

3D: Delaware Data Discourse

Behavioral Health Data Highlights from the 2023 Delaware Epidemiological Profile

**Hosted by the State Epidemiological Outcomes
Workgroup (SEOW)**

**Center for Drug and Health Studies of the
University of Delaware**

January 9th, 2024

The State Epidemiological Outcomes Workgroup (SEOW)

Funding for the SEOW has been provided by the Delaware Department for Health and Social Services, Division of Substance Abuse and Mental Health (DSAMH) through the Substance Abuse and Mental Health Services Administration (SAMHSA).

*The SEOW is facilitated by the Center for Drug and Health Studies at the University of Delaware. Visit the SEOW online at:
<https://cdhs.udel.edu/seow/what-is-the-seow>*



The 4 Goals of the SEOW

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SEOW

What is the SEOW?

Epidemiological Reports and Products

Delaware Heat Maps

DDATAGrams

School Surveys

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WHAT IS THE SEOW?

The State Epidemiological Outcomes Workgroup (SEOW)



A key element of the Strategic Prevention Framework - Partnerships for Success grant is to engage a robust State Epidemiological Outcomes Workgroup (SEOW) to share Delaware data on substance use and related issues. Data can be used to highlight trends (such as heroin use) and emerging issues (for example, "vaping"), demonstrate needs, and identify groups of people who are at disproportionate risk for substance use and related concerns. Data is also vital for evaluating prevention efforts.

The SEOW, formerly known as the Delaware Drug and Alcohol Tracking Alliance or DDATA), collects, synthesizes, and guides the development of data products to inform prevention policy, practice, programming throughout

- Identify, Analyze, and Share Data

- Create Data Products

- Train Communities in Understanding and Using Data

- Build State and Local Level Monitoring Systems

“The Epi”

The Delaware Epidemiological Profile is an annual compilation of data highlighting substance use, mental health, risk and protective factors, and special topics.

The Epi is a resource for:

- Needs assessment
- Grant applications
- Evaluation planning
- Presentations, public awareness, and media outreach



**COMPANION GUIDE
to the**

**The 2023 Delaware
Epidemiological
Profile**

**Substance Use, Mental
Health, and Related
Issues**



Data Sources

Instrument	Most Recent Data
Crisis Text Line	2023
Delaware Annual Traffic Statistical Report	2022
Delaware Behavioral Risk Factor Surveillance System (BRFSS)	2021
Delaware Division of Forensic Science Annual Report	2022
Delaware Infants with Prenatal Substance Exposure Program	2020
Delaware Online/NewsJournal Gun Violence Database	2023
Delaware Prescription Monitoring Program (PMP)	2021
Delaware School Surveys (DSS) – 5 th and Secondary (8 th and 11 th grades)	2022
Delaware Youth Risk Behavior Survey (YRBS) –High School and Middle School	2021
Healthcare Cost and Utilization Program (HCUP) Fast Stats – Neonatal Abstinence Syndrome	2016-2020
Household Pulse Survey	2023
National Highway Traffic Safety Administration	2017-2021
National Survey on Children’s Health (NSCH)	2020
National Survey on Drug Use and Health (NSDUH)	2021
Pregnancy Risk Assessment Monitoring System (PRAMS)	2020
State Unintentional Drug Overdose Reporting System (SUDORS)	2021
Treatment Admissions Data	2020

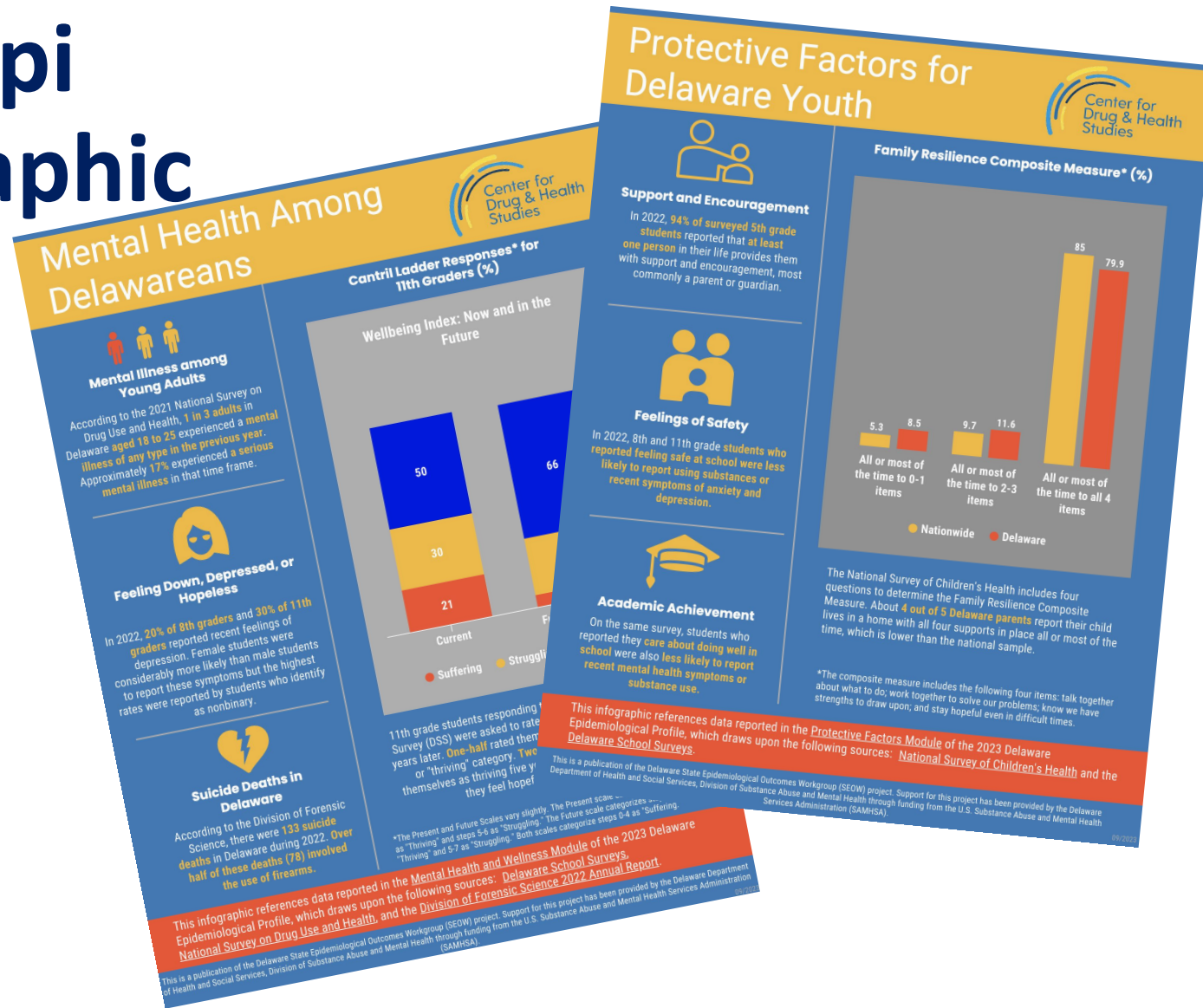
Additional Data References

American Psychological Association
 Center for Drug and Health Studies, University of Delaware
 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
 National Conference of State Legislatures
 National Council on Problem Gambling
 National Institute on Alcohol Abuse and Alcoholism
 National Institute on Drug Abuse
 National Institutes of Health
 National Institute on Mental Health
 The Trevor Project
 The Williams Institute
 U.S. Census Bureau
 U.S. Centers for Disease Control and Prevention

Modules included in the 2023 Epi Profile

**Tobacco and E-Cigarettes (Vaping)
Alcohol
Marijuana
Opioids
Other Illegal Drugs
Maternal and Behavioral Health
Gambling
Mental Health and Wellness
Persons with Disabilities
Adverse Childhood Experiences
(ACES) and Other Trauma
Gender and Sexuality
Protective Factors**

2023 Epi Infographic Series



Coming soon: Data
Visualization Overview
and Epi Slide Series of
select figures

What's New in the 2023 Profile?

- ❖ Companion Guide including background and supplemental materials, notes re: data reporting and interpretation, etc.
- ❖ Streamlined modular format for each topic
- ❖ Newly organized tobacco/vaping chapter
- ❖ Recent legislative updates

2023 Delaware State Epidemiological Profile

Data Reporting and Interpretation

Notes on 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 established 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 have been aggregated or otherwise reported differently than in years prior.

The following notes summarize the guidelines for interpreting data presented in this report:

- Reporting Small Numbers
- Rounding
- Missing Observations
- Statistical Significance
- Discrepancies in Reporting
- Weighted Data



Reporting Small Numbers and Rounding

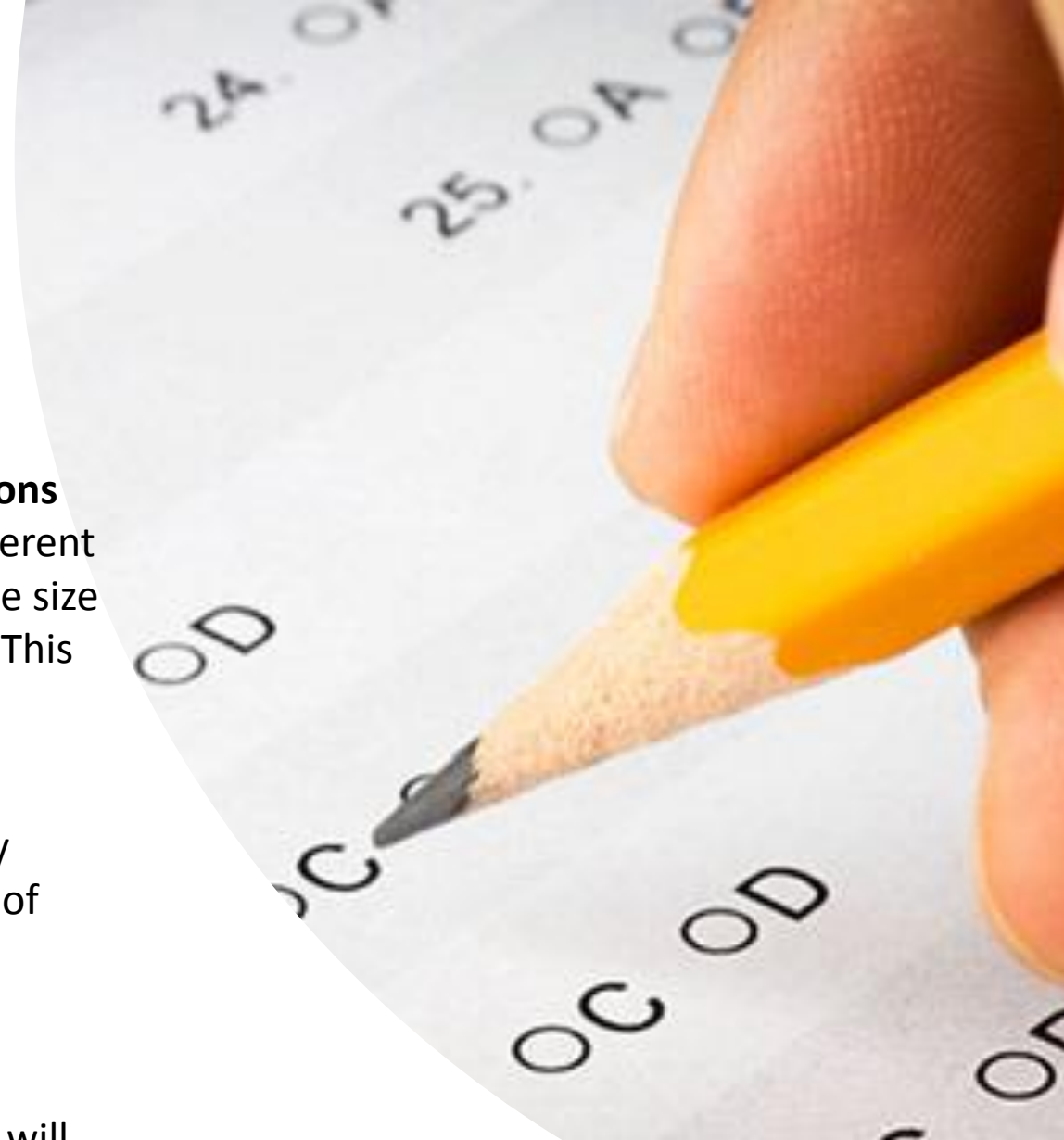
- **Reporting small numbers:** For any estimate where the raw number of responses is less than 30, no statistical estimates are reported. Statistics computed from such a small proportion of the total number of students may be unreliable, inflating the significance of existing relationships in the data, and among some special populations, may put individuals at risk of being identified. In some data products multiple years of data have been combined in order to increase the sample sizes to a reportable figure.
- **Rounding:** All figures from Delaware school survey data (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 the analysis of Delaware School Survey data, 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 get tired 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.

The Epi draws upon data from multiple but highly regarded sources to provide a comprehensive profile of behavioral health. At times, rates of behavior reported may vary substantially across these data sources. The nature and timing of the survey administration, sampling methods, wording and order of questions, definitions of key terms, and other factors may account for differences in these rates.



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.


$$p < .05$$

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.

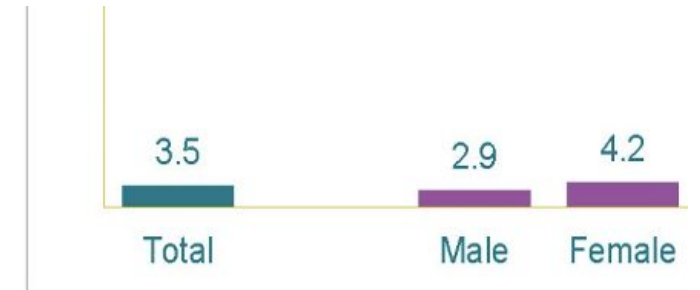


Figure 71: Students who misused prescription drugs

Notes:

*Counting drugs such as codeine, Vicodin, OxyContin, Hydro

[†]B > W, H > W (Based on t-test analysis, $p < 0.05$.)

All Hispanic students are included in the Hispanic category.

This graph contains weighted results.

Pandemic Impacts on Data Collection

Since 2020, the COVID-19 pandemic has greatly affected data collection of all kinds. Given that the timing and methods of various survey administrations may have changed within the past several years, it will be important to consider this when interpreting results. The profile is compiled using the most recently accessible data from state and national sources. Relevant notes regarding data interpretation from various data sources are included throughout the profile. Below is more specific information regarding the pandemic impacts on data collection for youth surveys administered by the Center for Drug and Health Studies at the University of Delaware.

Delaware School Survey (DSS)

For the first time, an electronic data collection method was offered as an option for the DSS in 2020 due to COVID-19. However, administration was suspended for the majority of the spring of 2020. Once it resumed in 2021/2022, schools could select either paper and pencil administration or the online questionnaire. Trained survey administrators were available to assist with both types of data collection, but schools could allow teachers to follow instructions for administering. Students participated in the survey while at school during a designated class period as part of a classroom activity. For online administration, students accessed a secure survey website using a school-issued device to participate in the survey. **Due to the data gap in 2020 as well as the changes in the methodology for the 2021-2022 administration, results of the 2022 DSS should be compared with caution to previous DSS survey results.**

2022 DSS sample sizes by grade:

- 5th grade: 4,088
- 8th grade: 3,544
- 11th grade: 2,936

Delaware Youth Risk Behavior Surveys (YRBS)

The Delaware YRBS is conducted in odd-numbered years during the spring (January-June) among public, charter, and alternative school students in grades 9-12. However, the 2021 administration was postponed to the fall (September-December) due to COVID-19 which meant that students were younger than they would have been during a spring administration. Also, ongoing pandemic restrictions may have kept some students from participating in classrooms. **Until the 2023 data is analyzed, comparisons of the 2021 data to previous years' data should be avoided, as findings from the 2021 data may be an exception to ongoing trends.** Additional high school YRBS data from previous years may be requested by following the Delaware Division of Public Data Information & Request Process.

2021 YRBS sample sizes by age group:

Middle school: 657

High school: 1,578

A Note on Word Choice

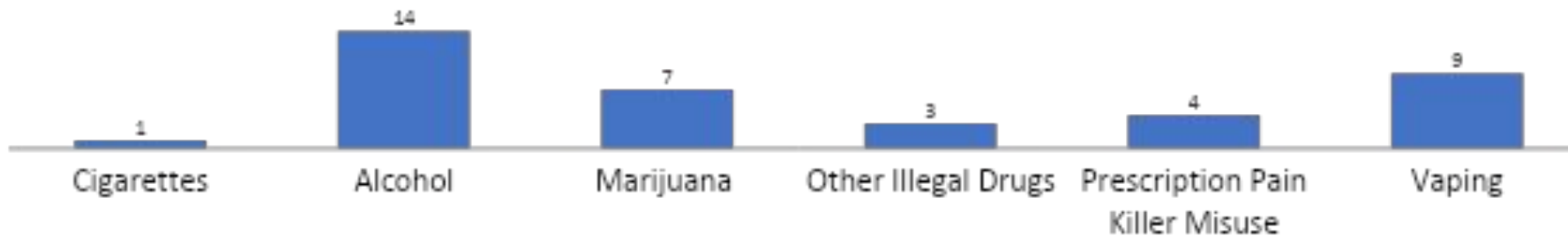
Language frames how people collectively think about behavioral health and is continuously evolving. The SEOW Facilitator Team strives to use word choices in its data products that are accurate, respectful, free of stigma, strength-based, trauma-informed, and inclusive and culturally sensitive. However, much of the data and information reported in SEOW data products are drawn from other sources. To preserve accuracy, whenever possible, the editors use the words, phrases, and data labels that are used in the original sources even if these terms are not necessarily the terms they 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, the original phrasing is included in the accompanying notes.

2023 Delaware State Epidemiological Profile

An Overview of Key Findings

State Overview: A Snapshot of Substance Use (8th Grade)

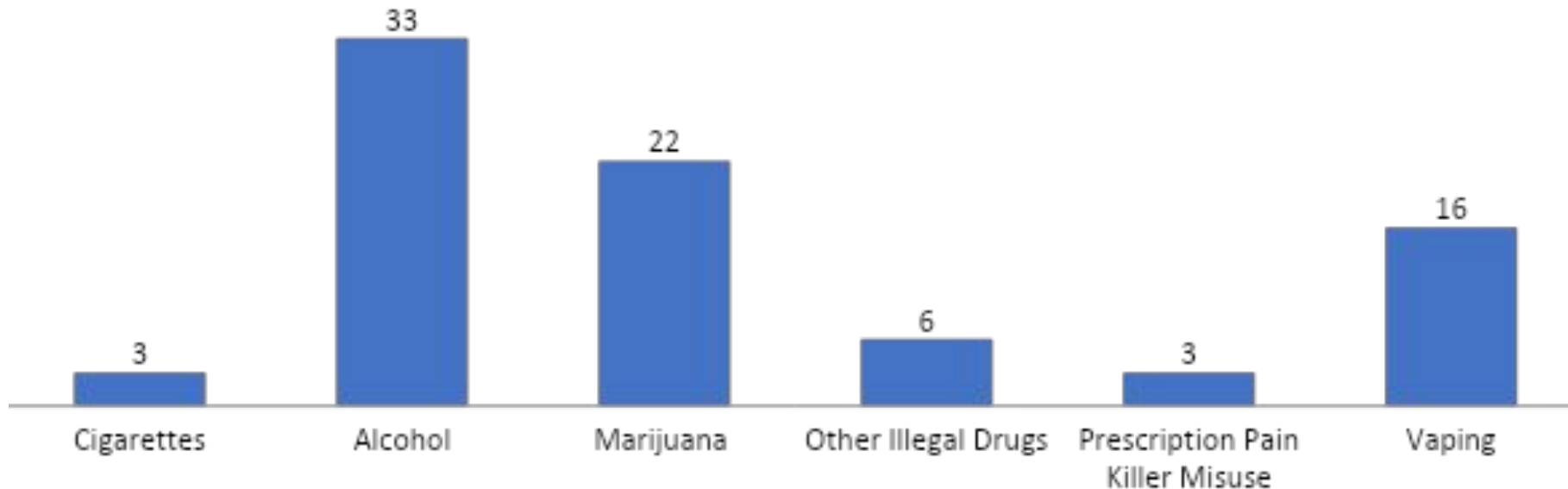
Reported Use of Select Substances in the Past Year among Delaware Students (%) 2022 Delaware School Survey, 8th Grade



- Prescription pain killer misuse includes OxyContin, codeine, Percocet, Dilaudid, morphine, Tylenol III, Vicodin, Promethazine/cough syrup with codeine, or other pain medication.
- Other illegal drugs include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.

State Overview: A Snapshot of Substance Use (11th Grade)

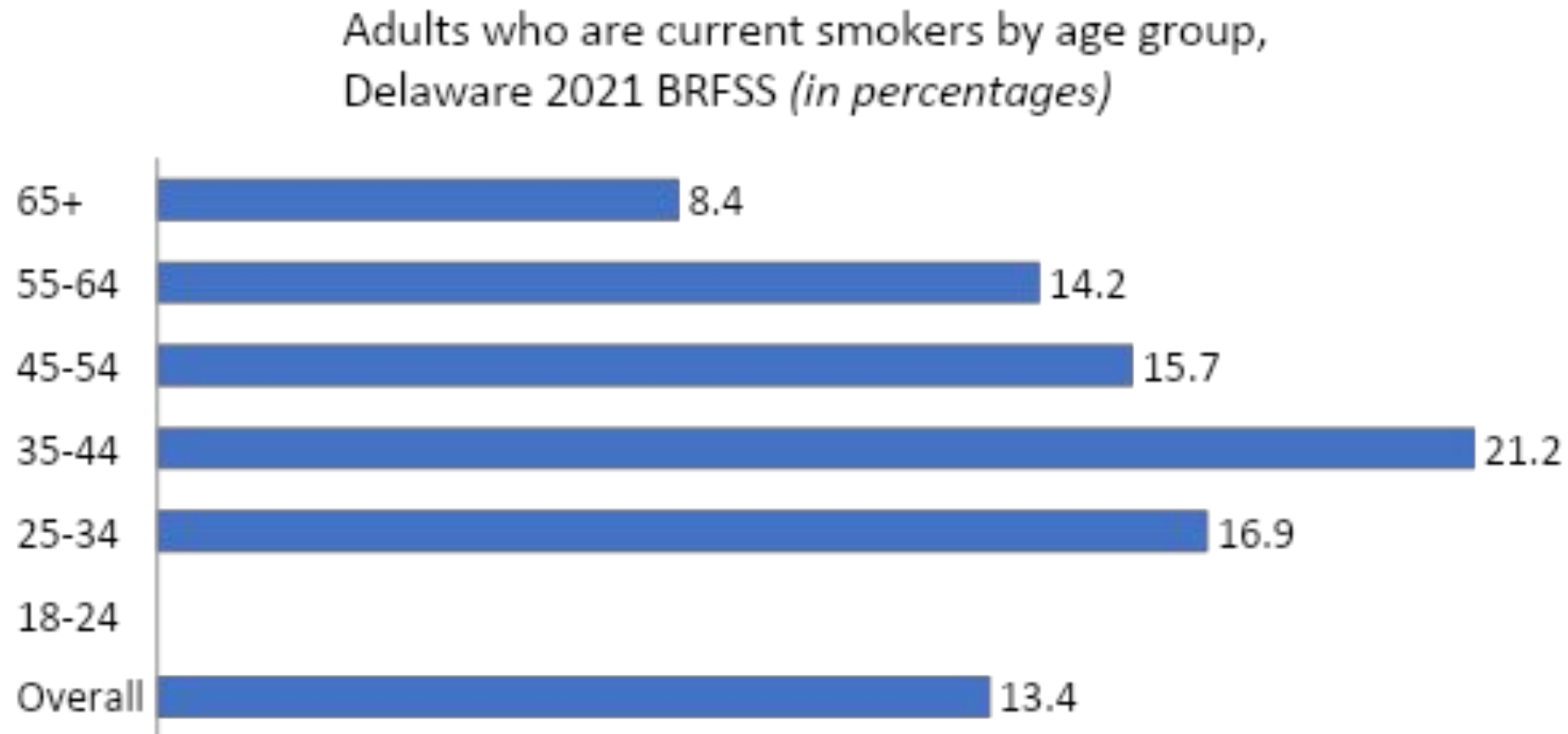
Reported Use of Select Substances in the Past Year among Delaware Students (%) 2022 Delaware School Survey, 11th Grade



- Prescription pain killer misuse includes OxyContin, codeine, Percocet, Dilaudid, morphine, Tylenol III, Vicodin, Promethazine/cough syrup with codeine, or other pain medication.
- Other illegal drugs include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.

Tobacco

Despite decreasing rates of tobacco use, the CDC estimates that 1,400 adults in Delaware die each year due to smoking-related illnesses.



Centers for Disease Control and Prevention (2021). *BRFSS Prevalence & Trends Data*.

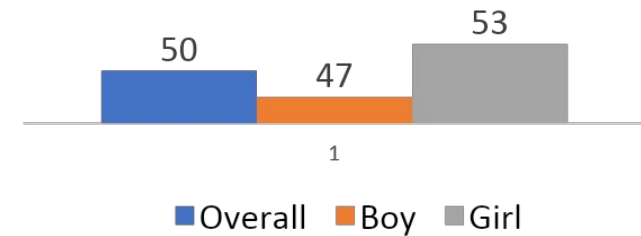
Tobacco

Cigarette Use by Grade, DSS
2022 (in percentages)

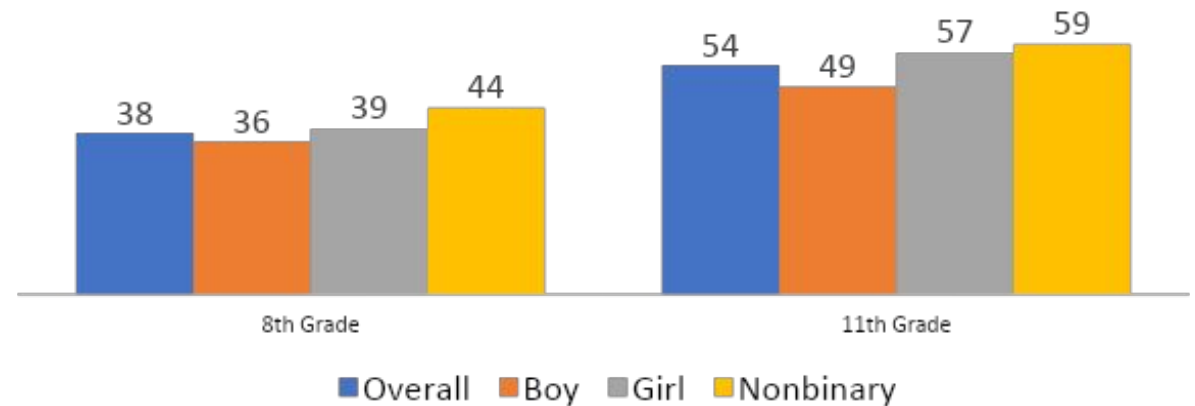
■ 5th Grade
■ 8th Grade
■ 11th Grade



Perceived "A Lot of Risk" From
Smoking One or More Packs of
Cigarettes Daily, 5th Grade, DSS
2022 (in percentages)

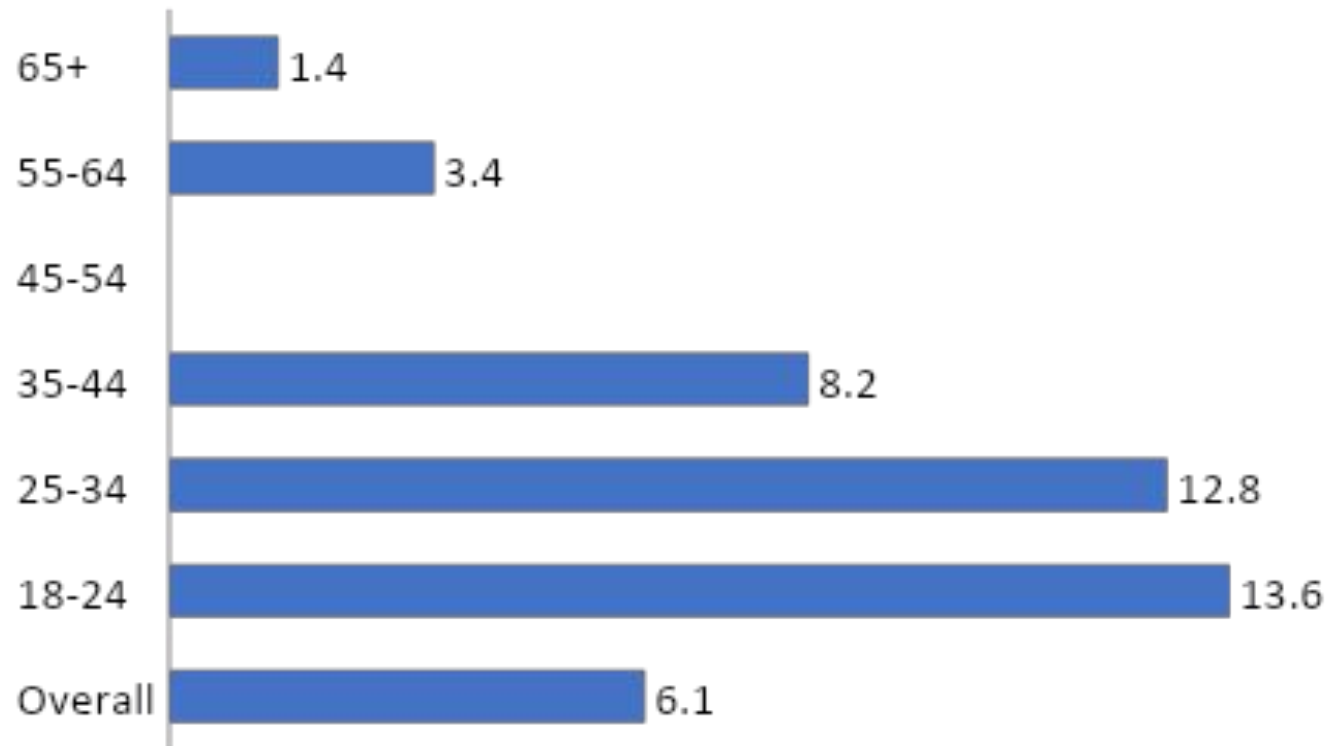


Perceived "Great Risk" From Smoking One or More Packs of
Cigarettes Daily, 8th and 11th Grade,
DSS 2022 (in percentages)



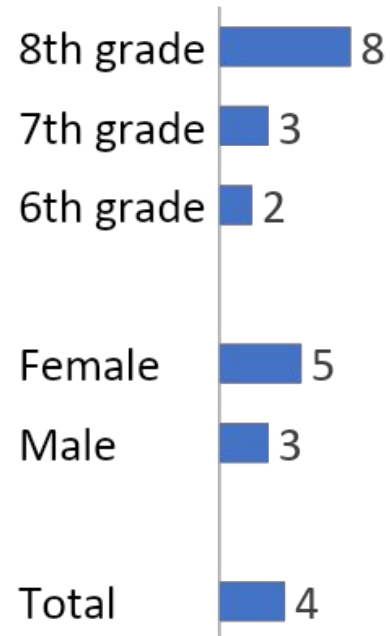
Electronic Cigarettes (Vaping)

Adults who are current e-cigarette users by age group,
Delaware 2021 BRFSS
(in percentages)

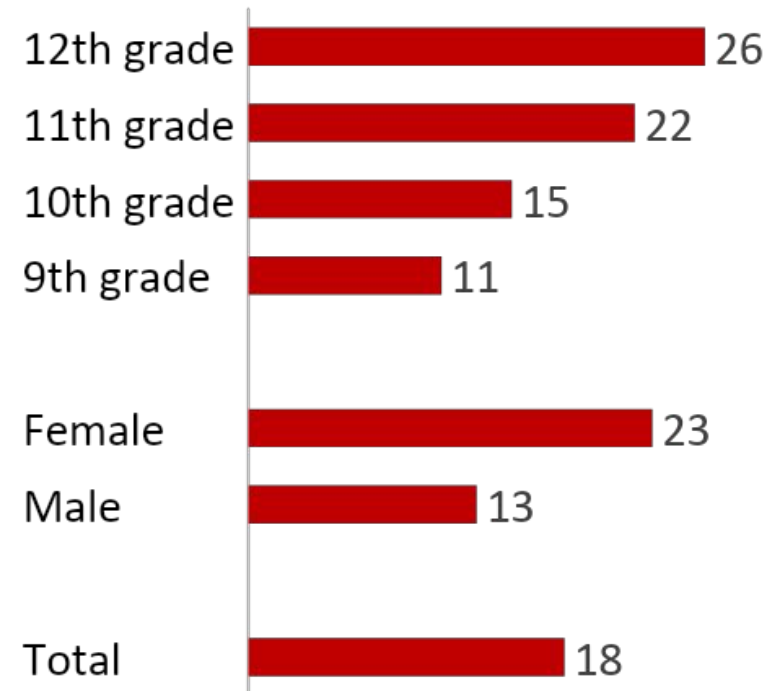


Electronic Cigarettes (Vaping)

Middle School Students Who Currently
Used Electronic Vapor Products, YRBS
2021 *(in percentages)*



High School Students Who Currently
Used Electronic Vapor Products, YRBS
2021 *(in percentages)*



Alcohol

Alcohol use and perceptions of great risk in Delaware by age group: model-based prevalence estimates from NSDUH, 2021 (in percentages)

Measure	Total 12 or Older	AGE GROUP			
		12-17	18-25	26 or Older	12-20
Past month alcohol use	50.70	6.54	56.77	54.59	15.59
Past month binge drinking	22.35	3.25	38.74	22.20	10.64
Perceived great risk of drinking 5 or more drinks once or twice a week	44.66	43.66	37.87	45.67	n/a

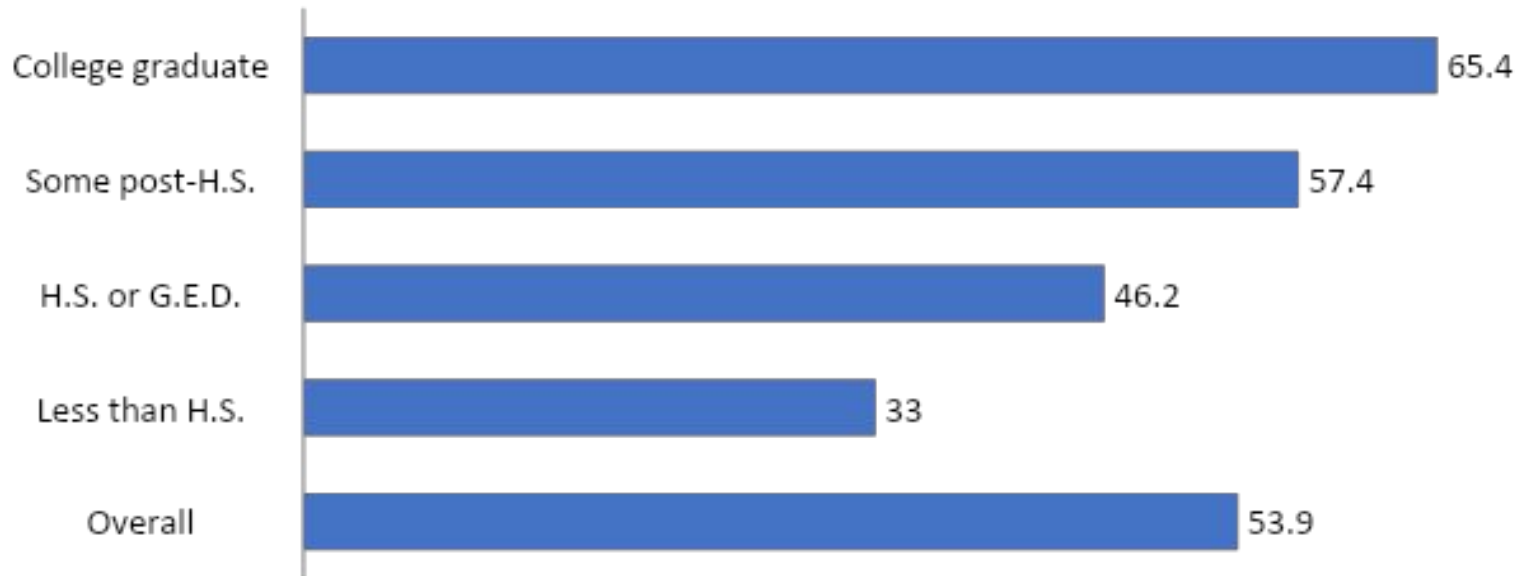
Estimates are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days. In 2015, the definition for females changed from five to four drinks.

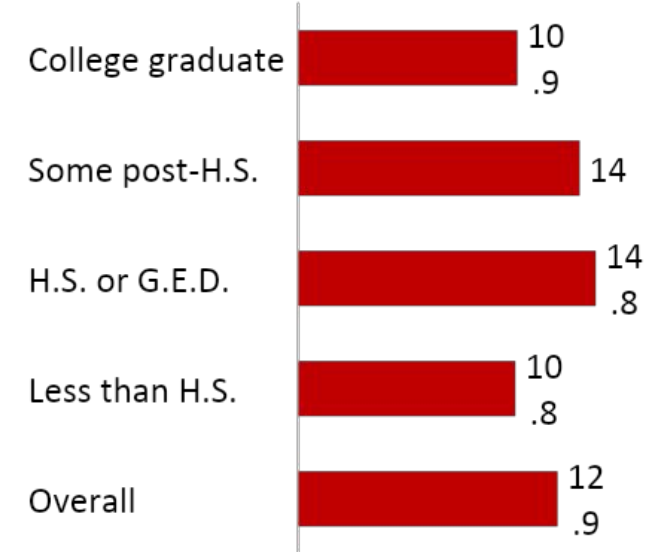
Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. 2021
National Survey of Drug Use and Health.

Alcohol

Adults who had at least one drink of alcohol in the past month by educational attainment,
Delaware 2021 BRFSS (in percentages)



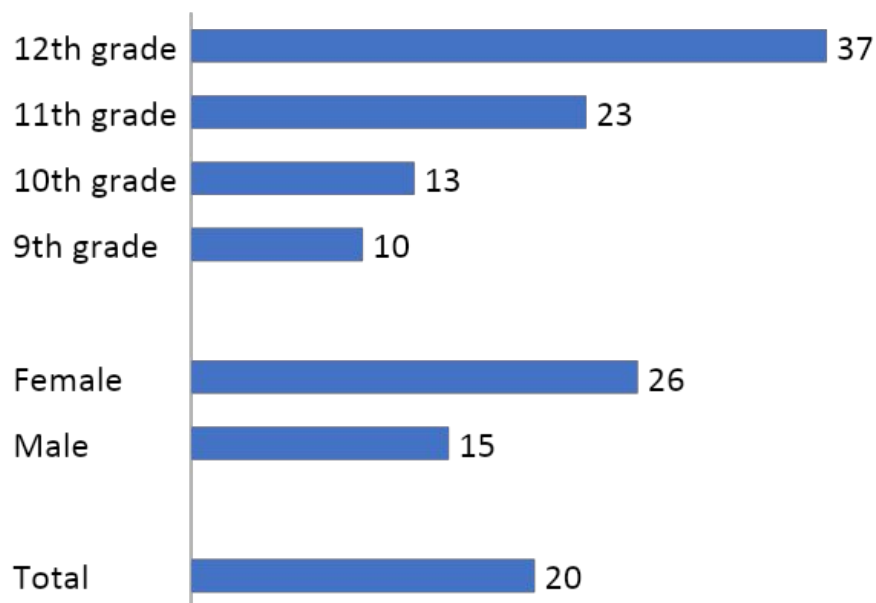
Adults who binge drink by educational attainment,
Delaware 2021 BRFSS (in percentages)



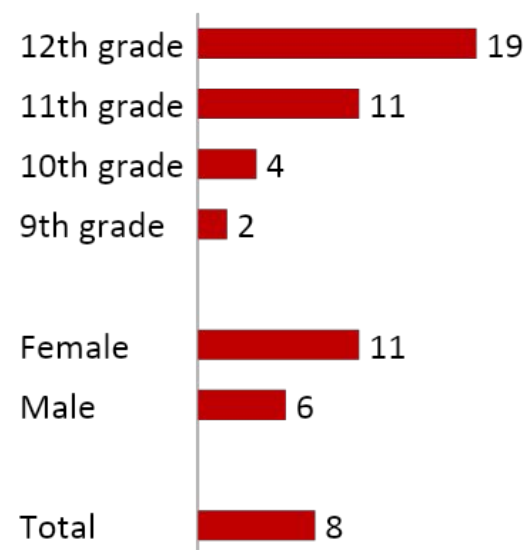
Binge drinking is defined in the BRFSS as 4 or more drinks for a woman or 5 or more drinks for a man on an occasion during the past 30 days.

Alcohol

High School Students Who Currently
Drank Alcohol, YRBS 2021
(in percentages)



High School Students Who Were
Currently Binge Drinking,
YRBS 2021 *(in percentages)*



Binge drinking is defined in the BRFSS as 4 or more drinks for a females or 5 or more drinks for a males in a row, within a couple of hours, at least 1 day during the 30 days before the survey.

Centers for Disease Control and Prevention. 1991-2021 Youth Risk Behavior Survey Data.

Marijuana

Marijuana use and perceptions of great risk in Delaware by age group: model-based prevalence estimates from NSDUH, percentages, 2021

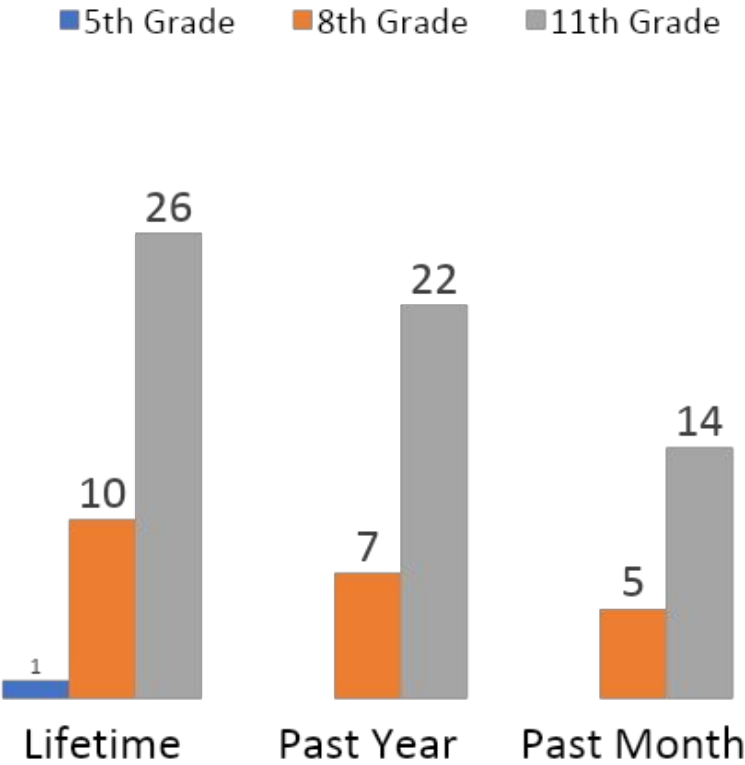
Measure	Total 12 or Older	AGE GROUP		
		12-17	18-25	26 or Older
Marijuana				
Past year marijuana use	19.16	11.69	39.65	17.22
Past month marijuana use	14.98	5.64	27.69	14.28
Perceived great risk of smoking marijuana once a month	19.35	21.26	9.96	20.42

Estimates are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

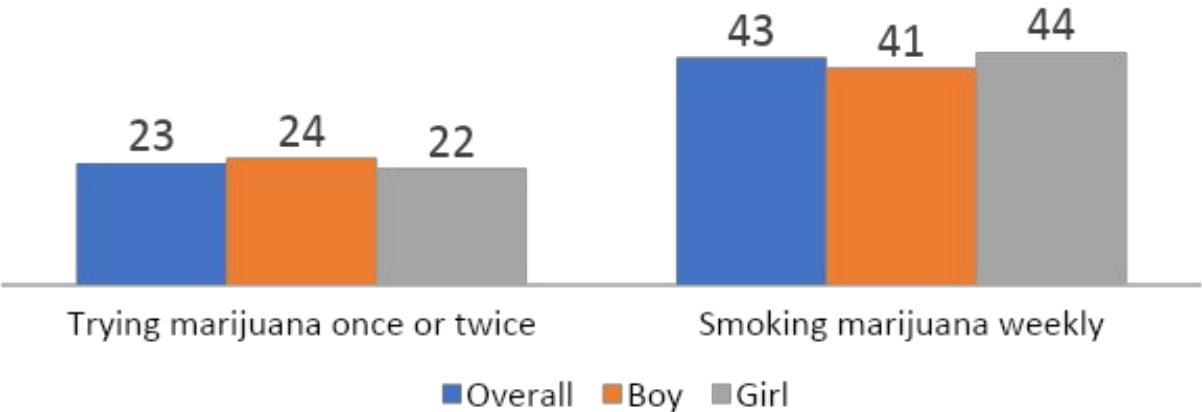
Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. 2021 National Survey of Drug Use and Health.

Marijuana

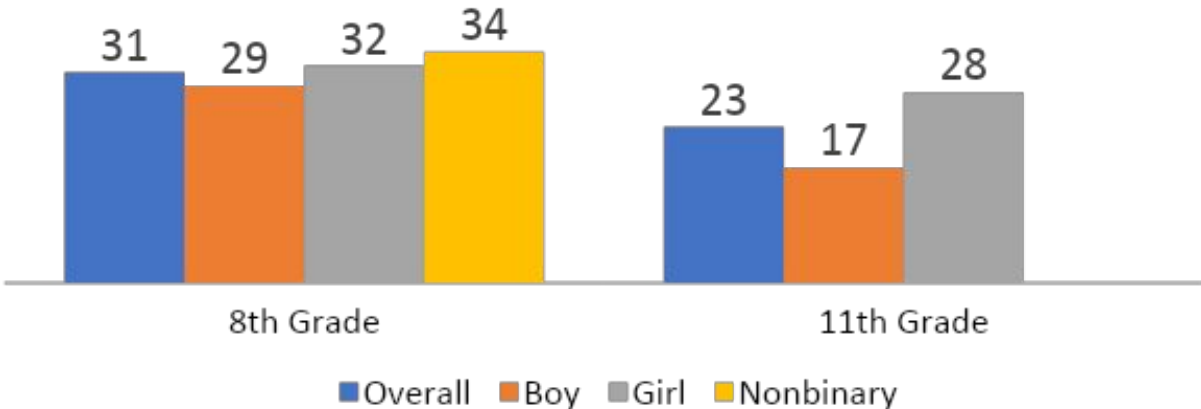
Marijuana Use by Grade, DSS 2022 (in percentages)



Perceived "A Lot of Risk" From Marijuana Use, 5th Grade, DSS 2022 (in percentages)

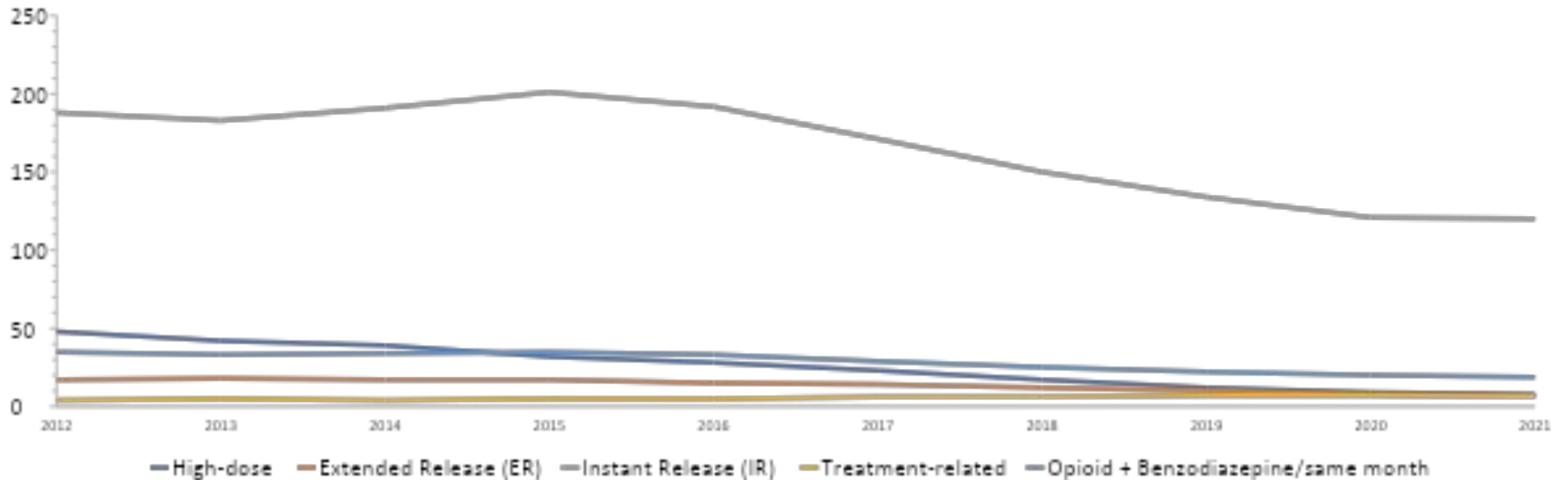


Perceived "Great Risk" From Smoking Marijuana Regularly, 8th and 11th Grade, DSS 2022 (in percentages)



Opioids and Prescription Misuse

Trends in People Filling Opioid Prescriptions in Delaware by Prescription Type,
2012-2021
(as a rate per 1,000 people)



Other Illegal Drugs - Adults

Illicit drug use in Delaware by age group: model-based prevalence estimates from NSDUH, 2021 (in percentages)

Measure	Total 12 or Older	AGE GROUP		
		12-17	18-25	26 or Older
Past month illicit drug use	16.81	9.73	30.14	15.79
Past month illicit drug use other than marijuana	3.54	2.00	6.45	3.31

Estimates are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

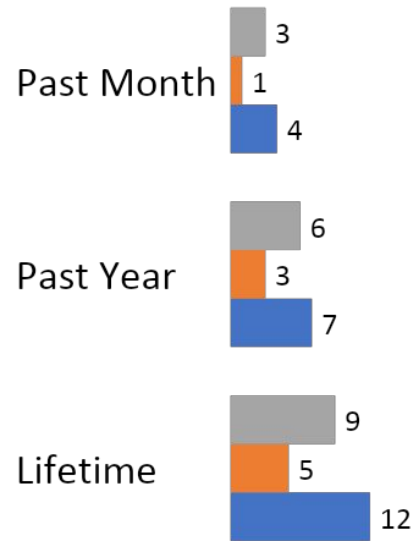
Illicit Drug Use includes the misuse of prescription psychotherapeutics or the use of marijuana (including vaping), cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription psychotherapeutics do not include over-the-counter drugs.

Illicit Drugs Other Than Marijuana excludes respondents who used only marijuana but includes those who used marijuana in addition to other illicit drugs.

Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. 2021 National Survey of Drug Use and Health.

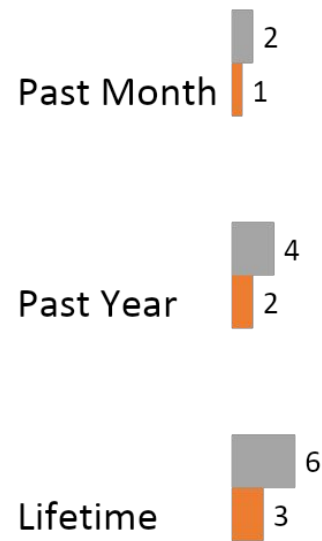
Other Illegal Drugs - Youth

Other Illegal Drug

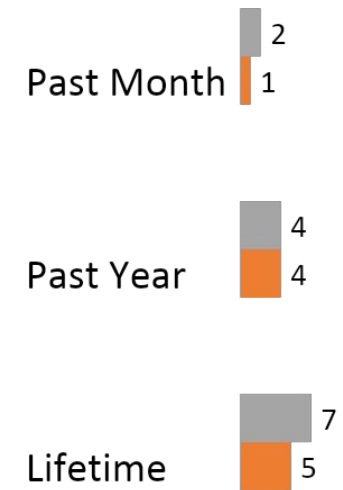


- 5th Grade
- 8th Grade
- 11th Grade

Synthetic Marijuana



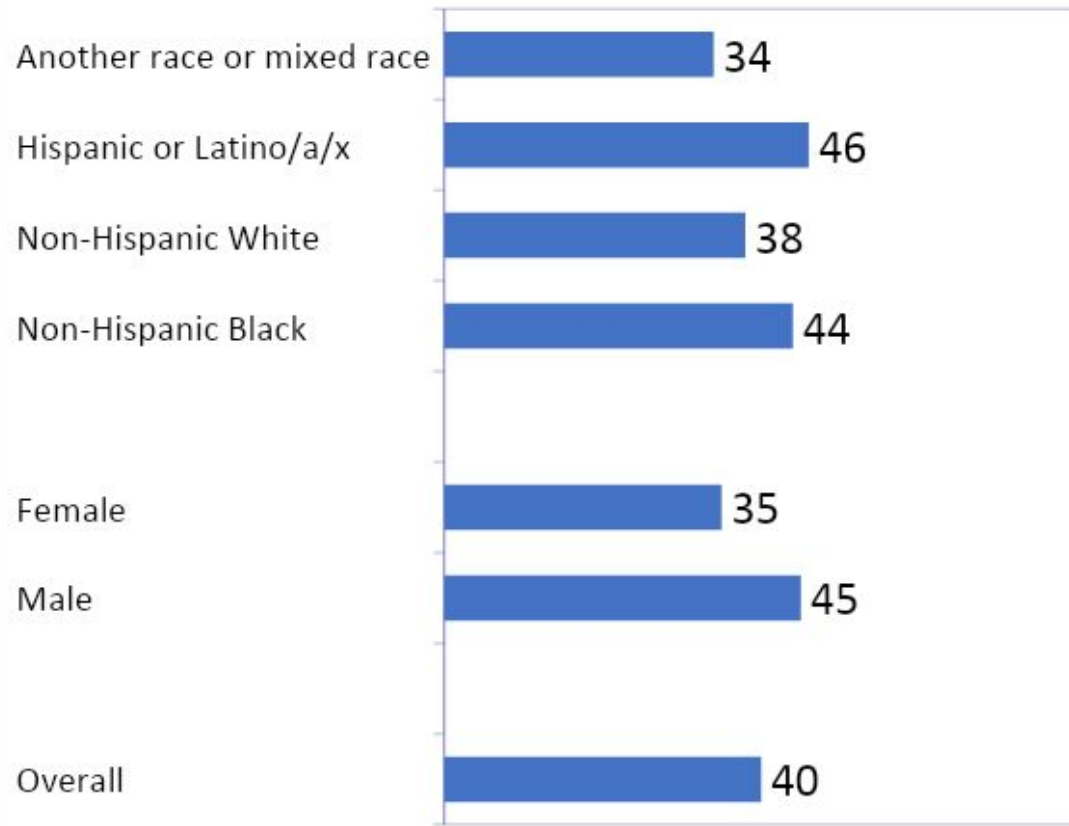
Over the Counter Drug Misuse



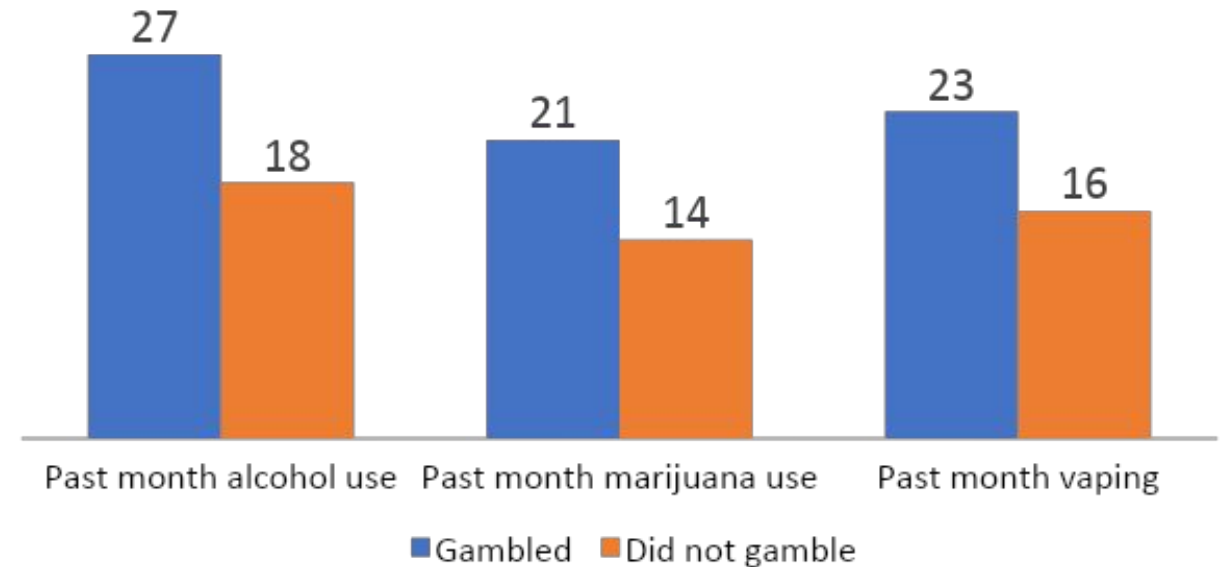
Other illegal drugs on the DSS includes ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.

Gambling

Past Year Gambling by Gender and Race/Ethnicity, High School, 2021 (*in percentages*)



Select Substance Use by High School Students who Gambled in the Past Year, 2021 (*in percentages*)



Maternal and Child Behavioral Health

Substance Use, Pregnancy Risk Assessment Monitoring System (PRAMS), 2020

Substance Use	2020	Overall 2020
Any cigarette smoking <ul style="list-style-type: none">During the 3 months before pregnancyDuring the last 3 months of pregnancyPostpartum	% (95% CI) 18.5 (15.7-21.6) 9.1 (7.2-11.5) 12.3 (10.0-15.0)	% (95% CI) 14 (13.4-14.5) 6.5 (6.2-6.9) 8.8 (8.3-9.2)
Any e-cigarette use <ul style="list-style-type: none">During the 3 months before pregnancyDuring the last 3 months of pregnancy	5.0 (3.6-7.0) 1.4 (0.7-2.5)	5.2 (4.9-5.6) 1.5 (1.3-1.7)
Hookah use in the last 2 years	3.6 (2.4-5.2)	4.4 (4.1-4.8)
Heavy drinking* during the 3 months before pregnancy *≥8 drinks a week	2.7 (1.7-4.2)	3.0 (2.8-3.3)

Maternal and Child Behavioral Health

Maternal Mental Health and Interpersonal Relationships, PRAMS, 2020

Depression	2020	Overall 2020
	% (95% CI)	% (95% CI)
Self-reported depression, 3 months before pregnancy	16.9 (14.3-19.8)	15.5 (15.0-16.1)
Self-reported depression during pregnancy	15.9 (13.4-18.9)	15.2 (14.7-15.8)
Self-reported postpartum depressive symptoms	10.6 (8.5-13.0)	13.4 (12.9-13.9)

Intimate Partner Violence	2020	Overall 2020
	% (95% CI)	% (95% CI)
Experienced IPV during the 12 months before pregnancy by a husband or partner and/or by an ex-husband or ex-partner	4.3 (3.0-6.1)	2.5 (2.3-2.8)
Experienced IPV during pregnancy by a husband or partner and/or by an ex-husband or ex-partner	2.7 (1.7-4.2)	1.7 (1.5-1.9)

Mental Health and Wellness

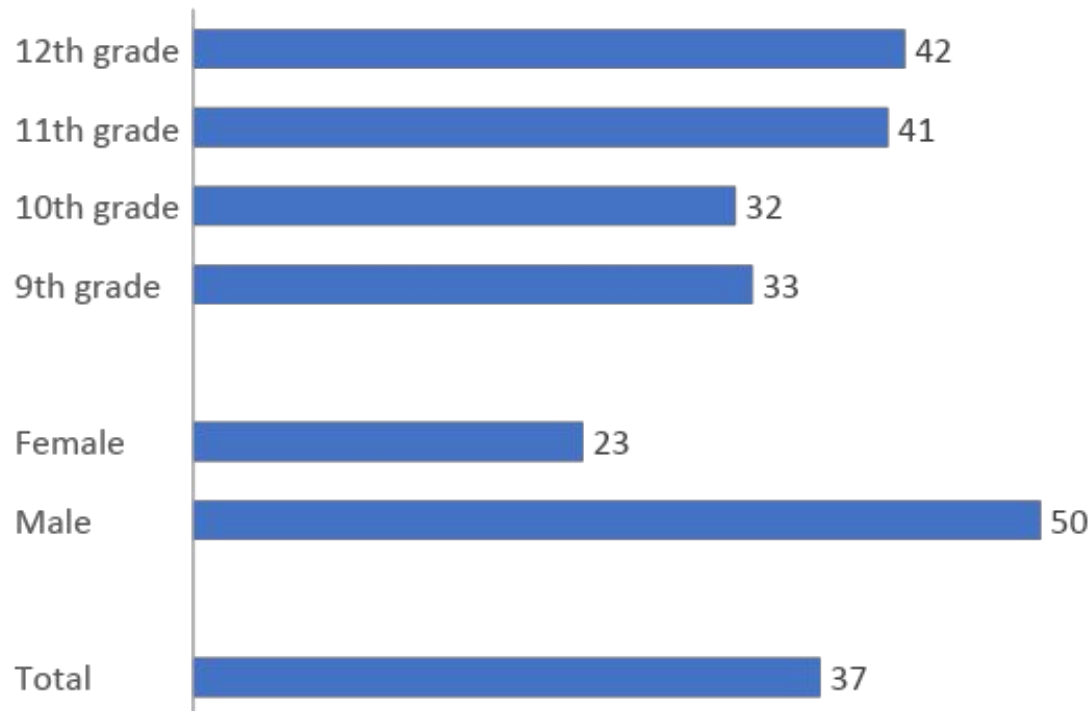
Past Year Mental Health Measures, by age group, Delaware: model-based prevalence estimates, NSDUH, 2021 (in percentages)

Measure	Age group		
	18 or older	18-25	26 or older
Any mental illness	19.96	33.85	18.10
Serious mental illness	4.30	12.69	3.17
Major Depressive episode	7.93	21.78	6.08
Serious thoughts of suicide	3.91	14.23	2.53
Made any suicide plans	1.52	8.12	0.64
Received mental health services	18.24	21.87	17.76

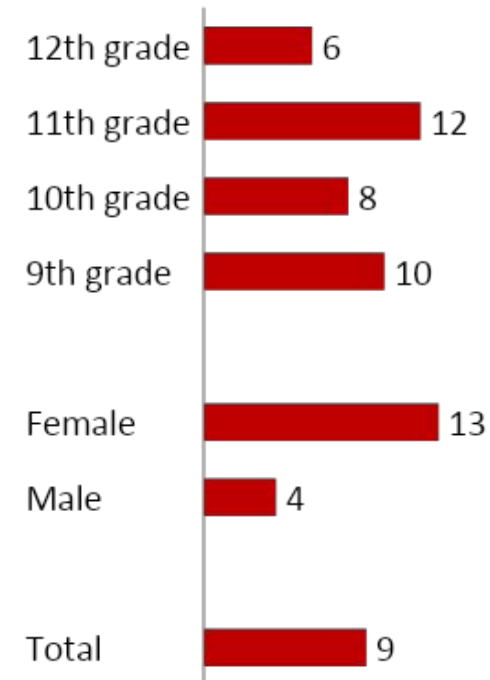
Estimates are based on a survey-weighted hierarchical Bayes estimation approach and generated by Markov Chain Monte Carlo techniques.

Mental Health and Wellness

High School Students Who Felt Sad or Hopeless Almost Every Day for 2 or More Weeks in a Row, YRBS 2021 *(in percentages)*

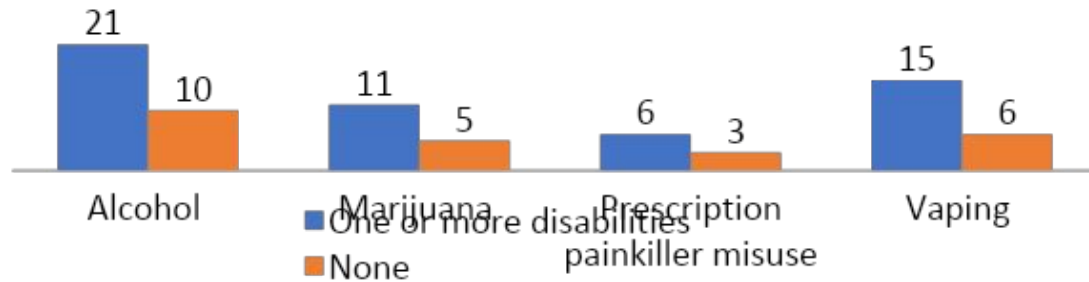


High School Students Who Attempted Suicide in the 12 months Before the Survey, YRBS 2021 *(in percentages)*

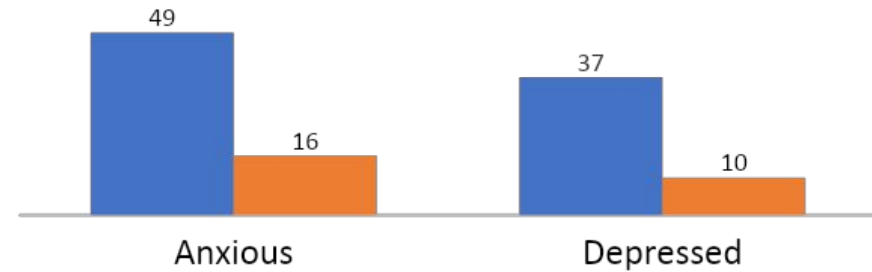


Persons with Disabilities

Disability and Past Year Substance Use,
8th Grade, DSS 2022 *(in percentages)*



Disability and Mental Health, 8th
Grade, DSS 2022 *(in percentages)*



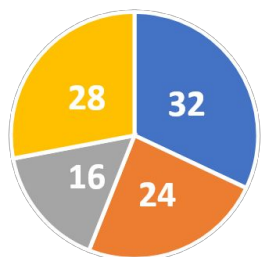
Disabilities are defined in the DSS as serious difficulty hearing or seeing, difficulty walking or climbing stairs, or difficulty concentrating, remembering, making decisions, or doing things due to a physical, emotional, or learning disability identified by the student or a doctor/healthcare professional.

Anxiety is defined as students who respond that they have felt very nervous or anxious on more than half of the days in the past two weeks.

Depression is defined as students who respond that they have been bothered by feeling down, depressed, or hopeless on more than half of the days in the past two weeks.

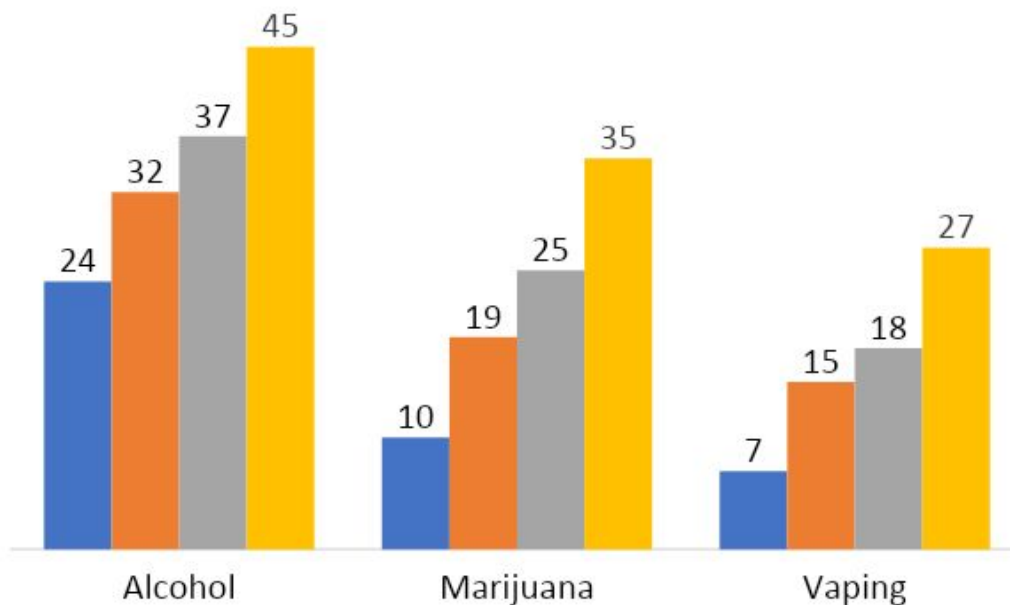
Adverse Childhood Experiences (ACEs) and Other Trauma

ACEs Among 11th Grade Students, DSS 2022 (in percentages)

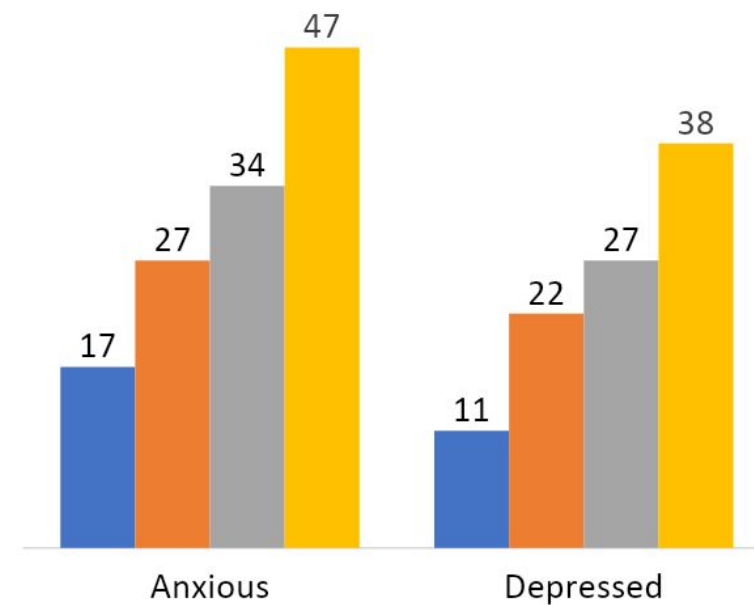


■ 0 ACEs
■ 1 ACEs
■ 2 ACEs
■ 3+ ACEs

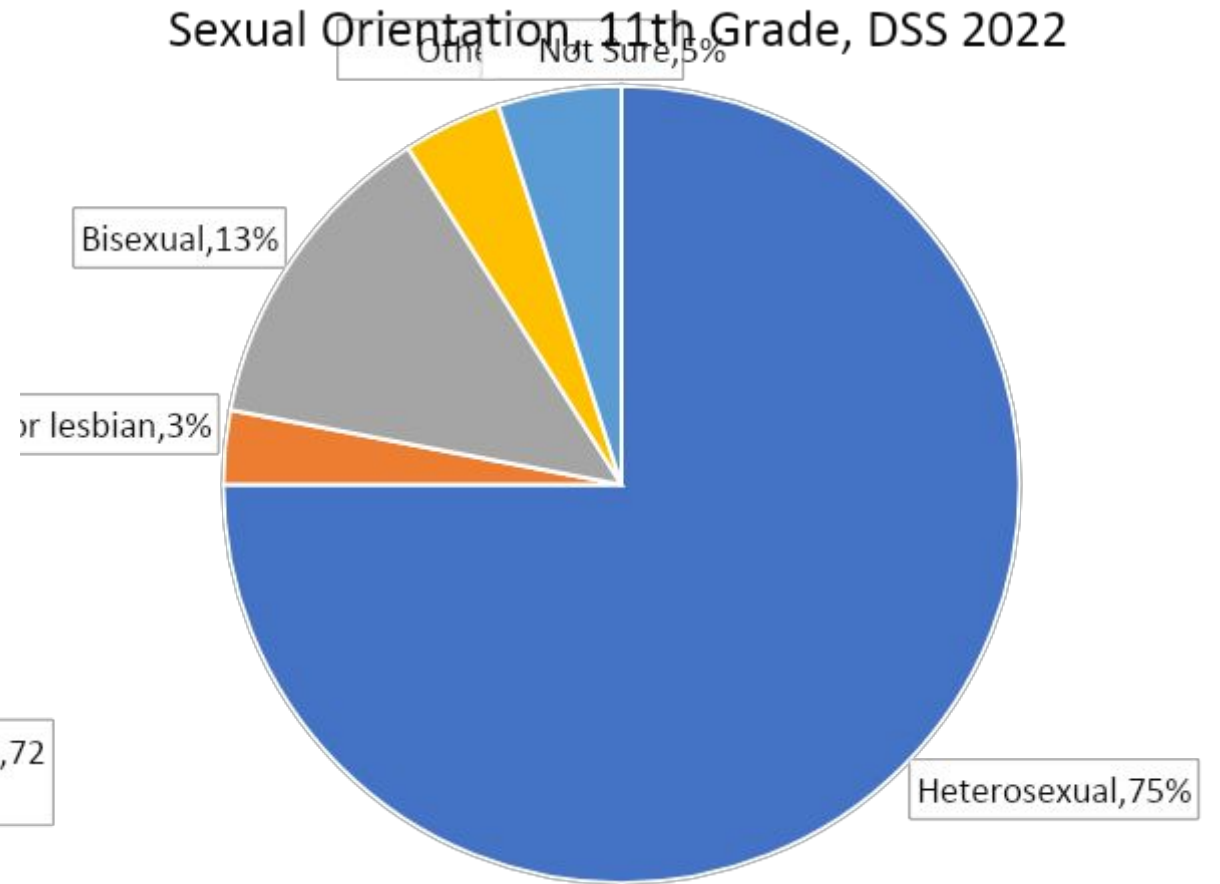
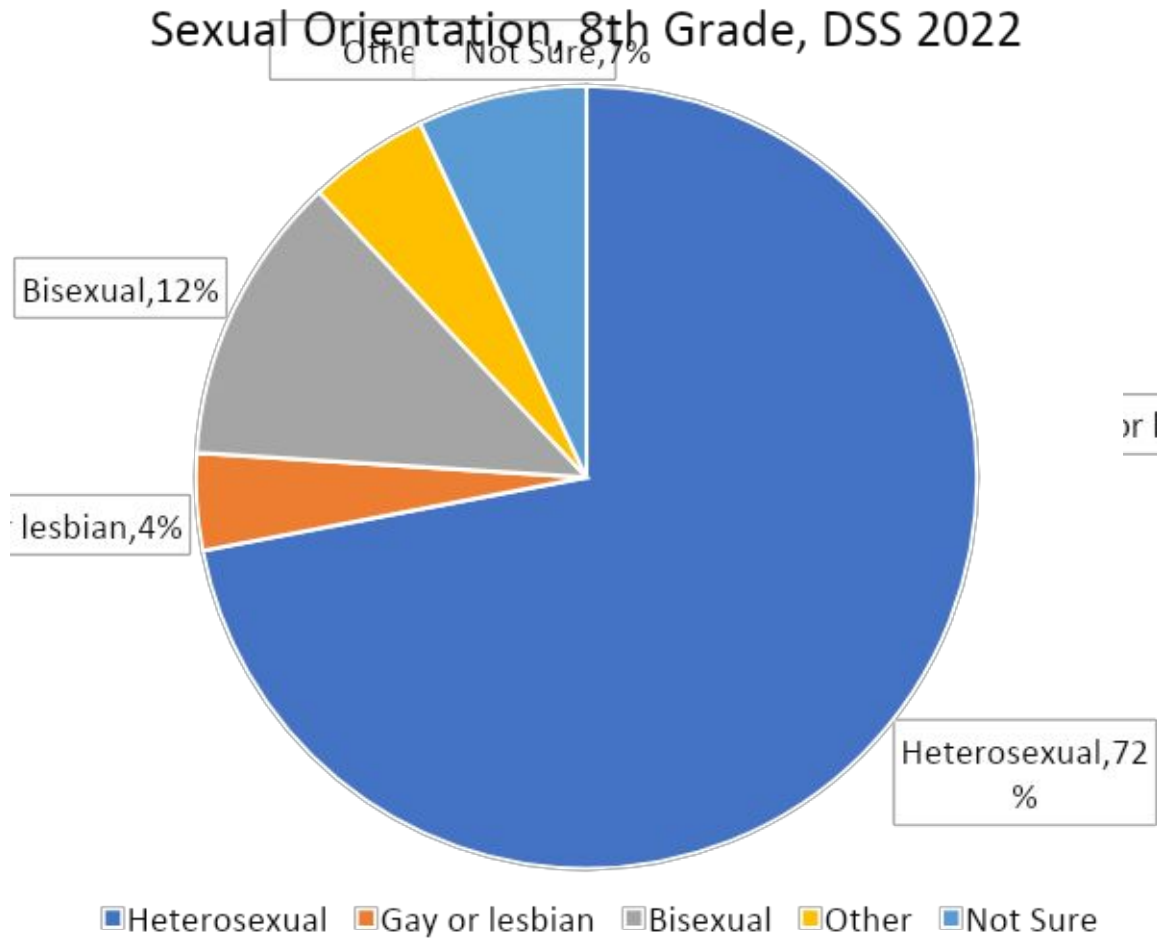
ACEs and Past Year Substance Use Among 11th Grade Students



ACEs and Feelings of Anxiety and Depression Among 11th Grade Students



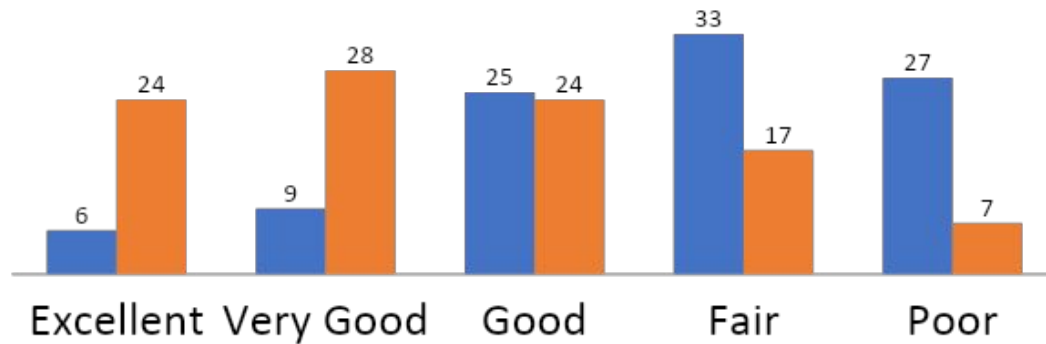
Gender and Sexuality



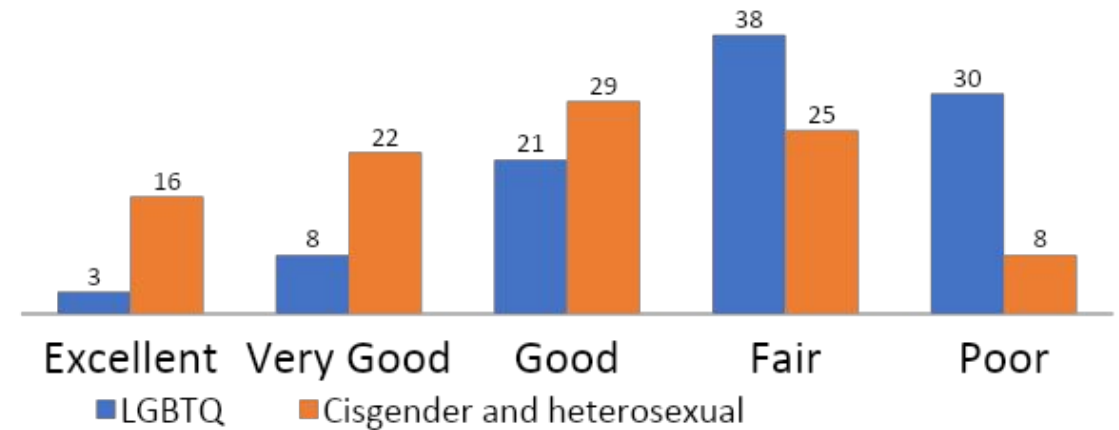
Gender and Sexuality

Self-Rated Emotional Health Among LGBTQ Students, DSS 2022 (*in percentages*)

8th Grade



11th Grade

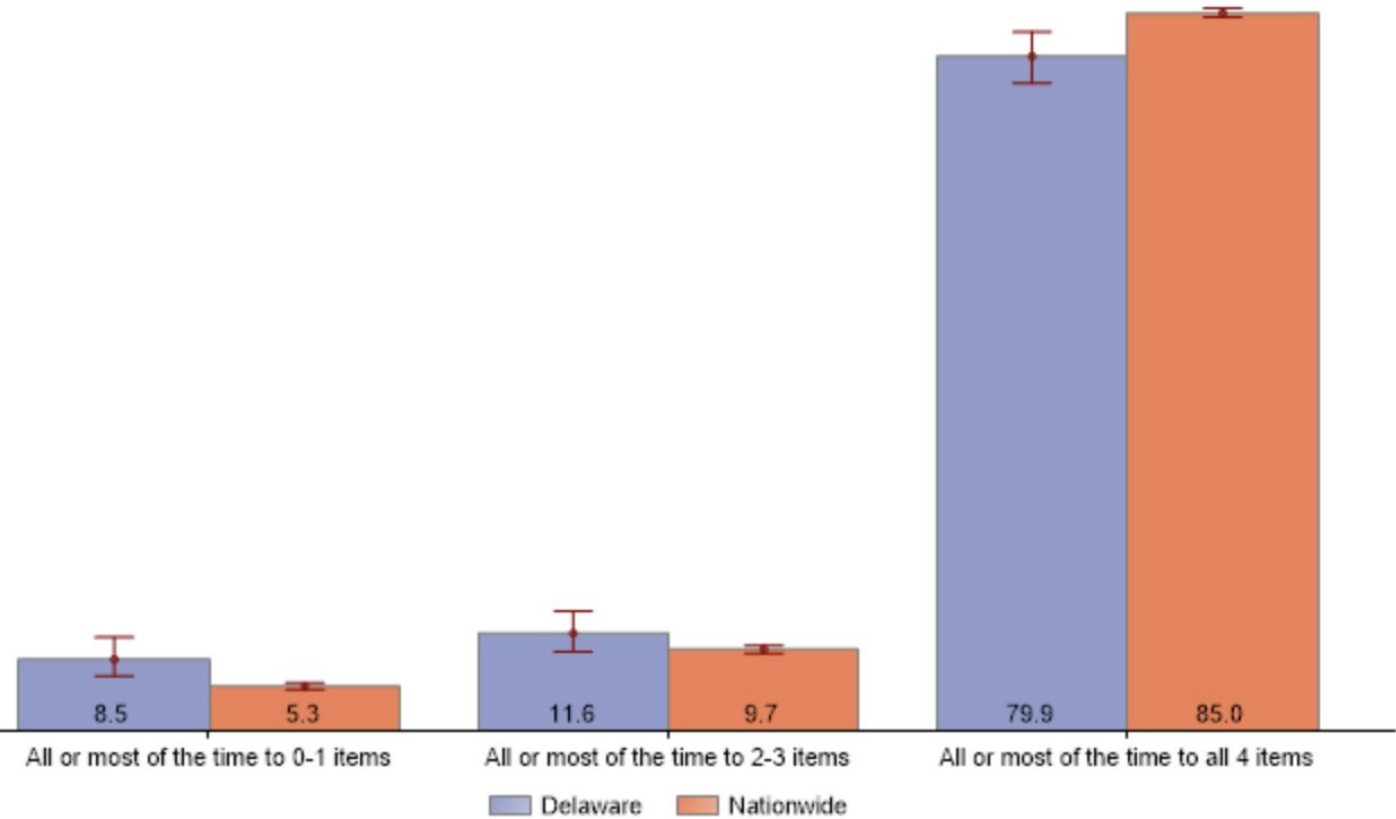


Protective Factors

2020-2021 National Survey of Children's Health		
	Percentages	
Parent, Child, and Family Protective Factors	Delaware	National
Children living with parent who have emotional help with parenthood	74.4	75.5
Family members eat together 4 or more days a week	71.2	75.8
Family members read to the child (aged 5 and under) 4 or more days a week	54	55.1
Child sleeps recommended hours for their age	61.1	65.6
School and Community Engagement and Supports		
Presence of at least one supportive adult outside the home (age 6-17)	83	85.9
Child is usually or always engaged in school (cares about doing well, does homework, age 6-17)	81.2	81.1
Child participated in organized activities after school or on weekends during the past year (age 6-17)	67.8	71.6
Child participates in community service or volunteer work during the past year (age 6-17)	29.4	34.5
Parent usually or always attended child's events or activities in the past year	81.8	84.1

Protective Factors

2020-2021 National Survey of Children’s Health Family Resilience Composite Measure (%)



Family Resilience Composite Measure: “Does this child live in a home where the family demonstrates qualities of resilience during difficult times.” The composite measure includes four items: “Talk together about what to do; Work together to solve the problem; Know we have strengths to draw upon; Stay hopeful even in difficult times.”



Questions?



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Center for Drug and Health Studies, University of Delaware. (2023). The 2023 Delaware Epidemiological Profile: Substance Use, Mental Health, and Related Issues. Prepared for the Delaware Division of Substance Abuse and Mental Health and the Delaware State Epidemiological Outcomes Workgroup.



Thank You!

