

Executive Summary

The 2022 Delaware Epidemiological Profile

Substance Use, Mental Health, and Related Issues

prepared for

Director Joanna Champney and the Delaware Division of Substance Abuse and Mental Health

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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, 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 Executive Summary provides an overview of the 2022 Delaware Epidemiological Profile. To review the complete report, slides, infographics, and other SEOW data products, please visit the UD Center for Drug and Health Studies <u>Delaware Epidemiological Reports</u> page. Video recordings of select SEOW presentations referenced in this report are also <u>available online</u>.

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

Unite States Department of Justice

United Way of Delaware

University of Delaware

College of Health Sciences

College of Arts and Sciences

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Student Health & Wellness Promotion

Wesley College

West End Neighborhood House

Wilmington University

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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%.
- <u>Missing Observations:</u> 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.)
- <u>Discrepancies in Reporting:</u> 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.
- <u>Statistical Significance:</u> 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 <u>Delaware Division</u> 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.
 - O 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.

2022 DELAWARE STATE EPIDEMIOLOGICAL PROFILE SUBSTANCE USE AND RELATED ISSUES

1. Executive Summary

Introduction

Each year, the Center for Drug and Health Studies at the University of Delaware (CDHS), the facilitator of the State Epidemiological Outcomes Workgroup (SEOW)¹, releases the Delaware State Epidemiological Profile which highlights the most recently available data on behavioral health among various populations in Delaware and nationwide. The 2022 Profile includes the following chapters:

- About Delaware: State Demographic Background and a Snapshot of Substance Use
- Tobacco and Electronic Cigarettes (Vaping)
- Alcohol
- Marijuana
- Opioid Use
- Other Illegal Drugs
- Infants with Prenatal Substance Exposure
- Gambling
- Mental Health and Wellness
- Persons with Disabilities
- Adverse Childhood Experiences and Other Trauma
- Gender and Sexuality
- Protective Factors

The Delaware State Epidemiological Profile is a comprehensive and robust document which incorporates data from approximately 45 state and national resources. The findings from this report can serve as a powerful tool for stakeholders to make informed decisions and to implement policies and interventions responsive to the health needs of Delaware's residents. It is intended to help prevention advocates, service providers, and others secure funding and accomplish goals related to needs assessments, strategic planning, evaluation, and research.

¹ The SEOW project was originally established with funding under the federal Strategic Prevention Framework initiative on behalf of the Delaware Division of Substance Abuse and Mental Health.

The first chapter provides an overview of demographic and other characteristics of Delaware. Subsequent chapters provide data relevant to specific types of substance use, crosscutting issues, and populations who experience disproportionate rates of risk. This Executive Summary includes a synopsis of highlights on each topic including notable trends. When observed, associations between population characteristics and rates of behaviors are reported. However, it is important to note that while there is often a strong statistical association between substance use, risk behaviors, and other measured indicators, this does not necessarily mean that there is a causal relationship between these variables in all instances, and there may be additional unobserved indicators that also influence the outcome.

Chapter Highlights

State Demographic Background: Delaware is the second-smallest state in the U.S. For the first time in July 2021 the estimated population topped 1 million people residing among its three counties, representing a 10% increase in the past decade (U.S. Census Bureau, n.d.). The northern part of the state (New Castle County) is more densely populated than the two southern counties (Kent and Sussex), which are predominantly rural. Approximately one in five residents are under the age of 18 with a similar percentage aged 65 and older. The state has become more diverse since 2010: 68.4% of residents identify as White; 23.6% as Black or African American; 0.7% as American Indian and Alaska Native; 4.2% as Asian; 0.1% as Native Hawaiian or Other Pacific Islander; 2.9% as two or more races; and 8.9% as some other race alone or in combination. One in ten Delawareans are Hispanic or Latino/a/x, and 13.4% report speaking a language other than English at home. There are 65,000 veterans living in Delaware. Nearly one in ten residents is foreign-born and nearly one in ten residents under age 65 report having a disability (U.S. Census Bureau, n.d.).

According to the U.S. Census Bureau (n.d.), the median household income for the state is \$69,110 and approximately 92% of state residents have some form of health insurance. One in ten residents lives in poverty. In November 2021, 58,034 Delaware families received assistance from the Supplemental Nutrition Assistance Program (KIDS COUNT in Delaware, Annie E. Casey Foundation, 2022). According to the U.S. Bureau of Labor Statistics, in July 2022, Delaware's seasonally adjusted unemployment rate was 4.5%, down from 5.6% at the same time in 2021 and considerably lower than when the state experienced a dramatic rise in unemployment due to the onset of the COVID-19 pandemic.

Much of Delaware is considered a Medically Underserved Area (Health Resources and Services Administration, n.d.), with all of Kent and Sussex Counties fitting the criteria, as well as communities in southern and eastern New Castle County. Delaware is currently ranked 10th throughout the U.S. with 296.2 primary care providers per 100,000 population. The state ranks 20th in access to mental health providers and 50th in access to dental care. Multiple chronic conditions, adverse childhood experiences (ACEs), premature death, obesity, low birth weight, violent crime, and preventable hospitalizations are core measures with negative impacts on Delaware's health (United Health Foundation [UHF], n.d.). According to America's Health

Rankings, in 2020, 12.3% of Delaware adults reported they experienced frequent mental distress (United Health Foundation [UHF], n.d.). Coupled with under-resourced service areas, this amplifies the need for preventive health services, including strategies to bolster behavioral health.

Tobacco/Electronic Cigarettes: While tobacco use remains a serious health issue, data from five major survey sources show that Delaware youth and adults continue reporting a steady decline in cigarette use since the late 1990s. At that time, a third of Delaware's 11th graders and one in five 8th graders reported regularly using cigarettes (Delaware School Survey [DSS], 1999). These rates dropped to 3% among 11th graders by 2019 and 1% among 8th graders as of 2020, the most recent years for which sufficient data is available from the Delaware School Survey (DSS). Of concern, however, the perception of the risk of smoking has also decreased over time. Less than half of 8th graders perceive there is a great risk of harm from smoking a pack of cigarettes per day; this is the first time that rate has dipped to below half of all 8th graders in 20 years.

Though the decline in cigarette use is promising, over the past decade the use of e-cigarettes or vaping devices has increased, possibly due to the perception that these products are safer alternatives to cigarettes. However, Middle School Youth Risk Behavior Survey trend data as well as DSS data suggests that the rate of vaping is declining. The 2021 DSS shows a decline in past month vaping rates among 11th graders, from a peak of 18% in 2019 to 7% in 2021. Youth survey administration methods have changed from an in person to online method due to the pandemic in recent years, which may account for some changes in trends; however, the decline in vaping rates may also be due to the success of vaping prevention efforts throughout Delaware.

Alcohol: The consequences of excessive alcohol use are considerable. The CDC Alcohol-Related Disease Impact (ARDI) portal estimates that on average, between 2015 and 2019, 466 deaths in Delaware were annually attributable to chronic or acute causes related to such use. In 2021, 4% of all traffic crashes in Delaware were alcohol-related. In all, there were 42 fatalities and 650 injuries associated with alcohol involved accidents and 2,886 driving under the influence (DUI) arrests were made statewide (Delaware State Police, Delaware Information and Analysis Center, 2022).

Overall, adults in Delaware tend to consume alcohol at rates comparable to national estimates, with 51.1% reporting current use (Behavioral Risk Factor Surveillance System [BRFSS], 2020). Thirty percent of Delaware adults between the ages of 18 and 25 reported binge drinking within the previous month (National Survey on Drug Use and Health, 2019-2020). In 2019, the Treatment Episode Data Set (TEDS) indicates that alcohol was the primary substance reported at admission among 10.7 % of clients receiving publicly funded treatment in Delaware, and it was identified as a secondary substance in another 8.2% of admissions.

Data from the most recent Delaware School Survey (DSS) and Youth Risk Behavior Surveys (YRBS) illustrate that alcohol remains the most commonly reported substance used by students. The 2021 Delaware School Survey (DSS) indicates that 18% of 8th graders drank alcohol at some point in their lifetime, 12% used it in the past year, and 5% had at least one drink in the past month. Nearly four in ten 11th graders reported that they drank alcohol at some time in their life, 31%

have had alcohol in the past year, and 13% in the past month. While alcohol use continues to mirror declining national trends, student surveys show that too many students still do not adequately understand the risks involved with alcohol consumption. Only 43% of Delaware 11th graders surveyed indicated that they believed there is a great risk in binge drinking, and 4% reported recent binge drinking. In the same survey, 9% reported drinking and driving at some time in their life, while 7% reported drinking and driving in the past year. Of note, only 37% of 8th graders identified binge drinking as a great risk, a rate lower than that among 11th graders. Perhaps even more concerning is that only 13% of 5th graders perceived "a lot of risk" from trying alcohol and 39% perceived similar risk for daily use. These younger students reported a lifetime rate of 8% and a past year rate of 2%.

Marijuana: Over the past couple of decades, states have enacted various laws that have changed the legal status of marijuana. Delaware currently permits medical marijuana for certain conditions and has decriminalized the possession of small amounts of marijuana by adults but recreational marijuana has not yet been legalized. The perception of risk of harm from marijuana use has declined among Delaware students since 1999. By 2021, the rate of 11th graders who perceived regular use as a great risk had dropped to 24% and to only one in three among 8th graders.

Marijuana remains a popular substance for youth. Trends in past month use among Delaware students had remained relatively stable until 2021. For the past 20 years, rates of past month use reported by 11th graders on the Delaware School Survey (DSS) fluctuated between 22% and 28%, with a rate of 24% in 2019. In 2021, the rate dropped to 11%. Approximately one in five students reported using marijuana in the past year and 5% reported heavy use (defined as using marijuana six times or more in the previous month). The average age of first use among 11th graders dropped to 14.7 years of age, nearly half a year younger than that reported in 2019. The past month marijuana use rate among 8th grade students also declined, dropping to 4% in 2021 from 7% in 2020. The rates of marijuana use have dropped in the past year across various age groups according to national as well as state surveys. But it is unclear if these declines reflect changes in data collection strategies, sample sizes, response rates, or other factors related to the COVID-19 pandemic. It will be necessary to monitor marijuana and other substance use rates in the coming years to determine if these are true declines or due to recent unusual circumstances.

In Delaware, young adults aged 18 to 25 reported a past year use rate of nearly 37% and a monthly rate of nearly 22% on the 2019-2020 National Survey on Drug Use and Health (NSDUH).

Opioid Use: The CDC estimates Delaware's 2020 drug overdose mortality rate involving any opioid as 44.4 deaths per 100,000 residents, ranking third among the 29 jurisdictions reporting and substantially higher than the national rate of 25.4 deaths per 100,000 (CDC, n.d.). In 2021, fentanyl was identified in 425 of 515 overdose deaths and 68 involved heroin (Delaware Division of Forensic Science [DFS], 2022). DFS also reports that fentanyl and fentanyl analogs are the most commonly identified substances in postmortem overdose toxicology analysis (DFS, 2022). Almost

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 $^{^2}$ Due to the COVID-19 pandemic and subsequent shift to remote education, the Delaware School Survey was not administered to $11^{\rm th}$ grade students in 2020.

half of individuals admitted to publicly funded treatment programs in Delaware in 2019 listed heroin as their primary drug. An additional 7% of treatment admissions were primarily attributed to use of other opiates (Treatment Episode Data Set, 2019). Results of the 2019-2020 National Survey on Drug Use and Health (NSDUH) estimate that 3.34% of all Delawareans aged 12 and older and 3.39% of adults aged 26 and older have misused prescription pain relievers in the past year. The highest rate of misuse occurs among adults aged 18 to 25 (4.29%).

Among Delaware youth, in 2021, 4% of 8th grade students reported rates of lifetime misuse of pain medication and 2% reported past year misuse. Only half perceived a great risk in misuse of prescription medications in ways other than prescribed (Delaware School Survey [DSS], 2021). Eleventh graders responding to the 2021 DSS reported a 3% lifetime rate of misuse of prescription pain medications while 57% perceived a great risk for any prescription misuse.

On a positive note, the rate of Delawareans filling opioid prescriptions has declined since 2015, from 204 per 1,000 people to the 2021 rate of 124 per 1,000; however, this does represent a slight uptick since the rate of 122 per 1,000 reported in 2020. The rates of instant relief and high-dose opioid prescriptions being filled have declined since 2012 (Delaware Department of Health and Social Services, n.d.).

Other Illegal Drugs: According to the National Survey on Drug Use and Health (NSDUH) 2019-2020 estimates, in Delaware, approximately 4% of all people aged 12 and over used an illicit drug in the past month.³ The NSDUH also estimates that approximately 1.75% of Delaware adults age 12 and older have used cocaine in the past year, with adults aged 18 to 25 reporting highest rates of use (6.30%). Cocaine has been increasingly identified in overdose deaths in Delaware since 2016. In 2021, 221 overdose deaths involved cocaine compared to 152 reported in 2020 and was found in more than one in five postmortem cases (Division of Forensic Science, 2022). Approximately 5% of all drug treatment admissions to publicly funded treatment programs in the state were primarily due to cocaine use (Treatment Episode Data Set [TEDS], 2019).

Three percent of 8th grade students reported using synthetic marijuana at least once in their lifetime and 2% in the past year on the 2021 Delaware School Survey. Among 11th graders, 6% reported using the substance at least once in their lifetime while 4% indicated use in the past year.

The 2021 Delaware School Survey (DSS) also indicates that 2% of 8th grade students reported use of an illicit drug other than marijuana in the past year and 4% at some time in their life. Seven percent reported misuse of prescription medication (including pain medication) within the previous year. Eleventh graders also reported 9% lifetime and 5% past year rates of illicit drug use other than marijuana in 2021. Three percent of both 8th and 11th grade students reported misusing an over-the-counter drug in the previous year.

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³ The National Survey on Drug Use and Health includes the following in this calculation: misuse of prescription psychotherapeutics, cocaine (including crack), heroin, hallucinogens, inhalants, or methamphetamine. It does not include marijuana.

Infants with Prenatal Substance Exposure (IPSE): Infants are a special population that can be uniquely impacted by substance use. Heavy prenatal substance exposure can lead to conditions such as neonatal abstinence syndrome, fetal alcohol spectrum disorders, or other developmental delays, and has the potential to create additional health issues during infancy and later in life. In 2020, there were 702 cases of infants with prenatal exposure reported in Delaware with marijuana the most commonly identified substance in cases involving one or two substances. In cases of polysubstance exposure (three or more substances present at birth) opioids followed by methadone, fentanyl, and cocaine were most commonly identified. Fentanyl exposure has increased and was identified in 72 or approximately 10% of IPSE births in 2020. Notably, 40% of the mothers who gave birth to prenatally substance exposed infants reported that they themselves have a history of involvement with family services as a youth or a history of childhood trauma and 56% reported having a mental health condition. Early, coordinated intervention and family support are critical to ameliorating negative impacts of prenatal substance exposure. In 2020, plans of safe care were established for 653 of the 702 infants born with prenatal substance exposure; with these supports, 88% of infants were able to remain in the home with the mother at the time of discharge (Delaware Office of the Child Advocate, 2021).

According to the Agency for Healthcare Research and Quality (AHRQ), Delaware rates of neonatal abstinence syndrome have been on the decline since 2016, from 26.4 per 1,000 newborn hospitalizations to 18.8 per 1,000 in 2019. However, this is nearly three times the national rate and Delaware ranks among the highest in the U.S. (Agency for Healthcare Research and Quality, 2021).

Gambling: Gambling has become an area of interest among prevention specialists. Most forms of gambling are legal in Delaware, with three casinos across the state and legalized sports betting. While many people can enjoy gambling harmlessly, for others, problem gambling and gambling disorders can present numerous challenges and negative consequences. There is evidence that gambling disorders often co-occur with other mental health and substance use disorders among adults (Petry, Stinson, & Grant, 2005; Martin, Usdan, Cremeens, Vail-Smith, 2014). In 2021, 42% of 5th grade students reported on the Delaware School Survey (DSS) that they had gambled at some point in the previous year. Among 8th graders who responded to the 2020 DSS (the most recent administration of the survey to include gambling questions for this age group), approximately half (51%) reported that they gambled at least once in the past year. Male students reported higher rates of gambling than female students. Students who reported past year gambling were three times as likely to report past year rates of alcohol and marijuana use and lifetime misuse of prescription pain medicine.

Mental Health and Wellness: According to the Centers for Disease Control and Prevention (CDC), more than half of all people in the U.S. will be diagnosed with a mental illness or disorder at some time (CDC, n.d). Mental health problems and substance use disorders often co-occur (National Institute of Drug Abuse, 2020). Findings from the 2019-2020 National Survey on Drug Use and Health (NSDUH) estimates that in the year prior to the survey: approximately 20% of Delaware adults aged 18 and over experienced *any* mental illness; approximately 5.4% experienced a *serious* mental illness; approximately 8.4% experienced a major depressive episode; and one in

20 had serious thoughts of suicide (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). In 2020, 12.3% of Delaware adults experienced frequent mental distress with younger adults (aged 18 to 44) being the most affected (United Health Foundation [UHF], n.d.). The age-adjusted suicide rate for Delaware in 2019 was 11.3 deaths per 100,000 (Delaware Department of Health and Social Services, Division of Public Health, n.d.) and there were 138 suicide deaths in the state in 2021 (Delaware Division of Forensic Science, 2022).

Among Delaware youth, in 2017, one in four high school students reported feeling sad or hopeless almost every day for two weeks or more in a row in the previous year (Delaware High School Youth Risk Behavior Survey [YRBS], 2017). Seven percent reported that they had attempted suicide the prior year, which is similar to national YRBS rates. In 2019, 11% of Delaware middle school students reported that they had purposely hurt themselves without wanting to die during the previous year (Delaware Middle School YRBS, 2019). The Delaware School Survey (DSS) also includes questions regarding students' mental health. In 2021, 28% of 8th graders reported symptoms of anxiety on more than half of the days in the previous two weeks and 22% reported feelings of depression, rates slightly higher than those reported in 2020. Eleventh grade students reported similar rates of anxiety and depression symptoms (29% and 24%, respectively). Female students reported substantially higher rates of such symptoms across both age groups.

Although comprehensive Delaware data is not yet available on mental health throughout the COVID-19 pandemic, several national studies suggest that many people have experienced higher levels of distress since the start of the pandemic, a period also marked by social and political unrest and economic uncertainty (American Psychological Association, 2021; Rapid Assessment of Pandemic Impact on Development – Early Childhood [RAPID-EC], 2021, Czeisler et al., 2021). The Household Pulse Survey, a collaboration of the U.S. Census Bureau, the National Center for Health Statistics, and other federal agencies, was designed to provide "real time" data on the health and social impacts of the COVID-19 pandemic. From July 2021 through July 2022, the rates of past week anxiety among Delawareans have hovered between 22% and 30% and rates of past week depression have ranged between 16% and 26%. Both trends roughly parallel national rates for the past year.

Persons with Disabilities: Despite definitional variations and other challenges to collecting data regarding persons with disabilities and their needs, existing research indicates that these individuals often face significant health disparities in comparison to the general population, including disparate health outcomes and reduced healthcare access (Okoro, Hollis, Cyrus, & Griffin-Blake, 2018). Additional national research indicates that disparities also exist in rates of substance use (Glazier & Kling, 2013) and prescribing of opioids (Hong, Geraci, Turk, Love, McDermott, 2019). Prevalence estimates of persons with disabilities in Delaware range from 13.3% to 23.8% (U.S. Census Bureau, 2016-2020; Behavioral Risk Factor Surveillance System [BRFSS], 2020). Delaware adults with disabilities experience considerably higher rates of smoking and e-cigarette use, and depression than persons without disabilities, according to the 2020 BRFSS results (CDC, Disability and Health Data System, n.d.).

The National Survey of Children's Health (2019-2020) indicates that 14.8% of children in Delaware have one functional difficulty⁴ and 11.4% have two or more. The Delaware Department of Education (DOE, n.d.) reports that 16.86% of students currently enrolled in public schools have a disability. Youth survey data also indicate elevated risk of adverse outcomes for students who have a disability compared to students who do not. More than one-third of 8th and 11th grade students responding to the 2021 Delaware School Survey reported having a disability. Similar to adults, students who reported having a disability also reported higher rates of substance use and poorer mental health outcomes.⁶

Association defines trauma as an "emotional response to a terrible event like an accident, rape, or natural disaster." It can be experienced directly or indirectly. Adverse childhood experiences (ACEs) are traumatic events or conditions such as abuse, neglect, or parental divorce or separation that, when experienced in childhood, can result in toxic stress and may have lifelong impacts (Trauma Matters Delaware, n.d.; Center on the Developing Child, Harvard University, n.d.; Brown et al., 2009). Without intervention and support, children who experience traumatic events are likely to have increased health problems throughout their lives—lives that are likely to be shorter than the lives of others (Centers for Disease Control and Prevention [CDC], n.d.).

In 2019, the Delaware Behavioral Risk Factor Surveillance System (BRFSS) survey revealed that approximately two out of three adults experienced at least one ACE, with 43.3% experiencing two or more. The most common ACE was living with divorced or separated parents (28.5%), followed by living with a problem drinker (23.5%), exposure to domestic violence (18%), and living with someone with a mental illness (17.3%).

Findings from the National Survey of Children's Health (2016-2019) indicate that approximately 43% of Delaware youth were exposed to at least one ACE, most commonly having divorced or separated parents, experiencing economic hardship, living with a person with a substance use disorder, and having an incarcerated parent. More than one in five (21.9%) of Delaware youth have been exposed to two or more ACEs, and youth who are Black (non-Hispanic), whose parents were born outside of the U.S., who are poor, or who have special healthcare needs have

⁴ Functional difficulty, as defined by the National Survey of Children's Health, requires one of 12 of the following conditions: frequent or chronic respiratory problems (past year); difficulty eating or swallowing (past year); stomach/intestinal problems (past year); repeated or chronic pain, including headaches (past year); difficulty using hands (0-5 years); difficulty with coordination and movement (0-5 years); serious difficulty concentrating, remembering, or making decisions (6-17 years); serious difficulty walking or climbing stairs (6-17 years); difficulty dressing or bathing (6-17 years); difficulty doing errands alone (12-17 years); deafness/hearing problems; and blindness or vision difficulties even when wearing glasses.

⁵ Disability status from the Delaware School Survey includes having a 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.

⁶ The Delaware School Survey analysis highlighted in this report incorporates responses from students who selfidentify as having a disability as well as those who reported that they have been diagnosed with a physical, mental, or emotional disability by a medical professional.

experienced higher rates of ACEs. Conversely, children in families with high levels of resilience were less likely to have been exposed to multiple ACEs⁷ (Hussaini, 2021).

In 2021, 9% of 5th grade participants in the Delaware School Survey (DSS) reported being in a fight in their neighborhood, 4% reported being in a fight at school within the previous year, and 6% reported being bullied within the past month. Seven percent of 5th graders reported that an adult family member had been in jail or prison within the past year. Two out of three 8th graders reported experiencing at least one ACE, and nearly one in four revealed having exposure to three or more. Most commonly, students reported being bullied (29%), living with someone with mental illness (25%), living with someone with a substance use disorder (24%), and witnessing violence at home (22%). Nearly one in five (19%) had been or knew someone who was the victim of gun violence; the same percentage reported being hit by another teen. Twenty-five percent of 11th grade DSS participants reported exposure to one ACE and 28% reported experiencing three or more. One in three 11th graders indicated that they had ever lived with a person with a mental illness and 29% had ever lived with someone with a substance use disorder. Nearly one in four (23%) had been or knew someone who was the victim of gun violence. Youth who reported experiencing trauma were more likely to report use of all substances as well as symptoms of depression. Students who experience multiple ACEs have even greater rates of substance use or mental health concerns.8

Students were also asked about their perceptions of safety at school as well as concerns regarding gun violence. The majority of 8th and 11th graders reported feeling safe in their school most of the time of often (73% and 77% respectively). However, about a third of students reported that they believe student violence is a problem at least some of the time. Approximately one in ten 8th graders worry about gun violence as a problem and gun violence in school most of the time. While 15% of 11th graders worry about gun violence as a problem only 6% reported worrying about gun violence in school most of the time.

Exposure to trauma is not limited to home and school environments and one of the more visible forms of trauma is violence in the community. The count of homicides identified in Delaware has increased from 56 in 2019 to 103 in 2021, most commonly involving firearms (Delaware Division of Forensic Science, 2022). The victims were predominantly male, black, and between the ages of 11 and 40.9 The Delaware Online/News Journal gun violence database documents a dramatic increase in the number of gun violence incidents as well as victims who were wounded or died between 2019 and 2020. The numbers of incidents, victims, and those wounded declined modestly between 2020 and 2021, however, the number of those who died increased from 69 to 81. It is promising that as of early September 2022 the Year-to-Date indicators suggest a

⁷ For more on the NSCH Family Resilience Index, please see Chapter 13 of this report

⁸ It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this chapter.

⁹ It bears noting that there were fewer homicides than suicides throughout the state over this same time frame, ranging from 118 in 2019 to 138 in 2021 (Delaware Division of Forensic Science Annual Reports, 2019, 2020, 2021).

continuing decline, recording approximately two-thirds as many incidents and half as many deaths when compared to one year ago.

Gender and Sexuality: It is estimated that the lesbian, gay, bisexual, and transgender (LGBT)¹⁰ population constitutes approximately 7-8% of the adult U.S. population (Gallup, 2022; U.S. Census, 2021). Members of this community have consistently faced discrimination, harassment, and violence at the interpersonal and systemic levels. Despite making up a substantial portion of the population and ample evidence of discriminatory practices and policies, historically, research on LGBTQ individuals has not been robust nor conducted on a nationally representative scale. Difficulties in data collection are due to limitations of survey instruments, a lack of a mandate to collect this information, the complexities of gender identity and expression, and for other reasons. However, most existing research provides strong evidence that the disadvantages faced by members of the LGBTQ community are also associated with disproportionate risk for substance use, poor mental health, social and emotional instability, and violent victimization. Findings from the 2020 National Survey on Drug Use and Health estimates that: 37% of LGB adults aged 18 to 25 and more than one in four adults aged 26 and over reported using marijuana in the past month; approximately 34.2% of LGB adults age 18 or older met the criteria for a substance use disorder in 2020; more than half reported a mental illness; and 23.1% had met the criteria for both a substance use disorder and a mental illness (SAMHSA, 2022). This population was also more likely to experience mental health and economic challenges due to COVID-19; LGBT respondents were twice as likely as non-LGBT adults to report symptoms of depression and anxiety during the pandemic, and also more likely to report experiencing food insecurity, loss of employment income, and difficulty paying expenses (U.S. Census, 2021). Research also indicates that LGBT persons are also more likely to experience violent crimes, including sexual assault and relationship violence, at higher rates than heterosexual people (Walters, Chen, and Breiding, 2013; Williams Institute, 2020). It is important to note that differences in these rates are not intrinsically associated with being LGBTQ but rather relate to the adversities that these individuals frequently face concerning their sexual orientation or gender identity.

Similar disparities are observed among youth. The secondary Delaware School Survey (DSS), administered to 8th and 11th grade students, includes a question about sexual orientation: *Which of the following best describes you?* Students are provided four response choices: *heterosexual (straight)*; *gay or lesbian*; *bisexual*; *other*; or *not sure*. In 2021, approximately one in four 8th graders identified as other than straight (3% identified as *gay or lesbian*, 12% identified as *bisexual*, 4% as *other*, and 7% as *not sure*). These rates were relatively consistent with those

¹⁰ While the acronym LGBT explicitly references lesbian, gay, bisexual, and transgender identities, there are a variety of sexual orientations and gender identities that may be included within this community, such as pansexual, asexual, queer, non-binary, or people who are questioning their sexuality and/or gender. The letter "Q" has multiple meanings in this context. It is typically short for queer but can represent those individuals who do not feel fully represented by the adjectives of lesbian, gay, bisexual, or transgender, or those who are questioning or unsure how they identify in terms of sexual orientation, gender identity, or in terms of gender expression. While the LGBTQ acronym (or LGBT depending on the wording of the referenced data source) is used in this text, it is important to acknowledge that this is an imperfect and non-exhaustive identifier, and many sources may use variations of this acronym to refer to the community. The Trevor Support Center and GLSEN offer terminology resources on this topic.

identified by 11th graders (3% identified as *gay or lesbian*, 13% as *bisexual*, 3% as *other*, 4% as *unsure*). Similar to research and national data, across both grades, LGB students were more likely to report alcohol, marijuana, and vaping use, prescription medication misuse, and symptoms of depression and anxiety than their straight peers. Approximately half of LGB 8th and 11th graders reported recent symptoms of anxiety, and 42% of 8th graders and 48% of 11th graders reported recent symptoms of depression. Conversely, they were much more likely than straight students to rate their emotional health as poor or fair, and much less likely to rate their emotional health as excellent.

Protective Factors: While childhood trauma is associated with higher rates of health issues and risk behaviors, positive experiences and conditions can function as protective factors. The final section of this report focuses specifically on the role of protective factors at the individual, family, peer, and community levels. The National Survey of Children's Health (NSCH) includes a number of protective factor indicators, including a series of four questions that comprise a Family Resilience Composite Measure. The questions ask parent respondents to report if the child lives in a home where family members: talk together about what to do; work together to solve problems; know that they have strengths to draw upon; and stay hopeful even in difficult times. Approximately four out of five parent respondents of children living in Delaware agree with all of these statements most or all of the time, commensurate with the rate among the national sample. Additionally, nearly three out of four Delaware parents reported regularly attending activities that their child was involved in during the past year. Two-thirds of parents reported that the family ate a meal together at least four days a week, and more than half of parents of younger children reported that someone in the family read to them at least four days a week. Delaware parents also reported children had high levels of school engagement; approximately half reported that their child was always engaged and another third reported that their child was usually engaged. Approximately three out of four respondents reported that their child had no difficulty making and keeping friends (NSCH, n.d.).

Results from the 2021 Delaware School Survey (DSS) highlight associations between several protective factors and rates of substance use as well as mental health indicators among 8th and 11th grade students.¹¹ Overall, 95% of 8th grade students reported having at least one person as a source of support and encouragement, most commonly a parent or guardian, followed by friends and then teachers. Eighth-graders who reported higher grades reported lower rates of vaping, alcohol, and marijuana use, and those who cared about doing well in school reported lower substance use rates as well as lower rates of anxiety and depression. Feelings of safety in the neighborhood and at school were also associated with lower rates of anxiety, depression, and substance use for 8th grade students. The most notable associations were among students' report of getting along with their parents; students who reported never or not often getting along with their parents were approximately three times as likely to have used alcohol and nearly five times

chapter.

¹¹ It is important to note that while there is a statistical association between these factors, this does not necessarily mean that there is a causal relationship between these variables in every instance, and there may be additional unobserved indicators that also influence the outcome. This holds true for all of the associations discussed in this

as likely to have used marijuana or vaped within the past year. These students were also nearly three times as likely to report experiencing anxiety and four times as likely to report symptoms of depression recently. Getting along with parents, talking with parents about school, and caring about doing well in school were also associated with lower rates of anxiety, depression, and substance use among 11th graders.

Finally, hopefulness has been identified as a protective factor for mental health (Kirby et al., 2021). As discussed in the Mental Health and Wellness chapter, several questions on the DSS are based on the Cantril Ladder, which asks the following: *Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.* More than half (56%) of 8th graders rated themselves in the top tier of the ladder (*thriving*) at the time of the survey and 69% envisioned themselves being in the top tier in five years. Half of all 11th graders saw themselves as *thriving* currently and 67% believed they would be *thriving* in five years. This suggests that the majority of students are hopeful about where they will be in life in the future.

COVID-19 in Delaware

Delaware faced significant health, economic, and social challenges related to the COVID-19 pandemic which resulted in a stay-at-home order in March 2020 that lasted through much of the that year. The availability of vaccines, treatment, and federal relief measures enabled many businesses and institutions to re-open or remain operational to some degree, some with telecommuting components. In August 2021, schools resumed in person learning. However, the pandemic continues to impact healthcare and other services. According to the My Healthy Community COVID-19 Data Dashboard, positive cases and percentage of emergency department visits for COVID-19-like illnesses peaked in January 2022 with the emergence of the highly contagious Omicron variant. Although rates declined in late winter and early spring, there was an uptick in summer. At the end of July 2022, the average case rate was 247.4 per 100,000 of population. As of August 4th, 2022, 73.9% of the total population had received at least one dose of a vaccine (Delaware Department of Health and Social Services, n.d.).

The frequency of COVID cases and subsequent demands on the health care system may also indirectly impact the availability and accessibility of routine and other health care resources. This

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¹² The Delaware School Survey includes two questions based on the Cantril Ladder. Students are asked to imagine a ladder with steps numbered from zero at the bottom and ten at the top. The top of the ladder represents the best possible life for the student, and the bottom of the ladder represents the worst possible life. Students are asked to respond with which step of the ladder they feel that they personally stand on now, and on which step of the ladder they think they will stand on in five years. Present and Future scales vary slightly. The Present scale categorizes steps 7-10 as *Thriving* and steps 5-6 as *Struggling*. The Future scale categorizes steps 8-10 as *Thriving* and 5-7 as *Struggling*. Both scales categorize steps 0-4 as *Suffering*.

is particularly challenging since most of Delaware is designated as a Medically Underserved Area (please see Chapter 1). This could be even more problematic if health care professionals continue to feel overwhelmed and consider leaving the workforce in response to the pandemic as a 2021 KFF/Washington Post survey indicated.¹³

As mentioned previously, the state's seasonally adjusted unemployment rate has improved dramatically since July 2020. But other economic factors that were temporarily relieved by emergency measures, such as the national moratorium on evictions and deferment of student loan payments, have already expired or are scheduled to and inflation has risen dramatically in the past several years. These factors will need to be monitored for their impact on Delaware rates of poverty along with other indicators of financial stability, which interact with health and wellbeing.

¹³ A KFF/Washington Post survey conducted in 2021 indicated that 29% of health care workers had considered leaving their profession as a result of the pandemic.

Snapshot: Substance Use in Delaware

The following graphs and maps provide an overview of various rates of substance use among youth in Delaware.

2021 Delaware School Survey Reported Use of Selected Substances in the Past Year among Delaware 8th Grade Students (in percentages)

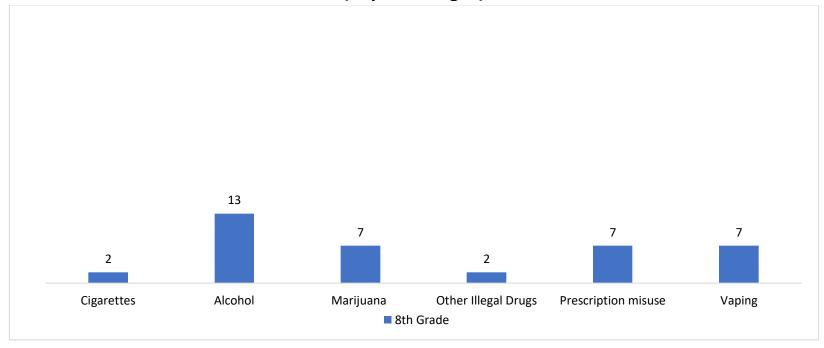


Figure 1: Selected substance use, past year, 8th grade

Prescription misuse refers to use of prescription medications without a prescription or in a way other than prescribed.

Other illegal drugs include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high. Source: Center for Drug & Health Studies. (2021). Delaware School Survey: Secondary [Annual Survey]. University of Delaware.

2021 Delaware School Survey

Reported Use of Selected Substances in the Past Year among Delaware 11th Grade Students (in percentages)

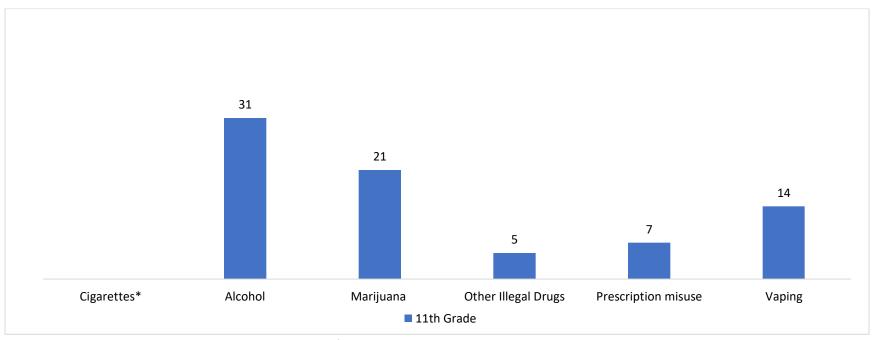


Figure 2: Selected substances used in past year, 11th grade

^{*}The unweighted sample size of 11th grade students who used cigarettes in the past year was below the minimum threshold for reporting (n<30). Prescription misuse refers to use of prescription medications without a prescription or in a way other than prescribed.

Other illegal drugs include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high. Source: Center for Drug & Health Studies. (2021). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

2018 Delaware School Survey Reported Polysubstance Use in the Past Year among Delaware 11th Grade Students

Alcohol Use

Vado Logo

Granda Marijuana Jee

Other Marijuana Jee

This Venn diagram illustrates the prevalence of past-year polysubstance use among 11th grade students in Delaware. Each circle has been scaled relative to the number of students who report using that substance in the past year, and the areas where circles overlap are accurate to the proportion of students who reported using multiple substances. Overall, 55% of students report using at least one substance in the past year, meaning that 45% of students did not report past-year substance use.

As in previous years, alcohol remains the most commonly used substance, with marijuana as the second most used substance. Most students who reported using a different substance were also using alcohol or marijuana, if not both. Also of note, every student who reported smoking cigarettes also reported the use of an e-cigarette or vaping device. Two percent of students reported using substances from all five categories of drugs here.

Figure 3: Polysubstance use, past year, 11th graders

Note: This includes ecstasy, hallucinogens, steroids, over-the-counter drugs, amphetamines, crack, cocaine, heroin, synthetic marijuana, and/or any prescription medication used in ways other than prescribed.

Source: Center for Drug & Health Studies. (2018). *Delaware School Survey: Secondary* [Annual Survey]. University of Delaware.

	% Reporting
Substance	Past-Year Use
Alcohol	45%
Marijuana	34%
E-cigarette/Vape	17%
Cigarettes	7%
At least one other drug	12%
All of the above categories	2%

Reported Past Month Cigarette Use Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

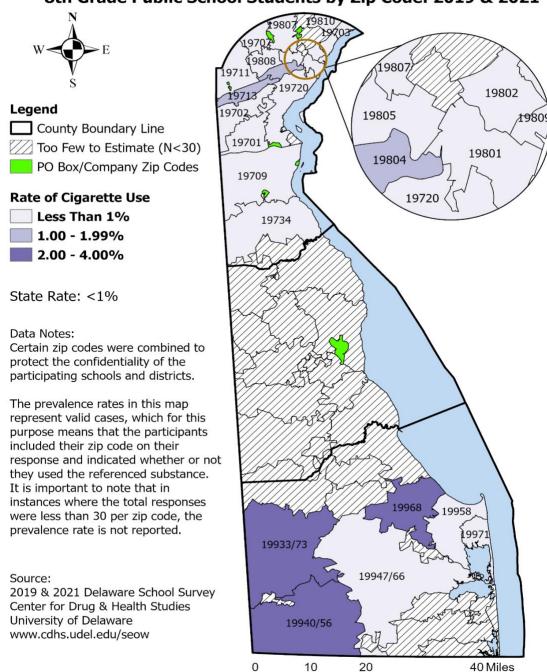


Figure 4: Map of past month cigarette use, 8th grade

Source: <u>Center for Drug & Health Studies.</u> (2020). <u>Delaware School Survey: Secondary</u> [Annual Survey]. <u>University of Delaware.</u>

Reported Past Month Vaping Device* Use Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

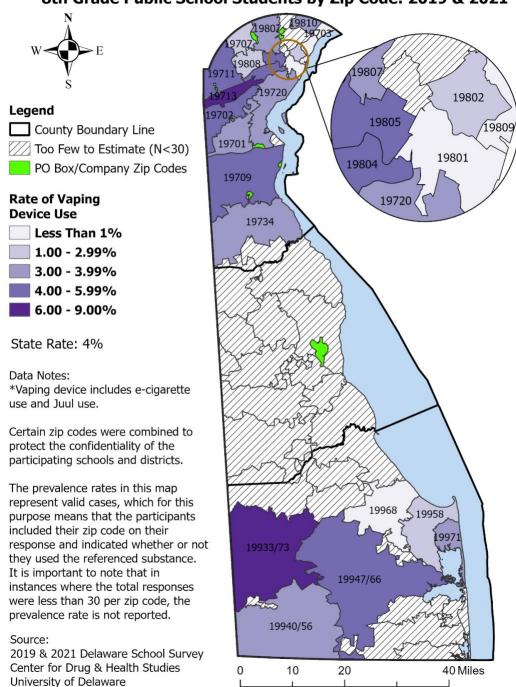


Figure 5: Map of past month vaping, 8th grade

www.cdhs.udel.edu/seow

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

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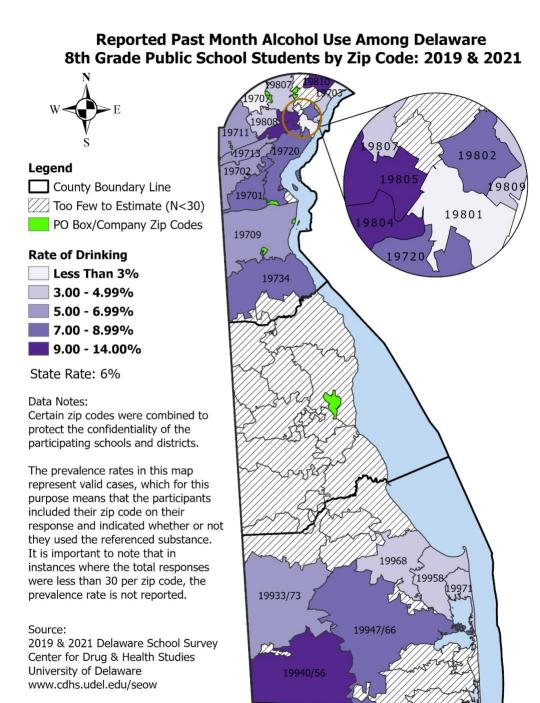


Figure 6: Map of past month alcohol use, 8th grade

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

10

20

40 Miles

Reported Past Two Week Binge Drinking* Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

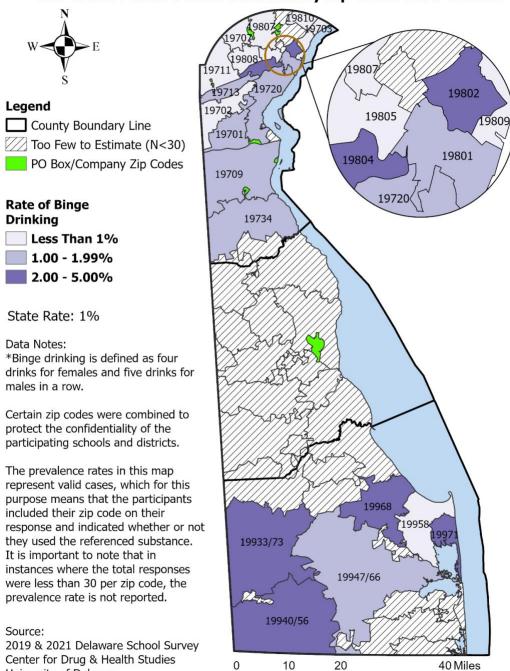


Figure 7: Map of binge drinking, 8th grade

University of Delaware www.cdhs.udel.edu/seow

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

Reported Past Month Marijuana Use Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

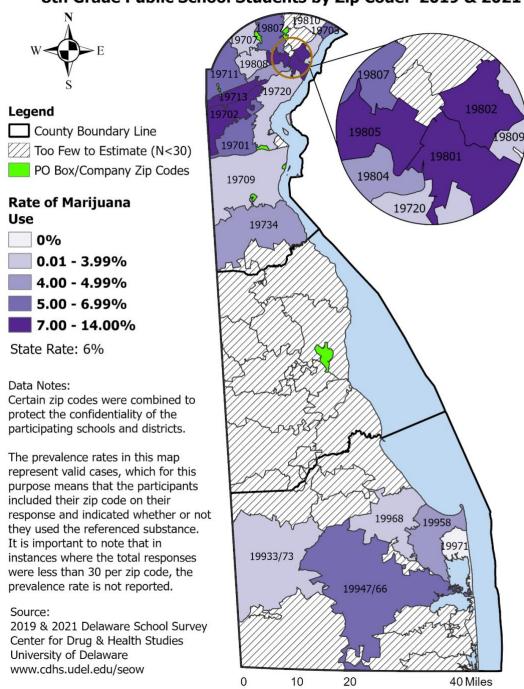


Figure 8: Map of past month marijuana use, 8th grade

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

Reported Past Year Prescription Painkiller Use Without a Prescription Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

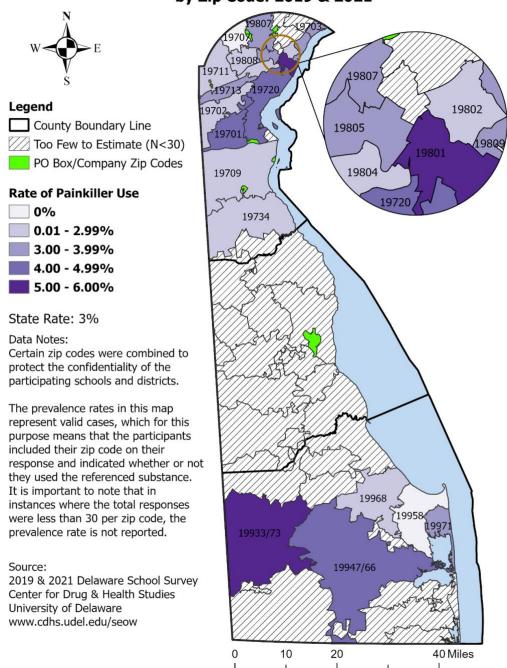


Figure 9: Map of past year prescription painkiller misuse, 8th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

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

Reported Past Year Prescription Drug* Use Without a Prescription Among Delaware 8th Grade Public School Students by Zip Code: 2019 & 2021

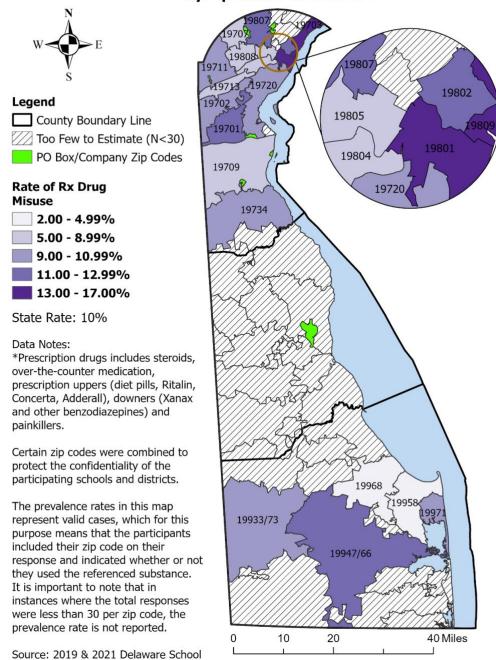


Figure 10: Map of past year prescription drug misuse, 8th grade

Survey

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

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

Reported Past Month Cigarette Use Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

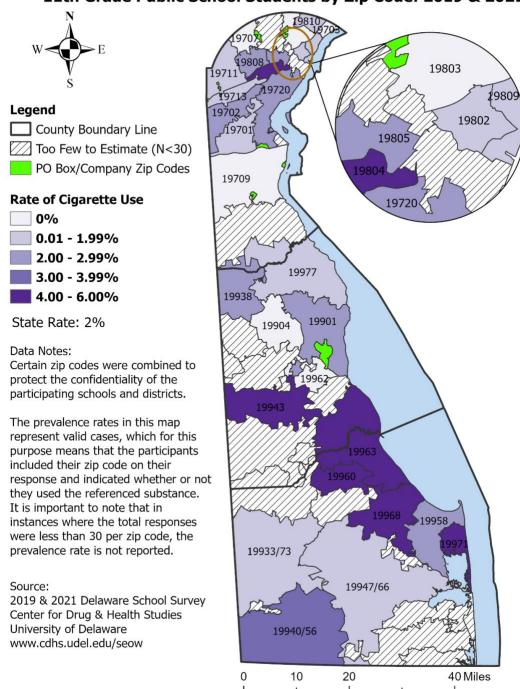


Figure 11: Map of past month cigarette use, 11th grade

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

Reported Past Month Vaping Device* Use Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

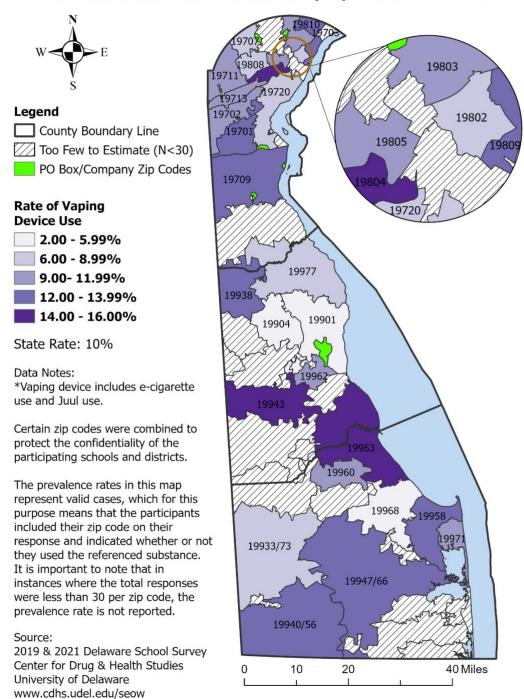


Figure 12: Map of past month vaping, 11th grade

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

Reported Past Month Alcohol Use Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

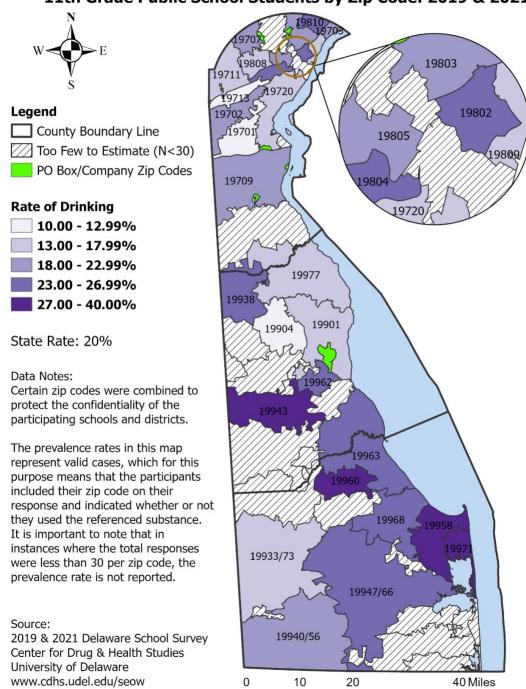


Figure 13: Map of past month alcohol use, 11th grade

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

Reported Past Two Week Binge Drinking* Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

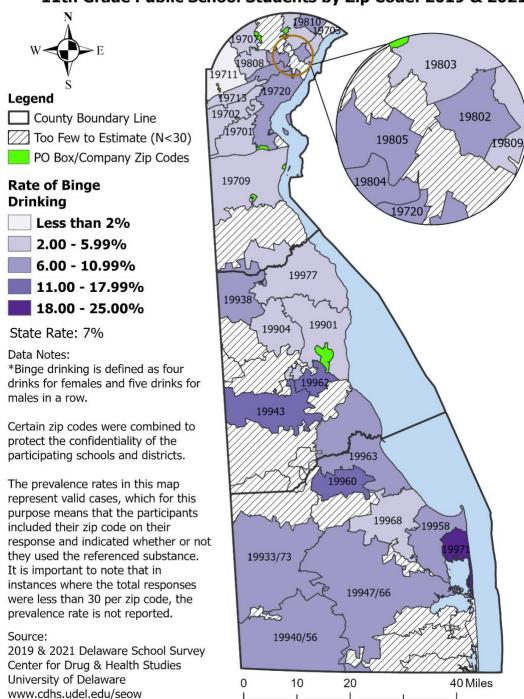


Figure 14: Map of binge drinking, 11th grade

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

Reported Past Month Marijuana Use Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

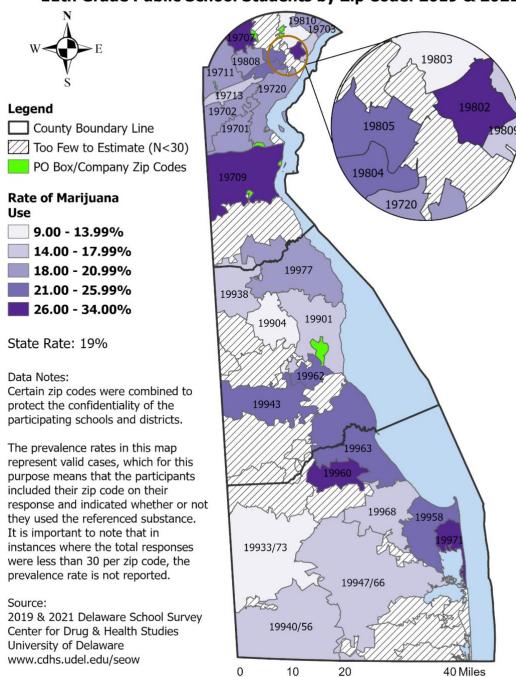


Figure 15: Map of past month marijuana use, 11th grade

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

Reported Past Year Prescription Painkiller Use Without a Prescription Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

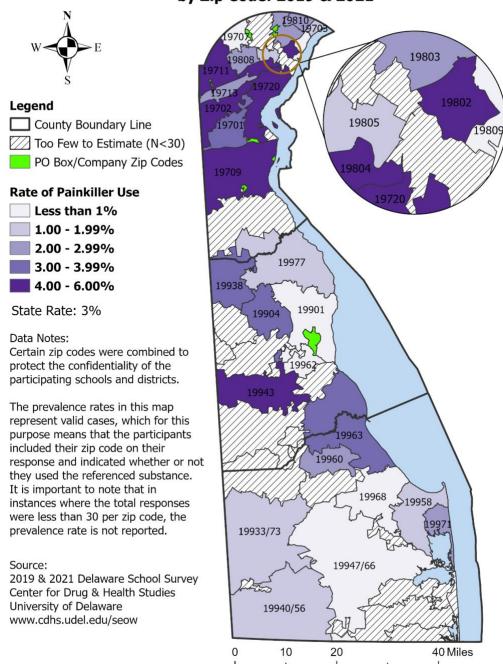


Figure 16: Map of past year prescription painkiller misuse, 11th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

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

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Reported Past Year Prescription Drug* Use Without a Prescription Among Delaware 11th Grade Public School Students by Zip Code: 2019 & 2021

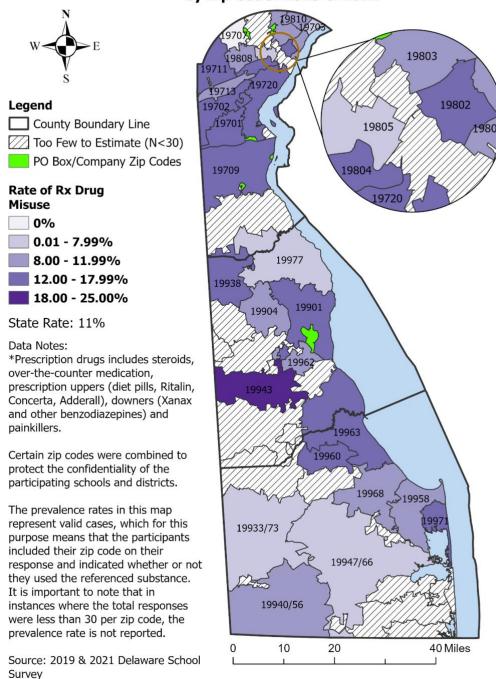


Figure 17: Map of past year prescription drug misuse, 11th grade

Note: Prescription misuse is defined by the survey as using a medication without a prescription or in a way other than prescribed.

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 8 th and 11 th grades	2021 2021	1999 - 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