



Gambling

The 2022 Delaware Epidemiological Profile

Substance Use, Mental Health, and Related Issues

prepared for

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Delaware Division of Substance Abuse
and Mental Health*

&

*The Delaware State Epidemiological
Outcomes Workgroup*



The annual Delaware Epidemiological Profile is a publication of the Delaware State Epidemiological Outcomes Workgroup (SEOW) project. Funding for the SEOW has been provided by the Department of Health and Social Services, Division of Substance Abuse and Mental Health through funding from the Substance Abuse and Mental Health Services Administration (SAMHSA). Please address all inquiries to M.J. Scales, MPH, CPS, University of Delaware [Center for Drug and Health Studies](mailto:mjscales@udel.edu), Department of Sociology and Criminal Justice: mjscales@udel.edu.



The Role of the Delaware State Epidemiological Outcomes Workgroup and the Purpose of the Epidemiological Profile

All states, including Delaware, received support from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Prevention (CSAP) to establish a Statewide Epidemiological Outcomes Workgroup (SEOW). The Division of Substance Abuse and Mental Health (DSAMH) in the Department of Health and Social Services initially supported the SEOW through SAMHSA Strategic Prevention Framework grants and continues to sponsor the SEOW with SAMHSA funding. The SEOW is facilitated by a team at the Center for Drug and Health Studies at the University of Delaware that convenes a network of representatives from approximately 55 State and nonprofit agencies, community organizations, advocacy groups, and other entities. Formerly known as the Delaware Drug and Alcohol Tracking Alliance (DDATA), the SEOW's mission is to bring data on behavioral health and associated issues to the forefront of prevention and treatment efforts by pursuing the following goals:

- To build monitoring and surveillance systems to identify, analyze, and profile data from state and local sources;
- To provide current benchmarks, trends, and patterns of substance abuse consumption and consequences;
- To create data-guided products that inform prevention and treatment planning and policies;
- To train agencies and communities in understanding, using, and presenting data effectively.

The annual Delaware State Epidemiological Profile is a valuable data resource for strategic planning, decision-making, and evaluation. Using data that are available on an ongoing basis, the report highlights indicators of mental health and wellbeing, patterns of substance use and its consequences, and risk and protective factors for people in Delaware. The report also highlights crosscutting issues that warrant attention as well as populations that may experience disproportionate risk for these concerns.

This chapter provides an overview of the rates of gambling among youth. To review the complete report, slides, infographics, and other SEOW data products, please visit the UD Center for Drug and Health Studies [Delaware Epidemiological Reports](#) page. Video recordings of select SEOW presentations referenced in this report are also [available online](#).

SEOW Collaborators

Thank you for your participation and commitment to data-driven prevention planning, practice, and evaluation! We are especially grateful to the team at the Delaware Division of Substance Abuse and Mental Health for their guidance and collaboration.

atTAcK Addiction
Bellevue Community Center
Beebe Healthcare
Children and Families First
Christiana Care Health System
Colonial School District
Delaware Academy of Medicine/Delaware Public Health Association
Delaware Afterschool Network
Delaware Center for Justice
Delaware Coalition Against Domestic Violence
Delaware Council on Gambling Problems
Delaware Courts - Office of the Child Advocate
Delaware Criminal Justice Council
Delaware Criminal Justice Information System
Delaware Department of Corrections
Delaware Department of Education
Delaware Department of Services for Children, Youth and their Families
 Division of Prevention and Behavioral Health Services
Delaware Department of Health and Social Services
 Division of Medicaid and Medical Assistance
 Division of Public Health
 Division of Services for Aging and Adults with Physical Disabilities
 Division of Substance Abuse and Mental Health
Delaware Department of Safety and Homeland Security
 Delaware State Police
 Division of Alcohol and Tobacco Enforcement
 Division of Forensic Science
Delaware Department of State
 Delaware Office of Controlled Substances
 Division of Professional Regulation, Prescription Monitoring Program
Delaware Domestic Violence Coordinating Council
Delaware Guidance Services
Delaware Information and Analysis Center
Delaware Multicultural and Civic Organization

Delaware Overdose System of Care
Delaware Prevention Coalition
Delaware State Board of Education
Holcomb BHS/Open Door, Inc.
KIDS COUNT in Delaware, University of Delaware Center for Community Research & Service
La Esperanza Community Center
Latin American Community Center
Mental Health Association in Delaware
Milford School District
NAMI Delaware
Nemours Health and Prevention Services
Network Connect
New Castle County Behavioral Health Unit
New Castle County Police Department
Planned Parenthood of Delaware
Red Clay Consolidated School District
Sun Behavioral Delaware
Sussex County Health Coalition
Transitions Delaware
Trauma Matters Delaware
United States Department of Justice
United Way of Delaware
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If your organization is interested in becoming an SEOW Collaborator, please contact Meisje Scales at: mjscales@udel.edu.

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Notes: Data Reporting and Interpretation

In order to protect the anonymity of respondents and to ensure that the data reported meet certain statistical standards, the Center for Drug and Health Studies (CDHS) at the University of Delaware has established a set of guidelines for reporting and interpreting data from surveys that it administers to students across the state. As a result, in the Delaware State Epidemiological Profile, data in some tables and figures may be aggregated or otherwise reported differently than in years prior. The following notes summarize the guidelines for interpreting data presented in this report and provide an overview of changes relevant to this year:

- **Reporting small numbers:** For any estimate where the raw number of responses is less than 30, no statistical estimates are reported. Statistics computed from such a small proportion of the total number of students may be unreliable, inflating the significance of existing relationships in the data, and among some special populations, may put individuals at risk of being identified. In some data products such as our heat maps, multiple years of data have been combined in order to increase the sample sizes to a reportable figure (i.e., 30 or above).
- **Rounding:** All figures from Delaware School Survey (DSS) are rounded to the *nearest whole percent*. As such, in some cases the cells in a table may add up to slightly more or less than 100%.
- **Missing Observations:** In our analysis, any missing observations (responses) are not calculated into the total percentages. Because different questions have varying numbers of missing responses, the total sample size and percent missing may fluctuate slightly from question to question. This is due to a few factors:
 - Students may not answer all questions on a survey, particularly those towards the end if they run out of time or they tire of answering questions.
 - Students may also skip or decide not to respond to certain questions for various reasons (e.g., if they fear their responses will not be kept confidential; if they consider the question too personal or sensitive; if they do not understand the question; etc.)
- **Discrepancies in Reporting:** In some instances, there may be slight differences in estimates reported by the Center for Drug and Health Studies compared to those reported by other state or federal entities for the same data source. In most cases this is due to differing practices in rounding or handling missing observations in the data and does not substantially impact the overall prevalence estimates, trends, and relationships among these data points.
- **Statistical Significance:** Unless otherwise indicated, all reported correlations between variables are statistically significant at the $p < .05$ level. Null hypothesis testing, used to estimate statistical significance, provides an estimate of the likelihood that the relationship between two indicators is not due to random chance. If the p-value for a

given crosstab is less than .05, this suggests that in 95% of cases, the correlation between the relevant variables is because there is a relationship between them.

- Weighted Data: Weighting data is a correction technique that compensates for nonresponses, helps correct for unequal probabilities of being selected within the sample, and helps ensure that the sample drawn is representative of the Delaware student population. If data is weighted, there will be a notation indicating the data is weighted for the specific fact, figure, or table.
 - A note about 2019 Youth Risk Behavior Survey (YRBS) Data: In previous years, Delaware received weighted Delaware YRBS survey data from the CDC for both middle and high school samples. However, during the 2019 administration, participation rates for the Delaware high school survey did not meet the required threshold for weighting the data. Therefore, this report only includes 2019 middle school findings from the YRBS. Whenever available, trend data from the CDC Youth Online Data Portal is also reported. Additional high school YRBS data from previous years may be requested by following the [Delaware Division of Public Data Information & Request Process](#).
- The 2021 Delaware School Survey (DSS) is administered annually to students in 5th, 8th, and 11th grades of participating public schools. There is one version designed for 5th graders and a secondary version for 8th and 11th graders. These data are important for monitoring behavioral health among youth and are included throughout the report. The sample sizes for the 2021 DSS are:
 - 5th grade: 2,601
 - 8th grade: 2,896
 - 11th grade: 1,597
- Pandemic Impacts on Data Collection: Since 2020, the COVID-19 pandemic has greatly affected data collection of all kinds. This report compiles the most recently accessible state and national data available to provide a comprehensive profile of behavioral health in Delaware. Given that the timing and methods of various data survey administrations may have changed within the past several years, it will be important to consider this when interpreting trends.
 - Prior to the onset of the COVID-19 pandemic, the Delaware School Survey was administered at participating schools in person and using paper and pencil copies. To accommodate the new pandemic-related protocols that were put in place when in person learning resumed, in 2021, the survey was administered to students using an online format. Data from the 2021 survey should be interpreted with this in mind, especially when comparing trends against previous years, as changes in the survey format may impact student participation in unknown ways.

A Note on Word Choice Used in this Report:

Language frames how we collectively think about behavioral health and is continuously evolving. The SEOW Facilitator Team strives to use word choices that are accurate, respectful, free of stigma, strength-based, trauma-informed, and inclusive and culturally sensitive in our data products. However, much of the data and information we report are drawn from other sources. To preserve accuracy, whenever possible, we use the words, phrases, and data labels that are used in the original sources even if these terms are not necessarily the terms we would use as researchers, practitioners, or prevention specialists. When it is necessary to edit an SEOW product in a way that uses different terminology from the original data source, we include the original phrasing in the accompanying notes.

1. Gambling

National Overview

Gambling is defined by the Substance Abuse and Mental Health Services Administration (2014) as “risking something of value, usually money, on the outcome of an event decided at least partially by chance.” While gambling can provide entertainment and function as a pleasurable pastime for many

individuals, problem gambling and gambling disorders can present numerous challenges and negative consequences for others. A gambling disorder requires at least four of the following nine criteria: preoccupation with gambling; inability to cut back or control gambling; irritability or restlessness when attempting to cut back or control gambling; risking more money to achieve the desired level of excitement; gambling to cope with emotional problems; “chasing one’s losses” by gambling even more after losing; lying about gambling; jeopardizing relationships or employment due to gambling; and relying on others to solve financial issues caused by gambling (American Psychiatric Association, 2013).

Gambling disorders also correlate with other demographic and behavioral health factors, suggesting that certain populations are more at risk for developing gambling problems. According to a meta-analysis of gambling studies in the U.S. and Canada, researchers from Harvard reported that disordered gambling was most prevalent among young people rather than the general adult population, males rather than females, and among those with concurrent psychiatric disorders (Shaffer, Hall, & Built, 1997). An analysis of data from the National Epidemiologic Survey on Alcohol and Related Conditions found that among individuals who met the criteria for gambling disorder, roughly three-quarters had a co-occurring alcohol use disorder, nearly 40% had another substance use disorder, and the majority also had nicotine dependence. In this same sample, the majority with symptoms of gambling disorders also had a mood disorder, anxiety disorder, and/or a personality disorder (Petry, Stinson, & Grant, 2005).

Gambling and problem gambling have been associated with heightened substance use and mental health disorders among younger populations as well. Studies focusing on the co-occurrence of substance use disorders, mental health disorders, and disordered or problem gambling in college student populations found that among the roughly 5% of students who met the criteria for problem gambling, there were much higher rates of problem drinking, anxiety,

Gambling and problem gambling has been associated with heightened substance use and mental health disorders.

Approximately half (51%) of Delaware 8th graders report that they gambled at least once in the past year. Students who gambled were more likely to also report substance use. Forty-two percent of 5th grade students also report gambling in the past year.

and depression compared to the general population of college students (Martin, Usdan, Cremeens, & Vail-Smith, 2014; Martens, Rocha, Cimini, Diaz-Myers, Rivero, & Wulfert, 2009).

Delaware Overview

In the U.S., gambling regulations vary from state to state; in Delaware, most forms of gambling are allowed and there are multiple casinos. However, there are different age restrictions for certain gambling behaviors. Delaware residents must be 18 or older to play charity bingo, purchase lottery tickets or scratch-offs, or make a bet on horses. Individuals must be 21 or older to gamble in casinos or slot machines or on the internet (Delaware Council on Gambling Problems, 2018). In June 2018, Delaware became the second state to legalize all other sports gambling, following the May Supreme Court decision, *Murphy v. National Collegiate Athletic Association* (Domonoske, 2018). Previously, the only other state to allow sports gambling was Nevada, which had legalized the practice in the early 1990s.

The Delaware School Survey (DSS) considers gambling to include: betting on a dice game; betting on individual sports teams; playing Bingo for money; playing the lottery or scratch-off tickets; gambling on the Internet; betting on fantasy sports; betting on a game of personal skill such as pool, darts, or basketball; betting on a video game; playing cards for money; or betting on a challenge (dare, fight, race, etc.). When asked on the 2021 DSS about these behaviors, 42% of 5th grade students indicated that they had gambled at least once in the past year. The rates were similar for male and female students. Because relatively few students use substances at this grade level, we are unable to analyze the data for associations between gambling and consumption rates.

Among 8th graders who responded to the 2020 DSS (the most recent administration of the survey to include gambling questions for this age group)¹, just over half (51%) reported that they had gambled at least once in the preceding year. While there were no differences in the rates of gambling among male and female 5th graders, 8th grade male students reported higher rates of gambling than females. Eighth graders who reported past year gambling were three times as likely to report past year use of alcohol and marijuana and lifetime misuse of prescription pain medicine.

¹The CDC-based Delaware Youth Risk Behavior Survey (YRBS) is administered every other year and it includes gambling questions on both middle and high school versions. In order to reduce the length of the Delaware School Survey administered to 8th and 11th grade students annually, the questionnaire omits gambling questions during years when the YRBS is also administered.

2021 Delaware School Survey

Delaware 5th Graders Who Report Gambling in the Past Year (in percentages)

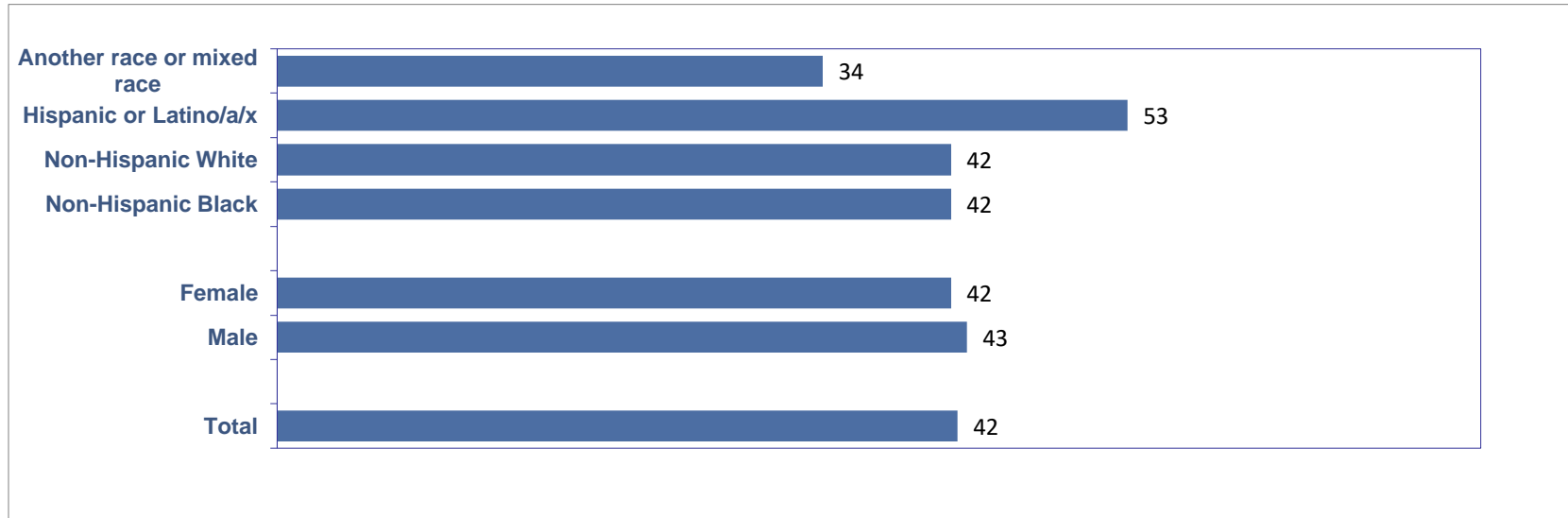


Figure 1: Past year gambling, by sex and race/ethnicity, 5th graders

Notes:

* The relationship between past year gambling and sex was not statistically significant among 5th graders.

** Gambling refers to at least one of the following: played the lottery or scratch-off tickets; bet on fantasy sports; bet on individual sports teams; played cards for money; bet on a challenge (dare, fight, race, etc.); played Bingo for money; bet on dice games such as craps; gambled on the Internet; bet on games of personal skill such as pool, darts, or basketball; bet on video games.

Source: [Center for Drug & Health Studies. \(2021\). Delaware School Survey: 5th Grade \[Annual Survey\]. University of Delaware.](#)

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2020 Delaware School Survey

Delaware 8th Graders Who Report Gambling in the Past Year (in percentages)

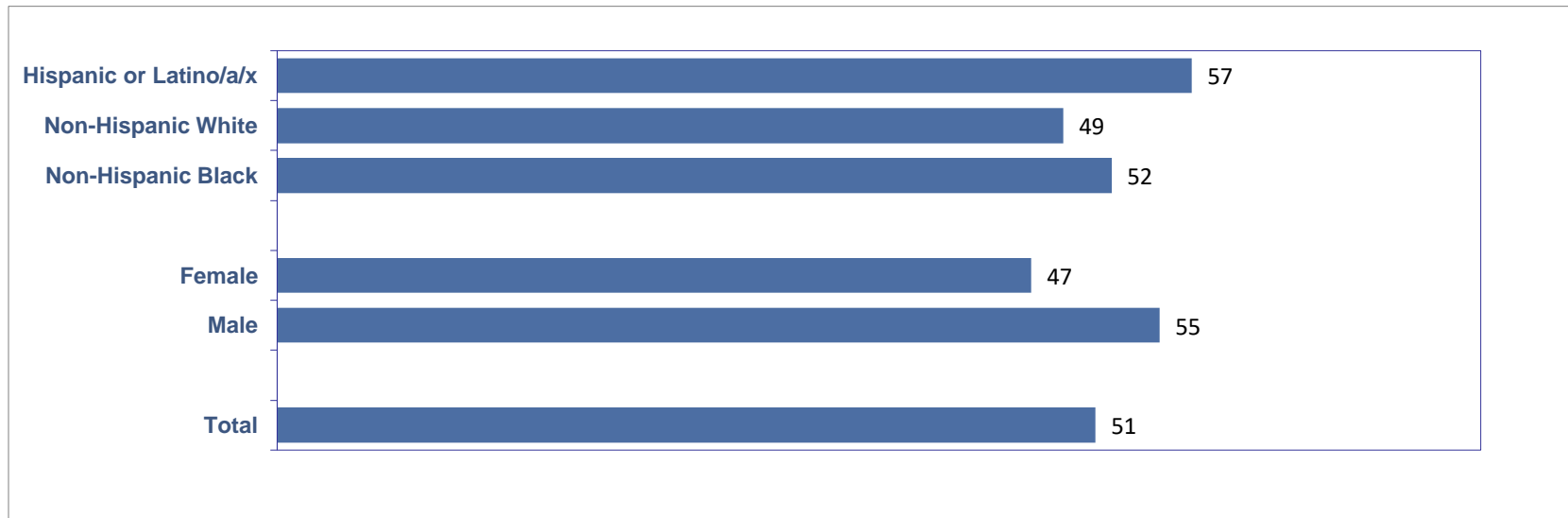


Figure 2: Past year gambling, by sex and race/ethnicity, 8th graders

Notes:

* Unless otherwise noted, all estimates are statistically significant at the $p < .05$ level.

** Gambling refers to at least one of the following: played the lottery or scratch-off tickets; bet on fantasy sports; bet on individual sports teams; played Bingo for money; bet on dice games such as craps; bet money on a challenge (dare, fight, street race, etc.); played online gambling games for money; bet on video games; bet on games of personal skill such as pool, darts, or basketball; played cards for money.

Source: [Center for Drug & Health Studies. \(2020\). Delaware School Survey: Secondary \[Annual Survey\]. University of Delaware.](#)

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2020 Delaware School Survey

Past Year Gambling and Substance Use among Delaware 8th Graders (in percentages)

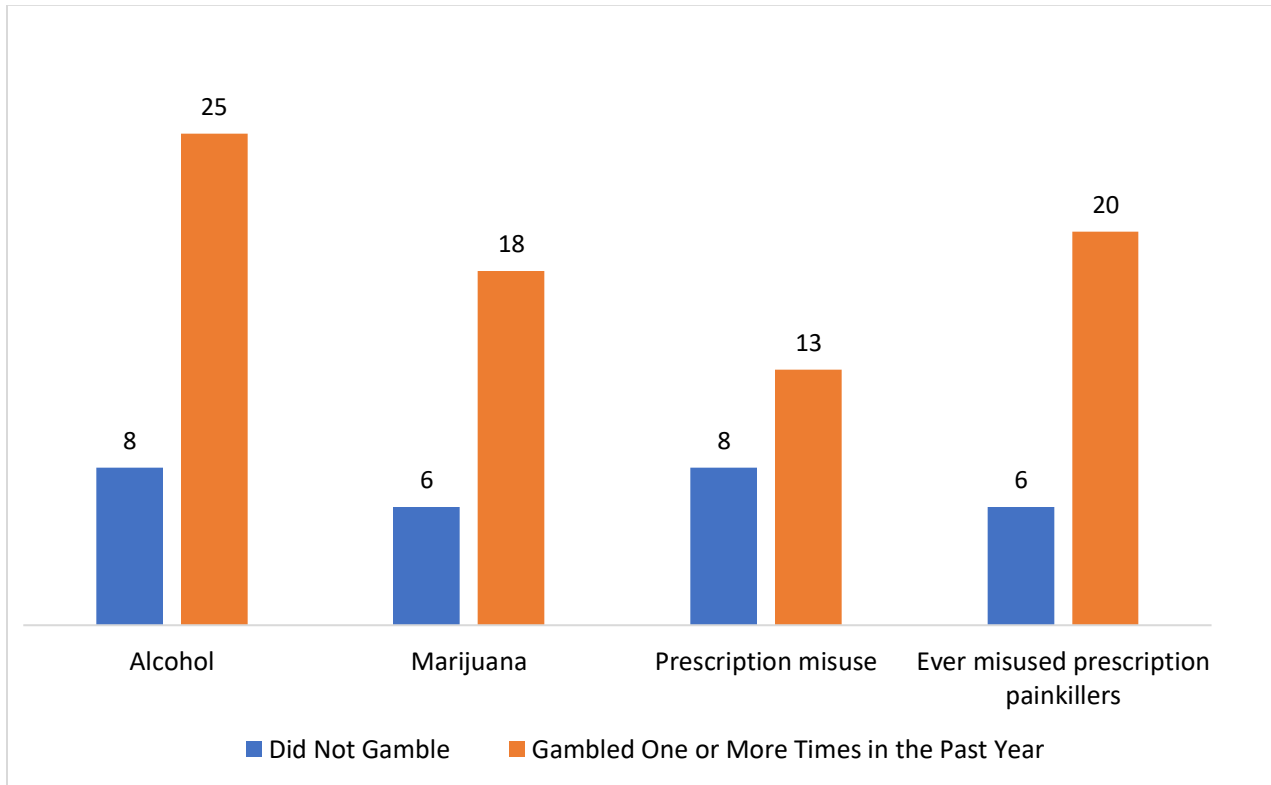


Figure 3: Gambling and substance use, 8th graders

Notes:

* Unless otherwise noted, all estimates are statistically significant at the $p < .05$ level.

** Gambling refers to at least one of the following: played the lottery or scratch-off tickets; bet on fantasy sports; bet on individual sports teams; played Bingo for money; bet on dice games such as craps; bet money on a challenge (dare, fight, street race, etc.); played online gambling games for money; bet on video games; bet on games of personal skill such as pool, darts, or basketball; played cards for money.

Source: [Center for Drug & Health Studies. \(2020\). Delaware School Survey: Secondary \[Annual Survey\]. University of Delaware.](#)

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Data Sources

Data Instrument	Most Recent Data	Trend Range
Delaware's Annual Traffic Statistical Report	2021	-
Delaware Behavioral Risk Factor Surveillance System (BRFSS)	2020	-
Delaware Division of Forensic Science Annual Report	2021	2019 - 2021
Delaware Online/NewsJournal Gun Violence Database	2022	2017 - 2022
Delaware Prescription Monitoring Program (PMP)	2020	2012- 2020
Delaware School Survey (DSS) – 5 th grade	2021	1999 - 2021
8 th and 11 th grades	2021	1999 - 2021
Delaware Youth Risk Behavior Survey (YRBS) – High School	2017	1999 - 2017
Delaware Youth Risk Behavior Survey (YRBS) – Middle School	2019	1999 - 2019
DOMIP (Delaware Opioid Metric Intelligence Program)	2020	-
Household Pulse Survey	2022	2021 - 2022
Monitoring the Future – 8 th , 10 th , and 12 th grades	2021	1999 - 2021
National Youth Risk Behavior Survey (YRBS) – National	2019	1999 - 2019
National Survey of Children's Health (NSCH)	2020	2016 - 2020

Data Instrument	Most Recent Data	Trend Range
National Survey on Drug Use and Health (NSDUH)	2019-2020	2002 - 2020
Delaware Infants with Prenatal Substance Exposure	2020	2015-2020
Treatment Admissions Data	2019	-

In addition to the data sources for the figures and tables in the 2022 report, the following data sources are also cited throughout the narrative:

- America’s Health Rankings
- American Psychological Association
- Bureau of Labor Statistics
- Center for Drug and Health Studies, University of Delaware
- Crisis Text Line
- Delaware Department of Education
- Delaware Department of Health and Social Services, Division of Public Health, My Healthy Community
- Delaware Drug Monitoring Initiative
- Delaware Household Health Survey
- Drug Enforcement Administration
- Gallup
- KIDS COUNT in Delaware
- KFF
- National Academies of Sciences, Engineering, and Medicine
- National Center for Health Statistics
- National Conference of State Legislatures
- National Institute on Alcohol Abuse and Alcoholism
- National Institute on Drug Abuse
- National Institutes of Health
- National Institute on Mental Health
- Rapid Assessment of Pandemic Impact on Development – Early Childhood
- State of Delaware Economic Development Office
- The Trevor Project
- The Williams Institute
- U.S. Bureau of Labor Statistics
- U.S. Census Bureau
- U.S. Centers for Disease Control and Prevention (Alcohol-Related Disease Impact [ARDI] Dashboard; Death Rate Maps & Graphs; State Overdose Death Reporting System [SUDORS])
- U.S. Health Resources and Services Administration