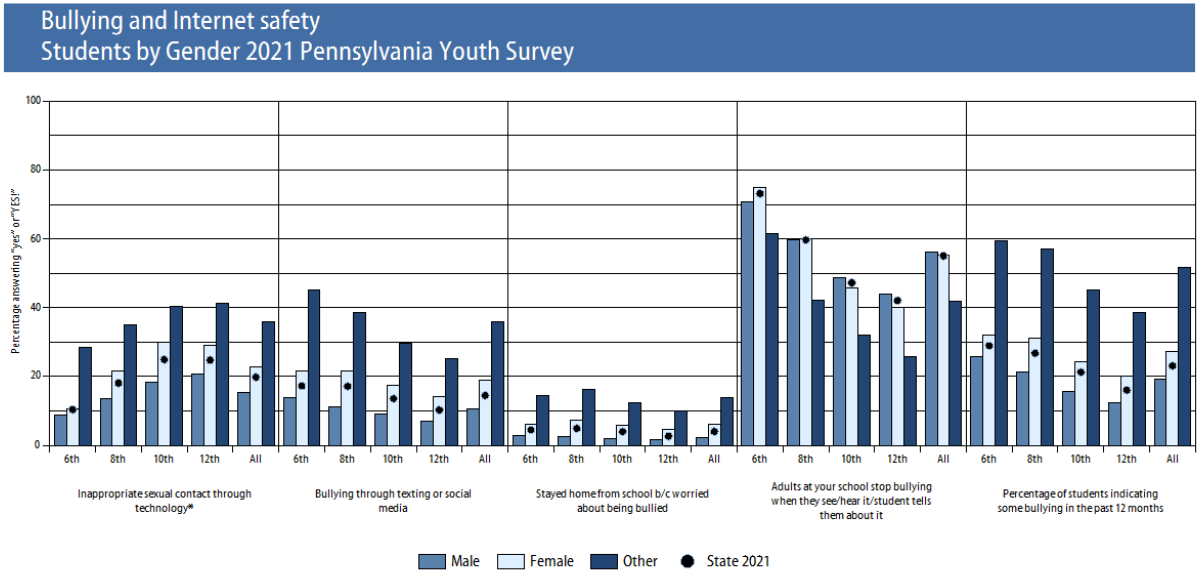
Violence and drugs on school property
Students by Gender 2021 Pennsylvania Youth Survey



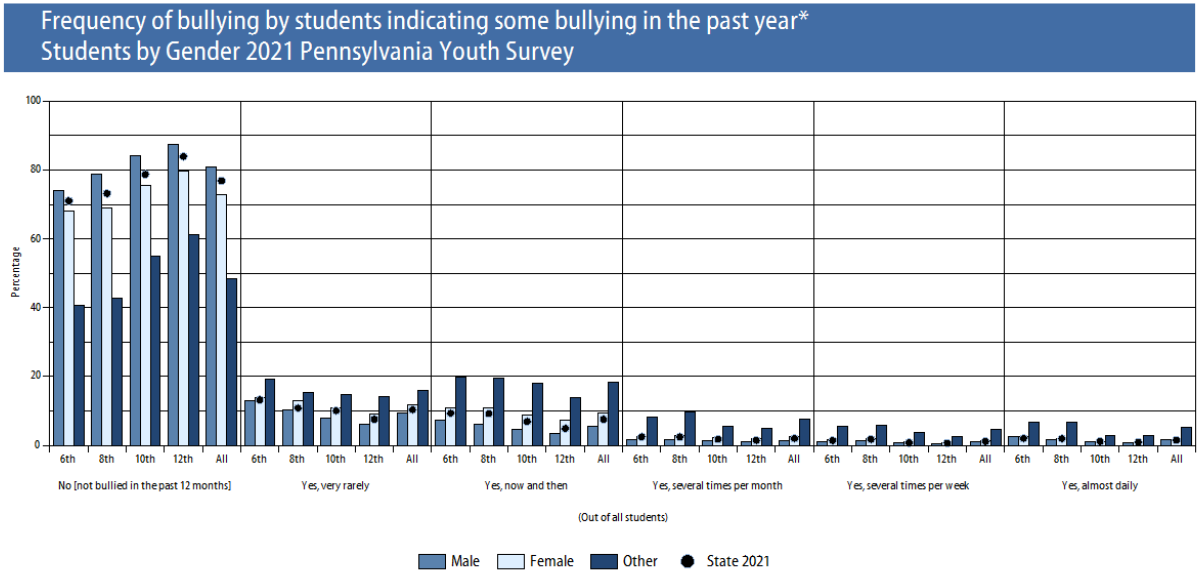
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Bullying and Internet safety, Statewide Sample 2021 PAYS



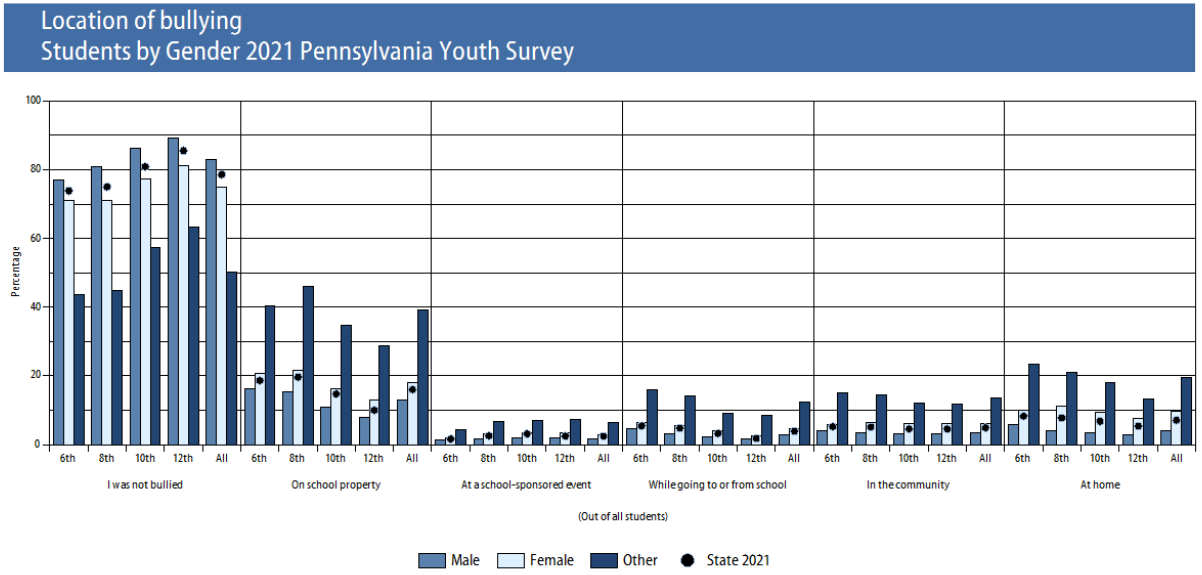
Frequency of bullying, Statewide Sample 2021 PAYS



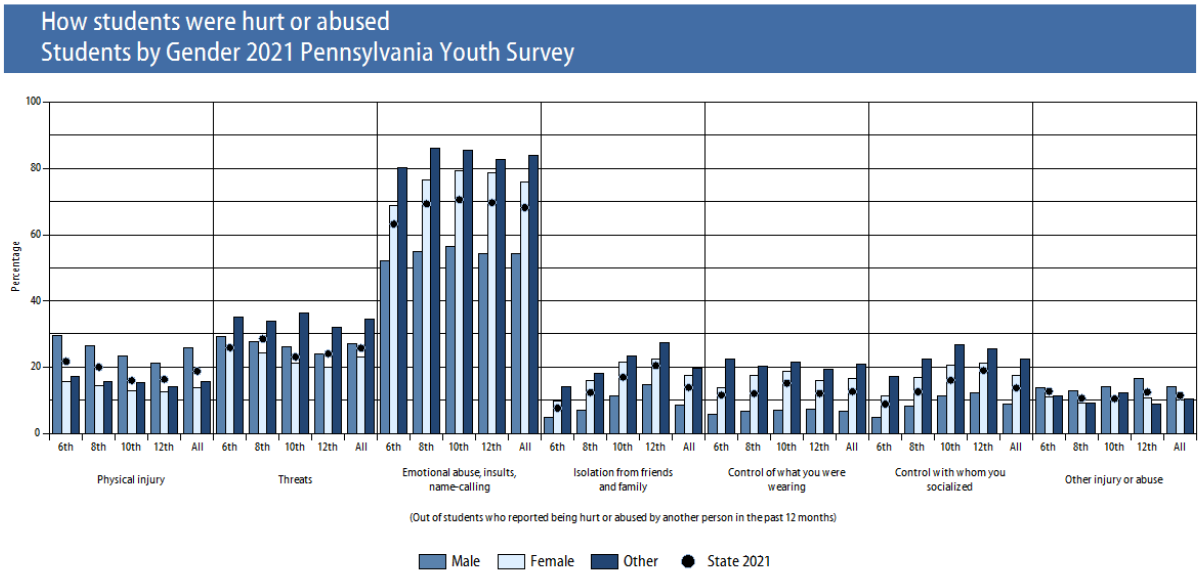
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Community and School Climate and Safety by Gender

Location of bullying, Statewide Sample 2021 PAYS



How students were hurt or abused, Statewide Sample 2021 PAYS



NOTE:
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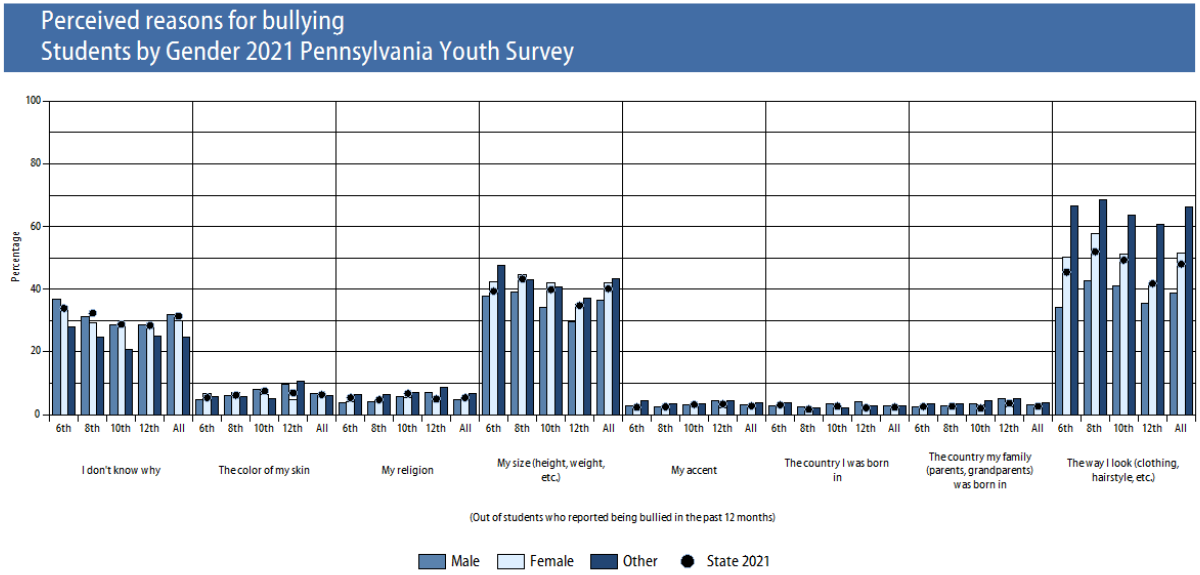
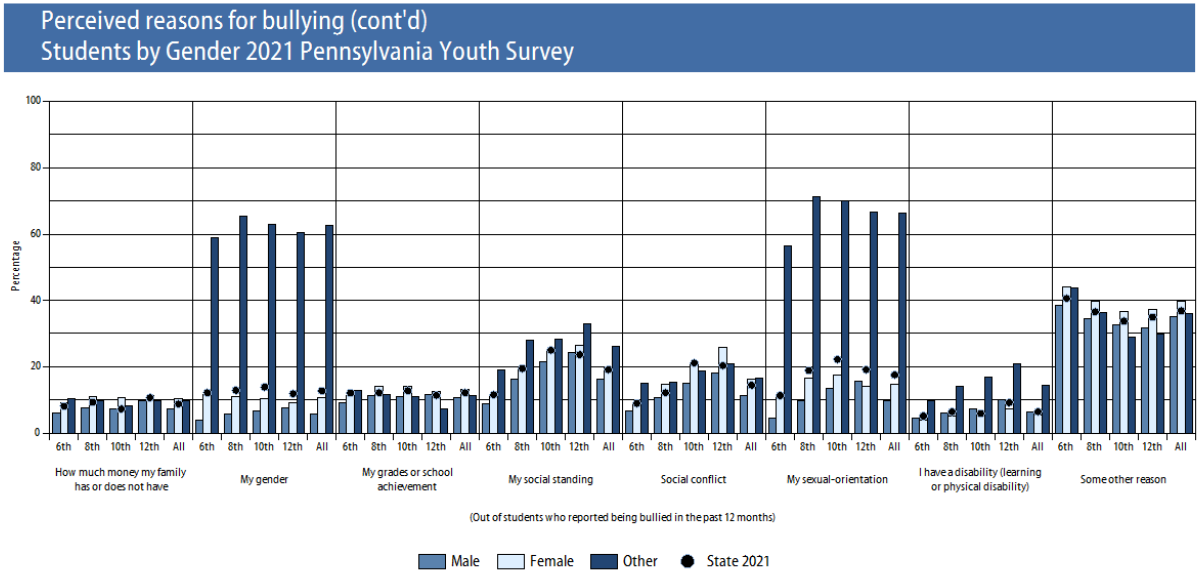
Community and School Climate and Safety by Gender

Perceived reasons for bullying, Statewide Sample 2021 PAYS



Perceived reasons for bullying, continued, Statewide Sample 2021 PAYS



NOTE:
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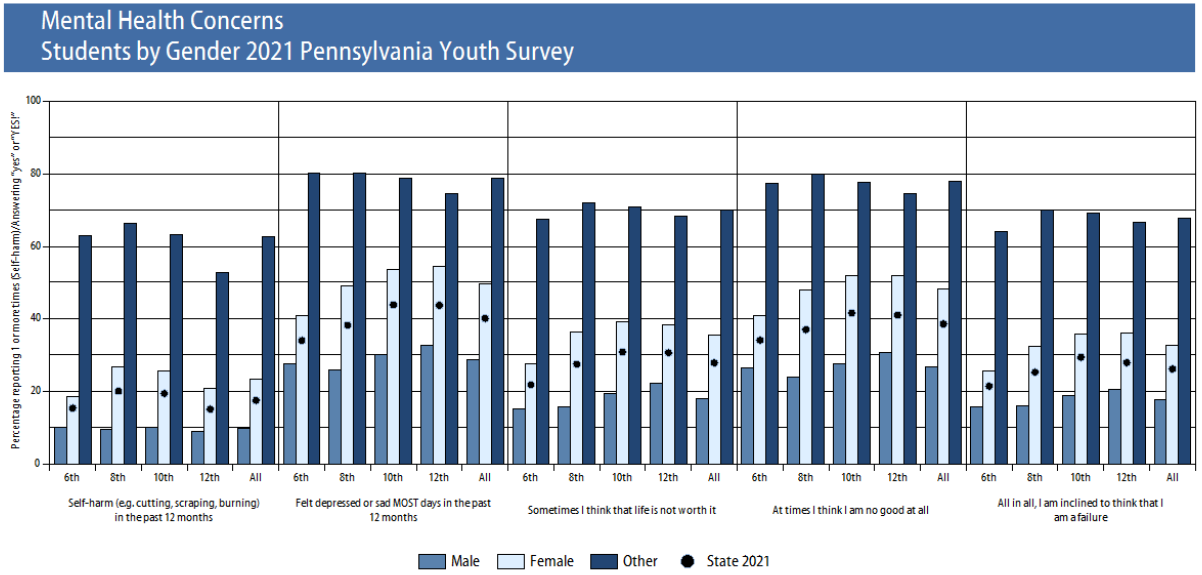
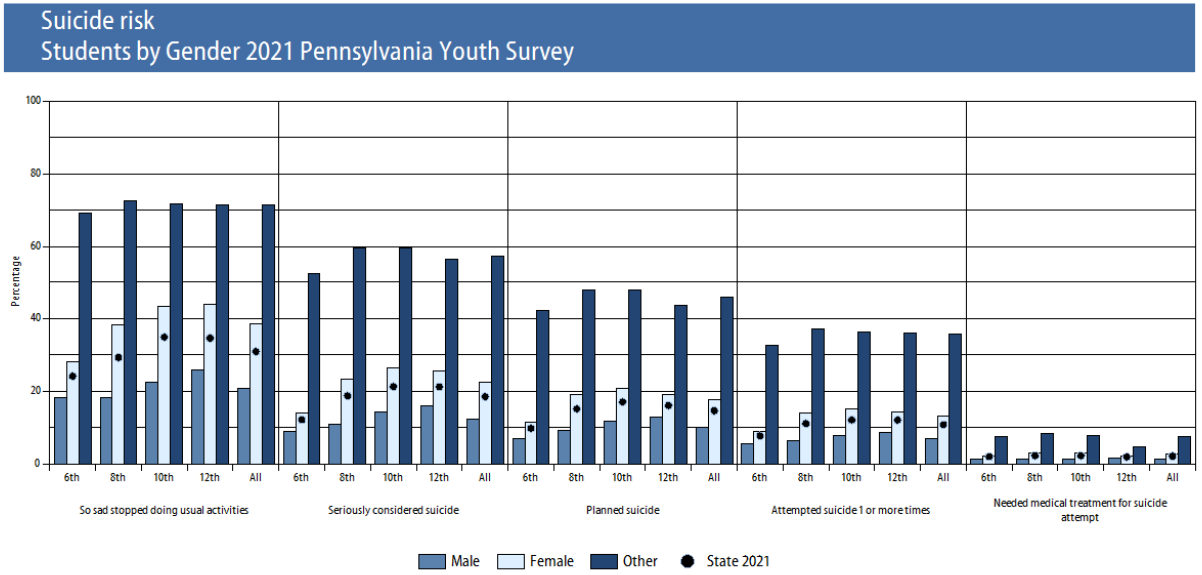
Social and Emotional Health by Gender

Mental Health Concerns, Statewide Sample 2021 PAYS



Suicide risk, Statewide Sample 2021 PAYS



NOTE:
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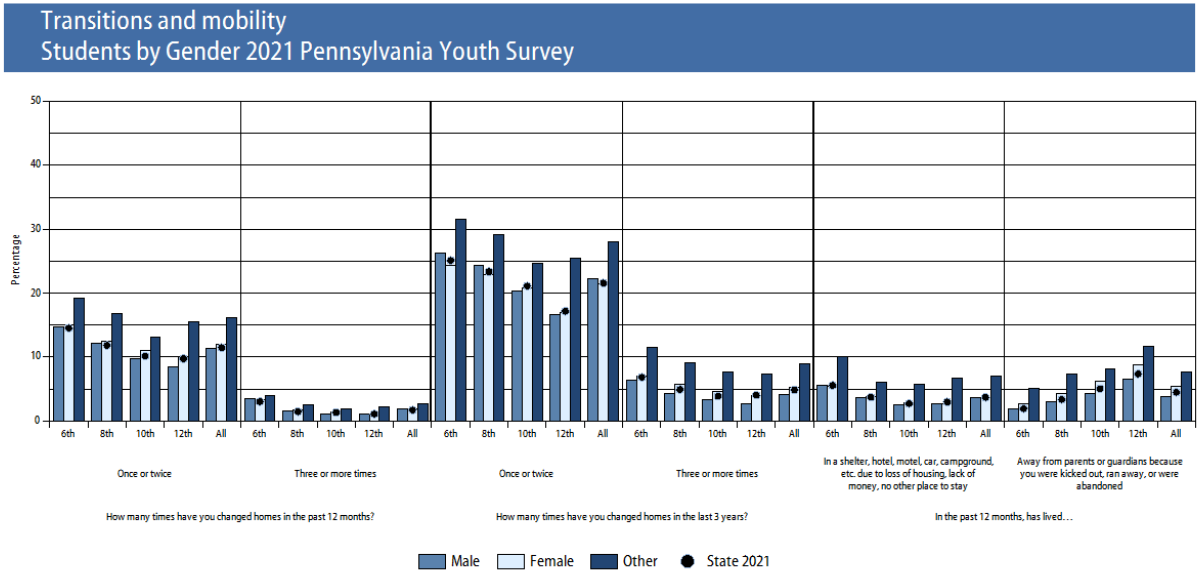
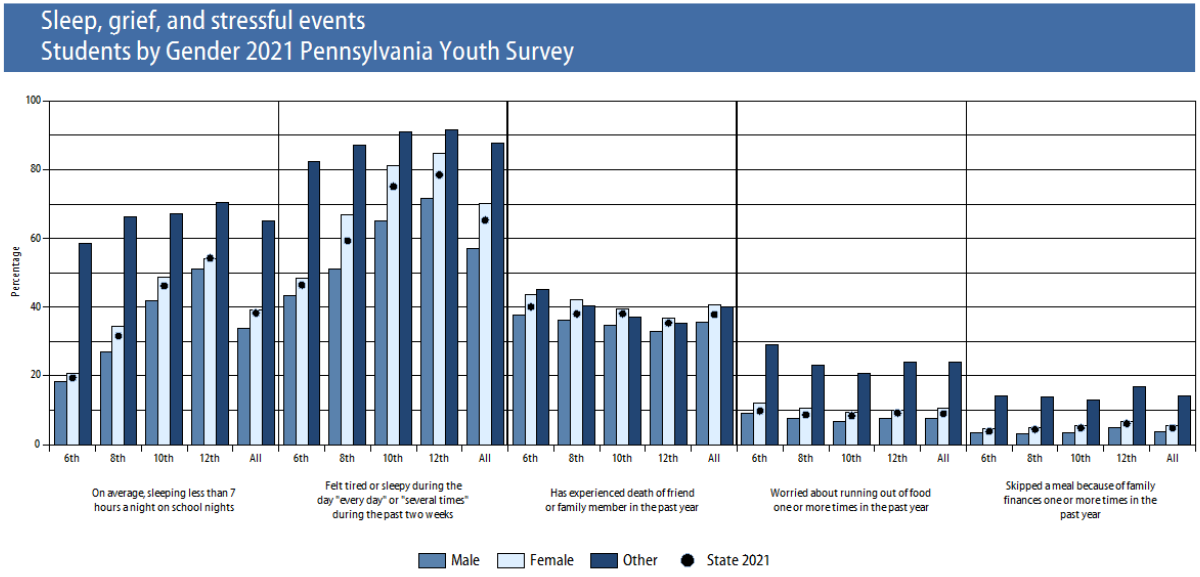
Social and Emotional Health by Gender

Transitions and mobility, Statewide Sample 2021 PAYS



Grief and other stressful events, Statewide Sample 2021 PAYS

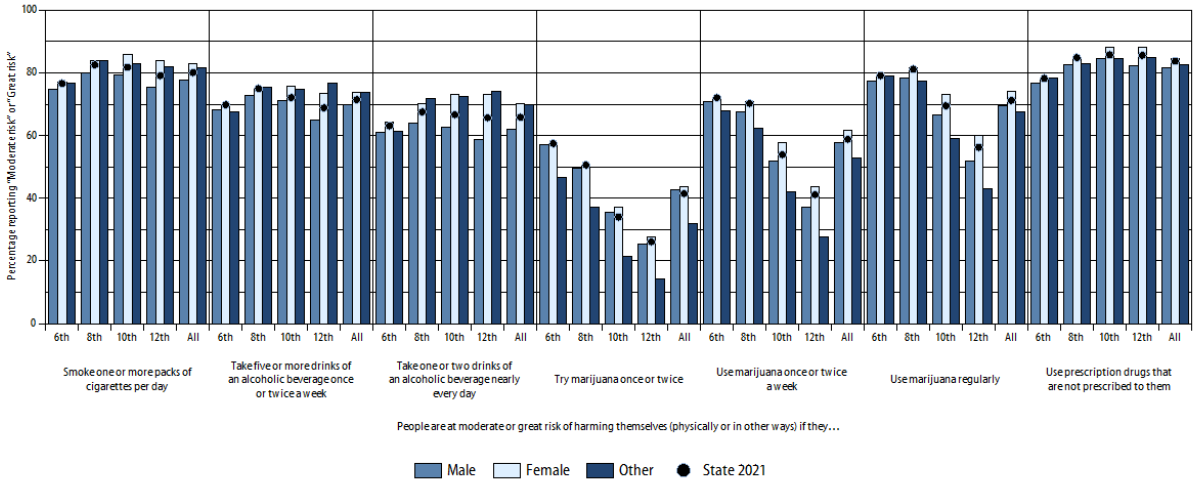


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

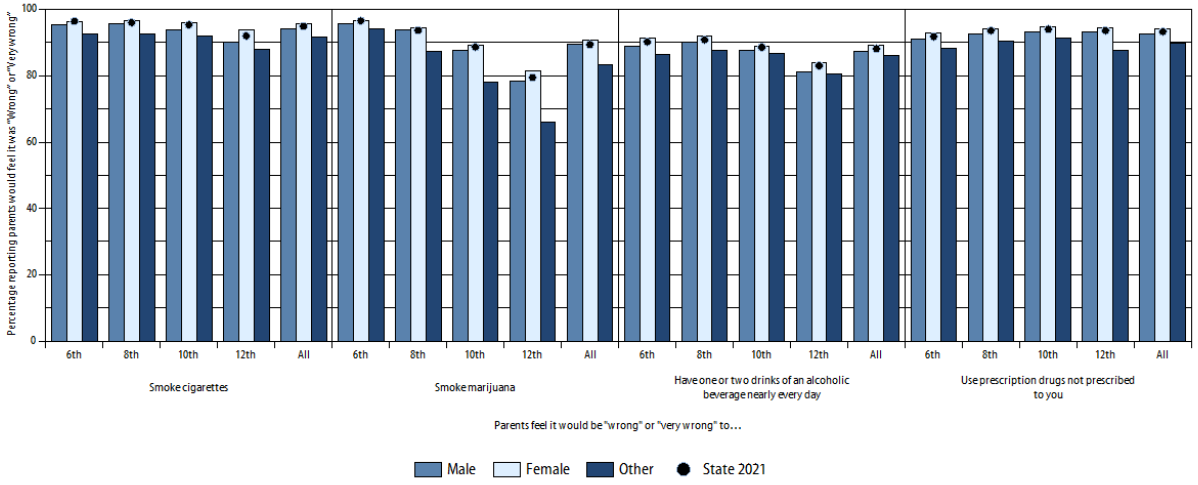
Perception of risk, Statewide Sample 2021 PAYS

Perception of risk
Students by Gender 2021 Pennsylvania Youth Survey



Perception of parental disapproval, Statewide Sample 2021 PAYS

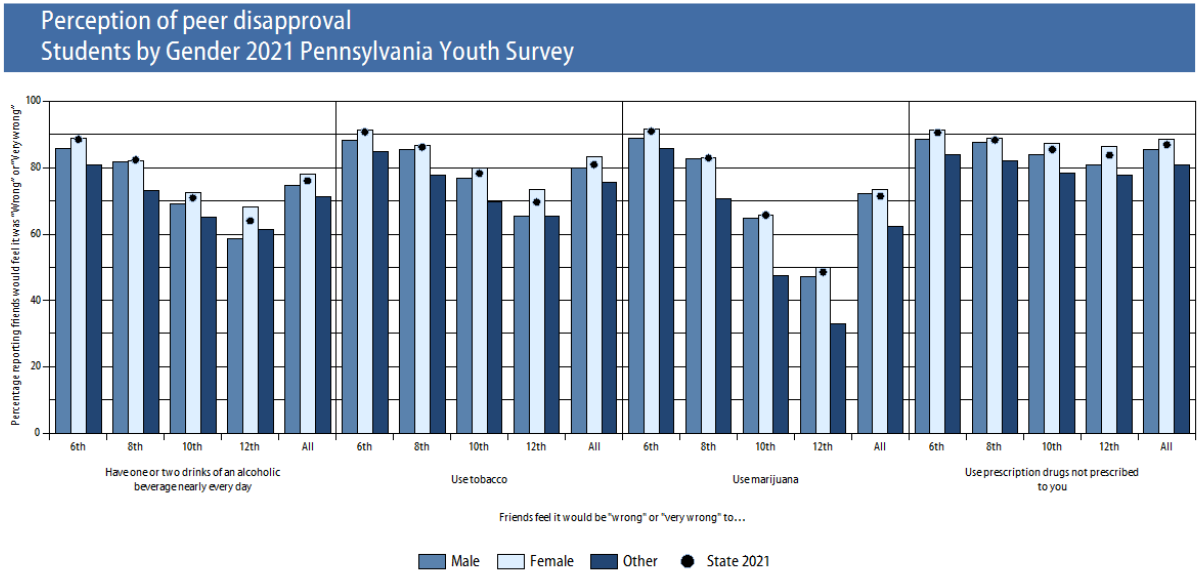
Perception of parental disapproval
Students by Gender 2021 Pennsylvania Youth Survey



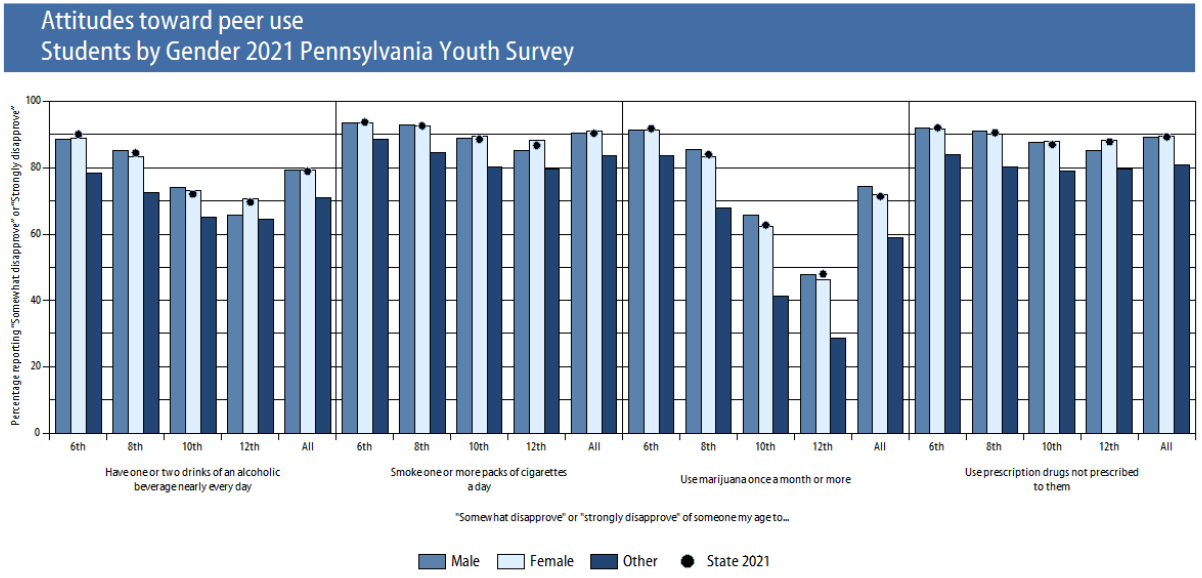
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

Perception of peer disapproval, Statewide Sample 2021 PAYS



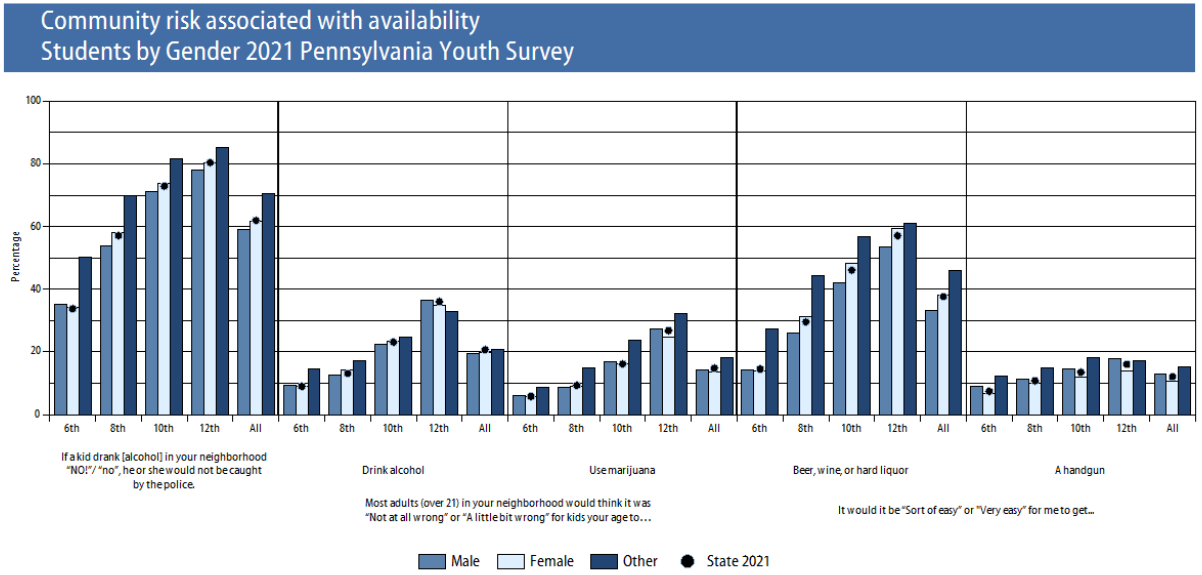
Attitudes toward peer use, Statewide Sample 2021 PAYS



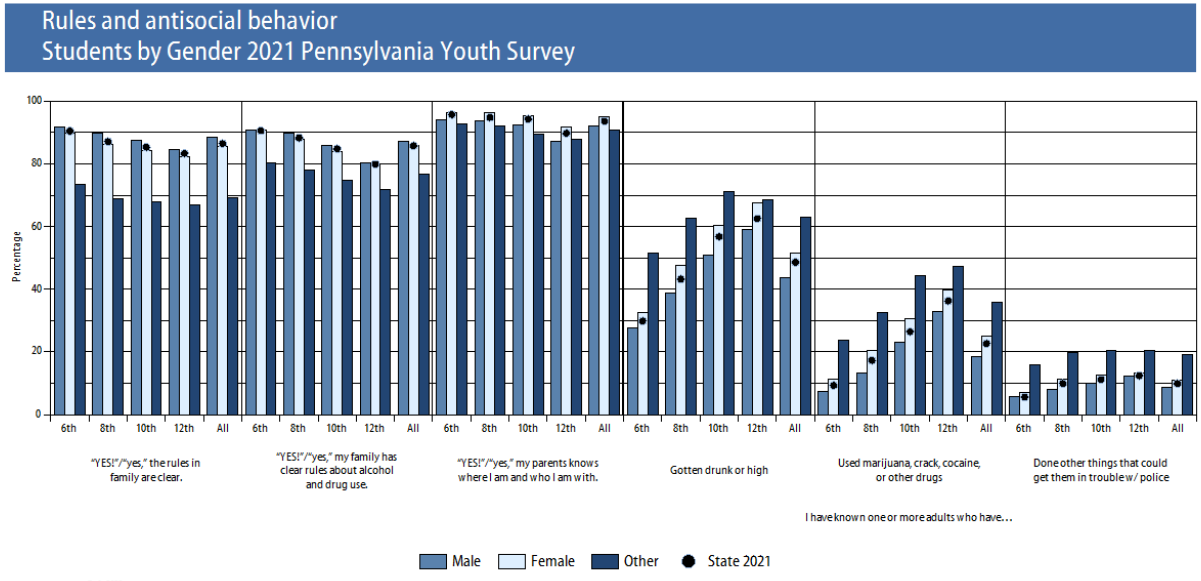
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

Community risk associated with availability, Statewide Sample 2021 PAYS



Rules and antisocial behavior, Statewide Sample 2021 PAYS

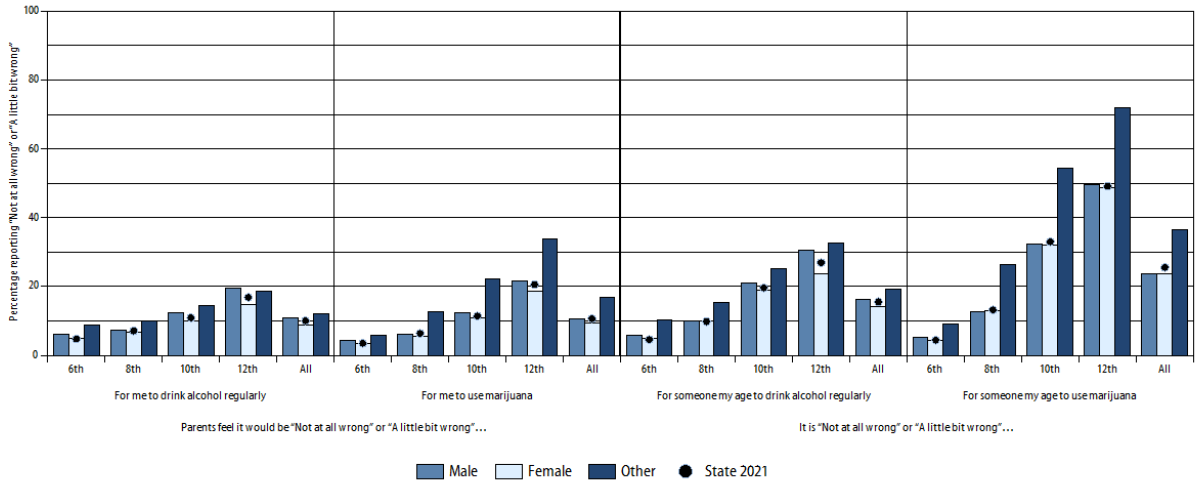


NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Systemic Factors by Gender

Attitudes favorable toward drug use, Statewide Sample 2021 PAYS

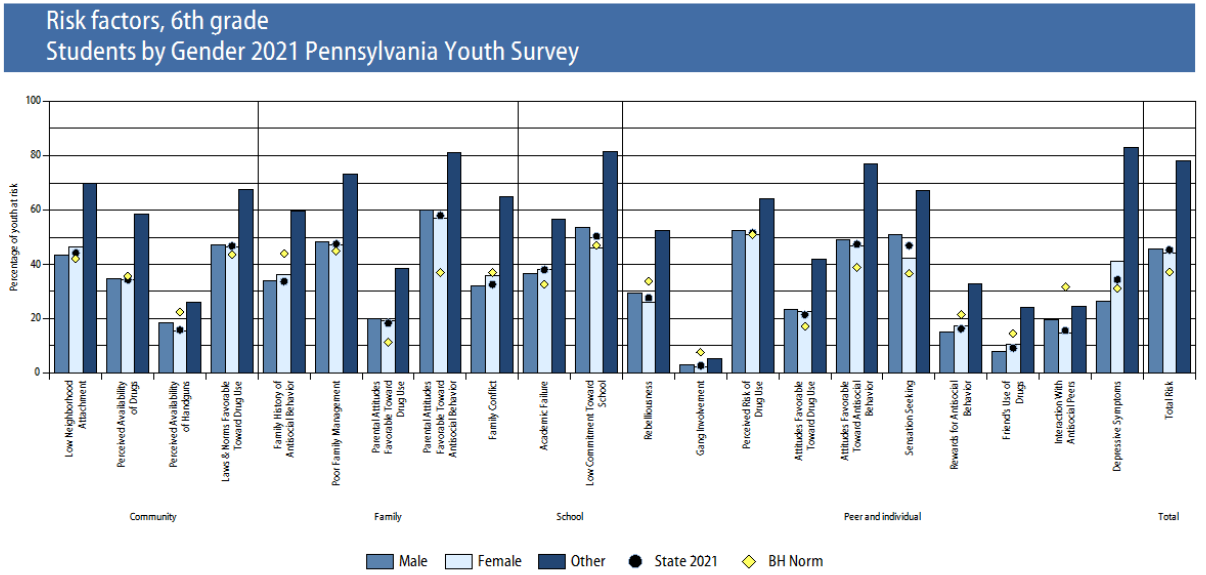
Attitudes favorable toward drug use
Students by Gender 2021 Pennsylvania Youth Survey



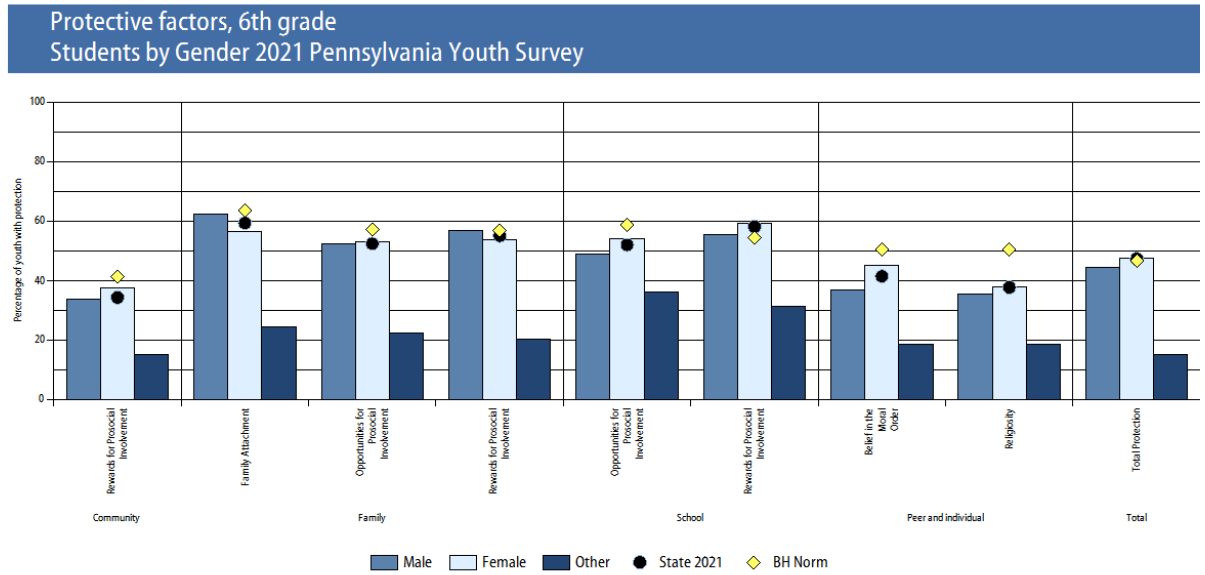
NOTE:
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: 6th Grade

Risk factor scales by Gender, 6th grade, Statewide Sample 2021 PAYS



Protective factor scales by Gender, 6th grade, Statewide Sample 2021 PAYS



NOTE:

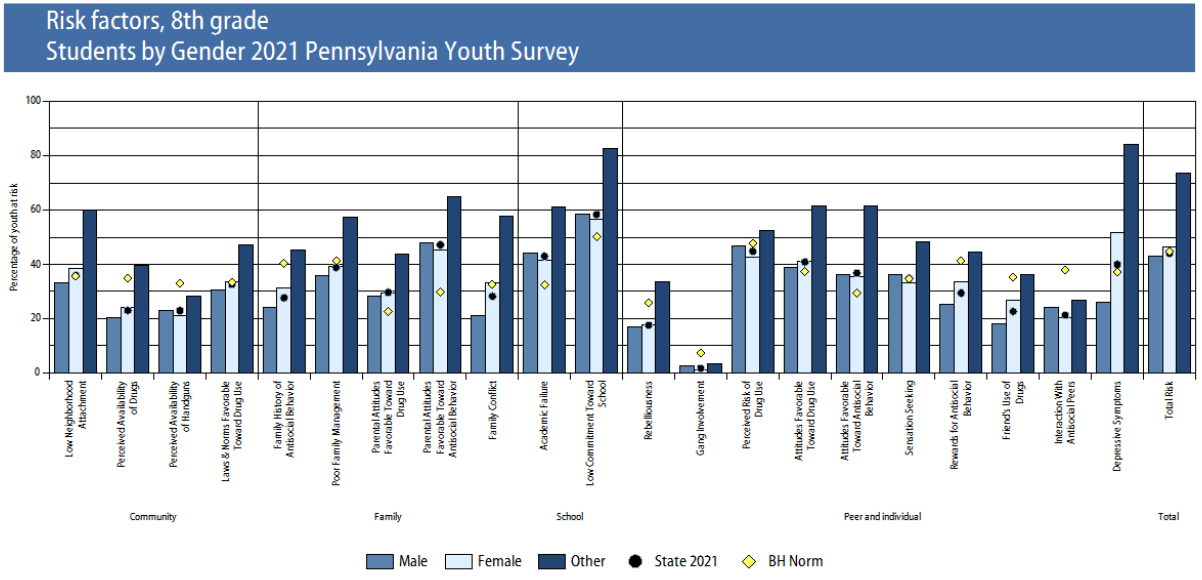
"Total Risk" is defined as the percentage of students who have more than a specified number of risk factors operating in their lives. (6th and 8th grades: 5 or more risk factors, 10th and 12th grades: 7 or more risk factors.)

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

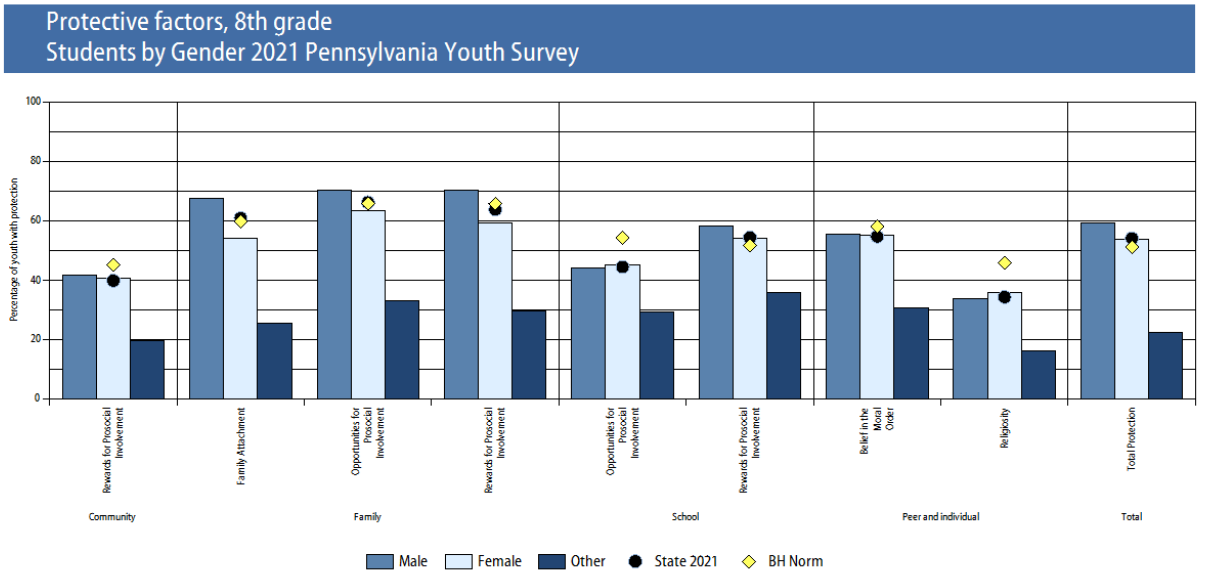
Please see the PAYS Web Tool at www.bach-harrison.com/PAYSWebTool for exact numbers and for additional gender-level data by category, variable, or individual item. Consider using the PAYS Web Tool to run similar data by county, grade, gender, or by item.

Risk and Protective Factor Scales by Gender: 8th Grade

Risk factor scales by Gender, 8th grade, Statewide Sample 2021 PAYS



Protective factor scales by Gender, 8th grade, Statewide Sample 2021 PAYS



NOTE:

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

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

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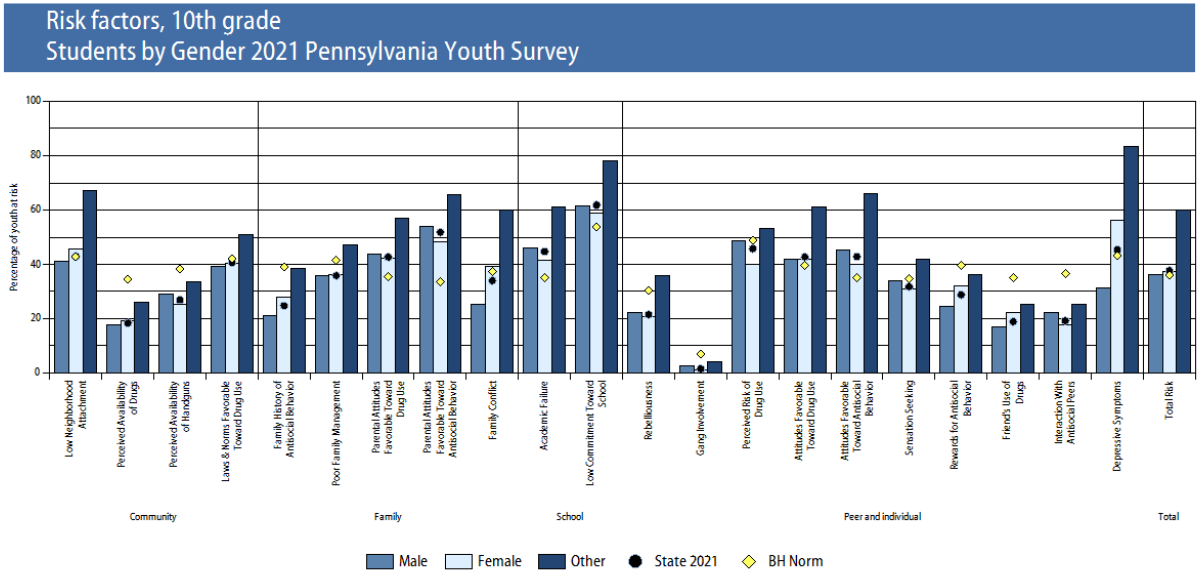
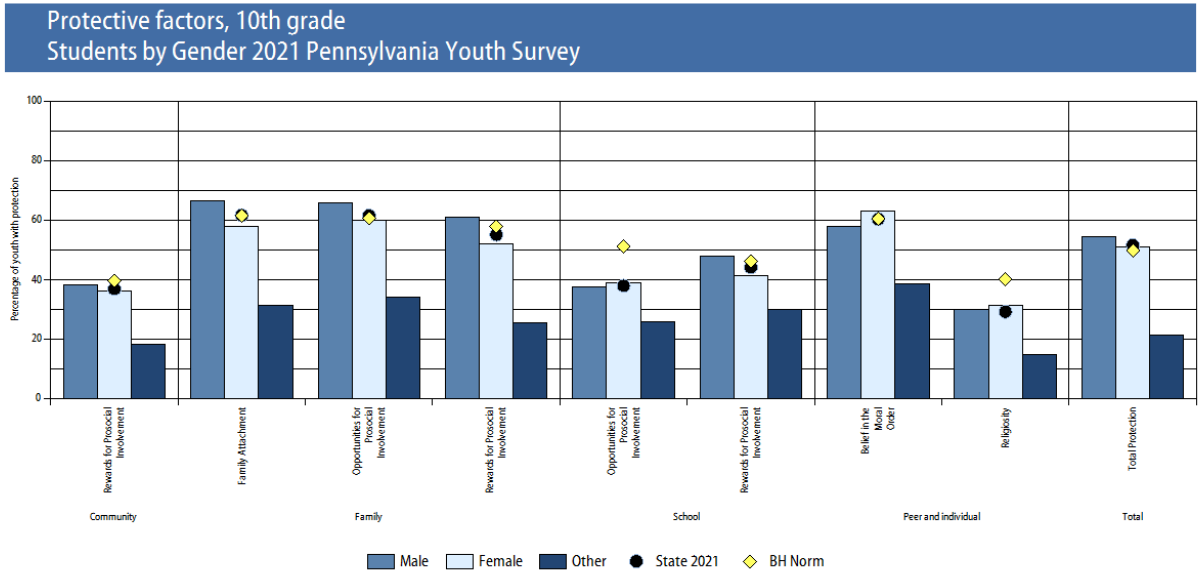
Risk and Protective Factor Scales by Gender: 10th Grade

Risk factor scales by Gender, 10th grade, Statewide Sample 2021 PAYS



Protective factor scales by Gender, 10th grade, Statewide Sample 2021 PAYS



NOTE:

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

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

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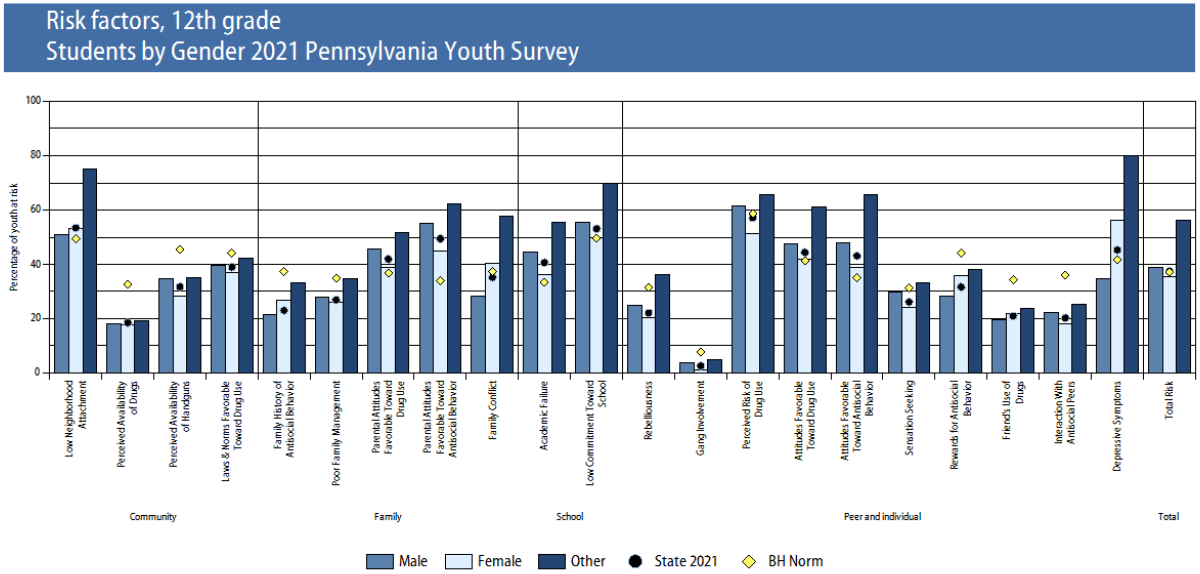
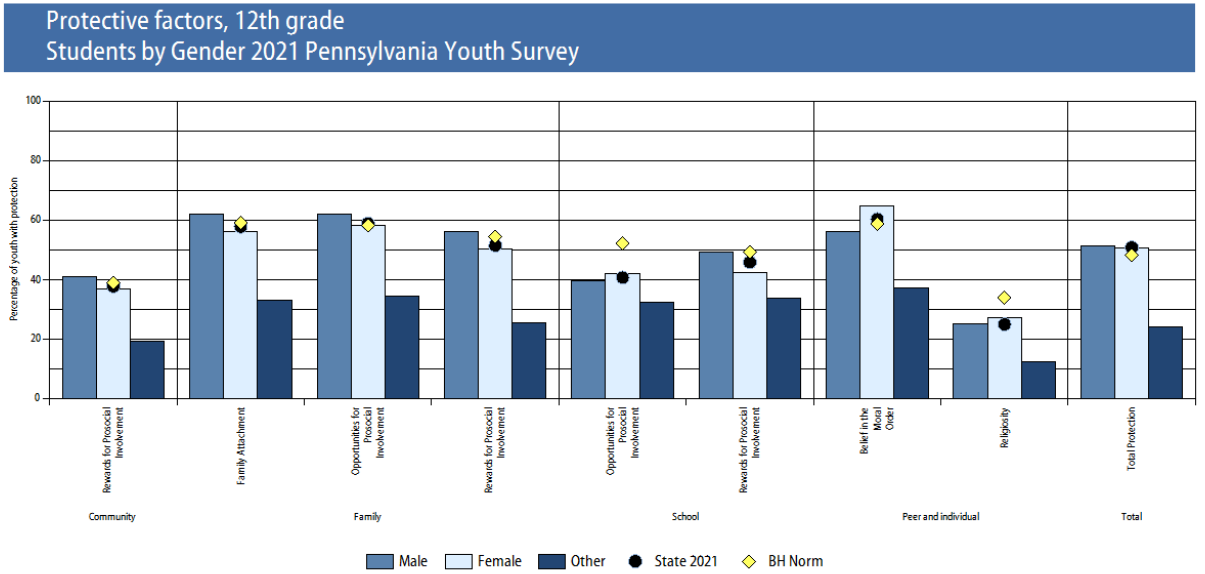
Risk and Protective Factor Scales by Gender: 12th Grade

Risk factor scales by Gender, 12th grade, Statewide Sample 2021 PAYS



Protective factor scales by Gender, 12th grade, Statewide Sample 2021 PAYS



NOTE:

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

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

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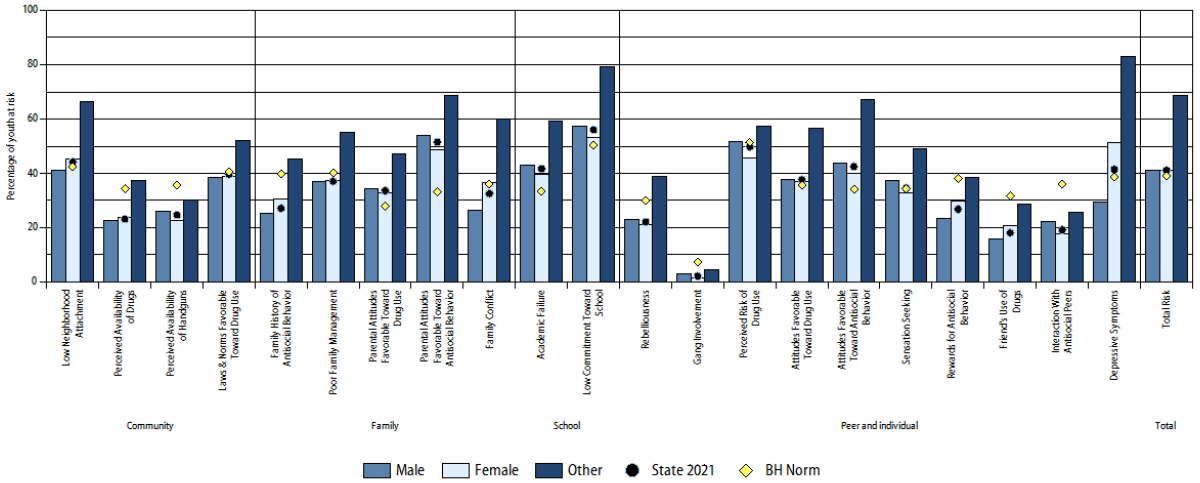
Risk and Protective Factor Scales by Gender: All Grades Combined

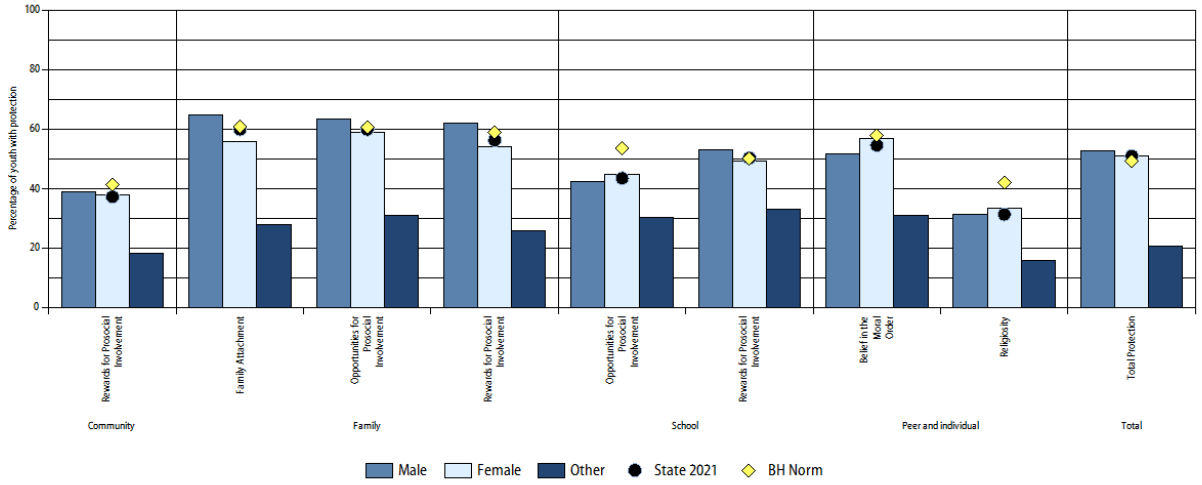
Risk factor scales by Gender
All Grades,
Statewide Sample 2021 PAYS

Risk factors, All grades
Students by Gender 2021 Pennsylvania Youth Survey



Protective factor scales by Gender
All Grades,
Statewide Sample 2021 PAYS

Protective factors, All grades
Students by Gender 2021 Pennsylvania Youth Survey



NOTE:

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

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

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