Executive Summary

The 2021 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
&
The Delaware State Epidemiological Outcomes Workgroup
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 over 50 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 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 is the Executive Summary of the 2021 edition. To review the complete report, other chapters, or infographics please visit the UD Center for Drug and Health Studies Delaware Epidemiological Reports page. Video recordings of select SEOW presentations referenced in this report are also available online.
SEOW Collaborators

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

atTacK Addiction
Bellevue Community Center
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 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 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
New Castle County Police Department
Planned Parenthood of Delaware
Red Clay Consolidated School District
Sun Behavioral Delaware
Sussex County Health Coalition
Transitions Delaware
Trauma Matters Delaware
United Way of Delaware
University of Delaware
  College of Health Sciences
  College of Arts and Sciences
  Partnership for Healthy Communities
  Student Health & Wellness Promotion
Wesley College
West End Neighborhood House
Wilmington University

**SEOW Facilitator Team at the University of Delaware Center for Drug and Health Studies:** Cheryl Ackerman, Jessica Arnold, Rochelle Brittingham, David Burton, Darryl Chambers, Miller Finkelstein, Bill Gratton, Stephanie Ha, James Highbarger, Dana Holz, Steve Martin, Sharon Merriman-Nai, Dan O’Connell, Laura Rapp, Rachel Ryding, Meisje Scales, Rachael Schilling, Eileen Sparling, Wenjin Wang.

*If your organization is interested in becoming an SEOW Collaborator, please contact Meisje Scales at: mjscales@udel.edu.*
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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 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.

- **Rounding**: All figures from Delaware School Survey (DSS) are rounded to the nearest whole percent. As such, in some cases the cells in a table may add up to slightly more or less than 100%.

- **Missing Observations**: In our analysis, any missing observations (responses) are not calculated into the total percentages. Because different questions have varying numbers of missing responses, the total sample size and percent missing may fluctuate slightly from question to question. This is due to a few factors:
  - Students may not answer all questions on a survey, particularly those towards the end if they run out of time or they tire of answering questions.
  - Students may also skip or decide not to respond to certain questions for various reasons (e.g., if they fear their responses will not be kept confidential; if they consider the question too personal or sensitive; if they do not understand the question; etc.)

- **Discrepancies in Reporting**: In some instances, there may be slight differences in estimates reported by the Center for Drug and Health Studies compared to those reported by other state or federal entities for the same data source. In most cases this is due to differing practices in rounding or handling missing observations in the data and does not substantially impact the overall prevalence estimates, trends, and relationships among these data points.

- **Statistical Significance**: Unless otherwise indicated, all reported correlations between variables are statistically significant at the p<.05 level. Null hypothesis testing, used to estimate statistical significance, provides an estimate of the likelihood that the relationship between two indicators is not due to random chance. If the p-value for a given crosstab is less than .05, this suggests that in 95% of cases, the correlation between the relevant variables is because there is a relationship between them.
• **Weighted Data:** Weighting data is a correction technique that compensates for nonresponses, helps correct for unequal probabilities of being selected within the sample, and helps ensure that the sample drawn is representative of the Delaware student population. If data is weighted, there will be a notation indicating the data is weighted for the specific fact, figure, or table.

  o **A note about 2019 Youth Risk Behavior Survey (YRBS) Data:** In previous years, Delaware received weighted Delaware YRBS survey data from the CDC for both middle and high school samples. However, during the 2019 administration, participation rates for the Delaware high school survey did not meet the required threshold for weighting the data. Therefore, this report only includes 2019 middle school findings from the YRBS. Whenever available, trend data from the CDC Youth Online Data Portal is also reported. Additional high school YRBS data from previous years may be requested by following the Delaware Division of Public Data Information & Request Process.

• **Pandemic Impacts on Data Collection:** In 2020, the advent of the COVID-19 pandemic and subsequent school closures and shifts to remote learning greatly impacted our ability to collect school survey data. As a result, in 2020, we are unable to report any data from the Youth Tobacco Survey (YTS) for middle or high school, or from the Delaware School Survey (DSS) for 5th and 11th graders. We are, however, able to report figures from the 8th grade Delaware School Survey, based on responses from 3,799 respondents.
2021 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), releases the Delaware State Epidemiological Profile which highlights the most recently available data on behavioral health among various populations in Delaware and nationwide. The 2021 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
- Gender and Sexuality
- Protective Factors

The Delaware State Epidemiological Profile is a comprehensive and robust document which incorporates data from approximately 40 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 accomplish goals related to needs assessments, strategic planning, evaluation, and research.

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 behaviors. This Executive

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.
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. There is an estimated population of 989,948 people, representing a 10% increase in the past decade, living among its three counties (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: three out of five residents identify as White; 22.1% as Black or African American; 4.3% as Asian; 0.5% as American Indian and Alaska Native; 7.7% 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 14% report speaking a language other than English at home (U.S. Census Bureau, n.d.).

Median household income for the state is $68,287, with 11.3% of residents living in poverty (U.S. Census Bureau, n.d.). Approximately 93% of state residents have some form of health insurance (United Health Foundation, n.d.). In November 2020, 60,582 Delaware families received assistance from the Supplemental Nutrition Assistance Program (KIDS COUNT in Delaware, Annie E. Casey Foundation, 2021). According to the U.S. Bureau of Labor Statistics, in July 2021, Delaware’s seasonally adjusted unemployment rate was 5.6%, down from 10.5% at the same time in 2020 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.

**Tobacco/Electronic Cigarettes:** While tobacco use remains a serious national and local 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. Of concern, however, perception of the risk of smoking has decreased over time. Less than half of 8th graders (46%) perceive there is a great risk of harm from smoking a pack of cigarettes per day (DSS, 2020). This represents a 10% drop from 56% in 2019 and is the first time such perception of risk 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. In 2019, 4.6% of Delaware middle school students reported using vape
products (down from 8.4% in 2015) and 6% reported that they have either smoked cigarettes, cigars, used smokeless tobacco, or an electronic vaping product within the past month (Delaware Middle School Youth Risk Behavior Survey [YRBS], 2019).

Past month smoking rates among Delaware adults also decreased over the past decade from 21.8% in 2011 compared to 15.9% in 2019 (Behavioral Risk Factor Surveillance System [BRFSS], 2019). According to the BRFSS, smoking tends to be most common among young adults (aged 25 to 34 years) and is associated with lower levels of educational attainment (2019).

**Alcohol:** Data from the most recent Delaware School Survey (DSS) and Youth Risk Behavior Surveys (YRBS) illustrate that alcohol and marijuana remain the most commonly reported substances used by students throughout the state. In 2019, one in four 11th graders reported drinking alcohol in the month prior to responding to the DSS. In 2020, 7% of 8th graders reported drinking alcohol in the prior month (DSS, 2020). Although alcohol use among Delaware students declined over the past five years, mirroring national trends, student surveys show that too many students still do not adequately understand the risks involved with alcohol use; only 37% of 8th graders identified binge drinking as a great risk in the 2020 DSS, down from 49% the preceding year.

Overall, adults in Delaware tend to consume alcohol at rates comparable to national estimates, with 57% reporting current use (Behavioral Risk Factor Surveillance System [BRFSS], 2019). More than one in three Delaware adults between the ages of 18 and 25 reported binge drinking within the previous month (National Survey on Drug Use and Health, 2018-2019). 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.

Driving while intoxicated remains a major public health concern. In 2020, 4% of all traffic crashes in Delaware were alcohol-related. Thirty percent of traffic fatalities and 7% of traffic-related injuries were associated with crashes involving alcohol, and 2,478 driving under the influence (DUI) arrests were made statewide (Delaware State Police, Delaware Information and Analysis Center, 2021).

**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. Given the shifting legal status of marijuana, the perception of risk of harm from marijuana use has declined among students surveyed by the Delaware School Survey (DSS, 2010-20) over the past decade. Seven percent of 8th graders reported past month use of marijuana in 2020 (Delaware School Survey), 2% reported heavy use (defined as using more than six times in the past month), and only 33% reported they perceived a great risk in using marijuana regularly. Alternate methods of ingesting marijuana have become more popular, including vaping, edibles, and marijuana concentrates. The 2020 DSS indicates that 2% of 8th graders used edibles to ingest marijuana and 2% vaped it in the past month. Fourteen percent of 11th graders responding to the
2019 DSS reported that at some point in their lives they had driven a car after smoking marijuana, and 7% reported that they had done so in the month prior to taking the survey (DSS, 2019).

Delaware adults use marijuana at slightly higher rates than the national average. This is particularly true among young adults aged 18 to 25, who reported a past year use rate of 41% and a monthly rate of nearly 28%. (National Survey of Drug Use and Health, 2018-2019).

**Opioid Use:** The CDC estimates Delaware’s 2019 drug overdose mortality rate as 48 deaths per 100,000 residents, (CDC, n.d.), ranking second among all states and substantially higher than the national rate of 21.6 deaths per 100,000 (Hedegaard, Minino, & Warner, 2020). Among the 447 overdose deaths recorded in 2020, fentanyl was identified in 372 and 94 involved heroin (Delaware Division of Forensic Science, 2021). Almost 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 2018-2019 National Survey on Drug Use and Health [NSDUH] estimate that 3.45% of all Delawareans aged 12 and older and 3.28% 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 (5.43%).

The 2020 Delaware School Survey data indicate that approximately 4% of 8th grade students report rates of lifetime misuse of prescription pain medications, a past year misuse rate of 3%, and a past month misuse rate of 2%. These results also indicate that less than half (46%) of 8th graders perceive a great risk in misusing pain medications in ways other than prescribed.

On a positive note, the rate of Delawareans filling opioid prescriptions has continued to decline since 2015, when it was 204 per 1,000 people to 120 per 1,000 in 2020. Additionally, 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) 2018-2019 estimates, in Delaware, approximately 4% of all people aged 12 and over used an illicit drug in the past month.2 The 2018-2019 NSDUH also estimates that approximately 2.21% 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 (6.63%). The Division of Forensic Science 2020 Report indicates that 152 overdose deaths in Delaware involved cocaine (Division of Forensic Science, 2021).3 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).

Five percent of 8th grade students reported using synthetic marijuana at least once in their lifetime, 3% reported past year use, and 2% reported past month use on the 2020 Delaware

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2 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.

3 To explore interactive maps on overdose death rates at the Census tract, zip code, county, and state level, visit the Delaware Opioid Metric Intelligence Project (DOMIP) on the Center for Drug and Health Studies at the University of Delaware website.
School Survey (DSS). Other 2020 DSS results also indicate that 2% of 8th grade students reported use of an illicit drug (other than marijuana) in the past month and 5% within the past year, and one in ten students reported misuse of prescription and over-the-counter medication (including pain medication) within the previous year. Concurrently, less than half (46%) of 8th graders perceive a great risk in misusing medication.

**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 substance-exposed infant births 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).

**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 sports betting recently legalized. 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, Creemens, Vail-Smith, 2014). Gambling is prevalent among Delaware youth; among 8th graders surveyed in Delaware, 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 (Delaware School Survey, 2020).

**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; one in five Americans will experience a mental illness each year; one in five children will experience a “serious debilitating mental illness;” and 4% of adults live with a serious mental illness such as major depression or schizophrenia (CDC, n.d). Mental health problems and substance use disorders often co-occur (National Institute of Drug Abuse, 2020). The 2018-2019 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 8.5% 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 2019, 13.5% 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 2018 was 11.4 deaths per 100,000 (Delaware Department of Health and Social Services, Division of Public Health, n.d.) and there were 125 suicide deaths in the state in 2020 (Delaware Division of Forensic Science, 2021).

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 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). From 2013 to 2019, the percentage of middle school students who reported they had ever attempted suicide increased from 6.8% to 8.5% (Delaware YRBS, 2013-2019). The Delaware School Survey (DSS) also includes questions regarding students’ mental health. In 2020, one in five 8th graders reported symptoms of anxiety on more than half of the days in the previous two weeks and 16% reported feelings of depression. Female students were two and half times as likely to report feeling depressed or anxious compared to male students.

Although 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).

**Persons with Disabilities:** There are definitional variations and other challenges to collecting data regarding persons with disabilities and their needs, yet 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 12.7% to 25.5% (American Community Surveys, 2015-2019; Behavioral Risk Factor Surveillance System [BRFSS], 2019). Delaware adults with disabilities experience considerably higher rates of smoking, e-cigarette use, obesity, and depression than persons without disabilities, according to the 2019 BRFSS results (CDC, Disability and Health Data System, n.d.).

The National Survey of Children’s Health (2018-2019) indicates that 14.7% of children in Delaware have one functional difficulty and 14.6% have two or more. The Delaware Department of

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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
Education (DOE, n.d.) reports that 16.7% 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. Three in ten 8th grade students responding to the 2020 Delaware School Survey reported having a disability. Students who reported having a disability also reported higher rates of all substance use and poorer mental health outcomes.

**Adverse Childhood Experiences (ACES):** 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 long-lasting negative impacts on individuals (Trauma Matters Delaware, n.d.; Center on the Developing Child, Harvard University, n.d. Brown et al., 2009). Experiencing one type of trauma increases the risk of experiencing additional traumas, and exposure to multiple ACES can have a compounded effect. 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.). Available data suggest that Delawareans experience rates of childhood adversity similar to national rates. In 2015, the Delaware Public Health Institute conducted the Delaware Household Health Survey, which asked adult respondents about their experiences with childhood trauma. Half of adults in Delaware reported experiencing one or more of the original ACES, with 13.8% reporting four or more. When factoring in being bullied and/or experiencing discrimination (two indicators added to the survey), 59% of adults reported having at least one ACE, with 16% reporting four or more (Public Health Management Corporation, 2016; Fink, 2016). For the first time in 2019, the Delaware Division of Public Health (DPH) included the optional ACES module in the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) survey. BRFSS findings reveal that ACES are common in Delaware; approximately two out of three adults experienced at least one ACE, with 43.3% experiencing two or more. Similar to the Delaware Household Health Survey, the most common adversity reported 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%).

The National Survey on Children’s Health (NSCH, 2016-2019) findings indicate that approximately 43% of Delaware youth experienced at least one ACE, most commonly having divorced or separated parents or experiencing economic hardship. The third most common ACE reported is living with a person with a substance use disorder, followed by parental incarceration. Parents reported that 6.1% of children have been treated unfairly because of race, one of several
indicators on the rise, including parental divorce and separation, parent or guardian death, and having been the victim of violence. 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 experienced higher rates of ACEs. Conversely, children in families with high levels of resilience were less likely to have been exposed to multiple ACEs\(^7\) (Hussaini, 2021).

The Delaware Secondary School Survey (DSS) includes a number of questions that address trauma as well as substance use and mental health. Two out of three 8\(^{th}\) graders reported experiencing at least one ACE, and nearly one in four revealed having exposure to three or more on the 2020 survey. Most commonly, students reported being bullied (30%), being hit by another teen (25%), living with someone with a substance use disorder (24%), witnessing violence at home (22%), and living with someone with mental illness (22%). According to the 2020 DSS, 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.\(^8\)

**Gender and Sexuality:** The lesbian, gay, bisexual, and transgender (LGBT)\(^9\) population constitutes approximately 4.5% of the adult U.S. population (Williams Institute, 2019). 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. Data from the 2019 National Survey on Drug Use and Health shows that more than a third (35.6%) of lesbian, gay, and bisexual (LGB) adults aged 18 to 25 report using marijuana in the past month (SAMHSA, 2020). There have also been significant increases in past month and daily marijuana use among LGB adults 26 and older.

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\(^7\) For more on the NSCH Family Resilience Index, please see Chapter 13 of this report, Protective Factors.

\(^8\) 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.

\(^9\) 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](https://www.trevorno.org) and [GLSEN](https://www.glsen.org) offer terminology resources on this topic.
In 2019, approximately 18.3% of LGB adults age 18 or older met the criteria for a substance use disorder, and 12.9% met the criteria for both a substance use disorder and a mental illness (SAMHSA 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. Data from the National Youth Risk Behavior Survey in 2019 found that LGB high school students report significantly higher rates of past month alcohol, marijuana, and cigarette use than their heterosexual peers. LGB students also attempted suicide in the past year at more than three times the rate of heterosexual students.

**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 on 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, more than half of Delaware parents reported having attended an event or activity of their child within the past year; two-thirds of parents reported that the family ate 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 and more than three quarters of respondents reported their children aged 6 to 17 had no difficulty making and keeping friends.

Results from the 2020 Delaware School Survey (DSS) highlight associations between select protective factors and rates of substance use as well as mental health indicators among 8th grade students. Overall, 95% of 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. Students 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. The most notable associations were among students who reported getting along with their parents; students who did not get along regularly with their parents were approximately three times as likely to have used alcohol, marijuana, or vape products within the past year. These students were also three times as likely to report experiencing anxiety and more than four and a half times as likely to report symptoms of depression on more than half of the days in the previous two weeks. Feeling safe in the

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10 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.
neighborhood and at school were also associated with lower rates of anxiety and depression, and feeling safe in the neighborhood was also associated with lower rates of substance use.

Finally, 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.* Two-thirds of 8th graders rated themselves in the top tier of the ladder at the time of the survey and three-quarters envisioned themselves being in the top tier in five years. Students who rate themselves at the top tier are considered to be *thriving.* The data suggests that the majority of students are hopeful about where they will be in life in the future.

**COVID-19 in Delaware**

Delaware continues to face significant health, economic, and social challenges related to the ongoing COVID-19 pandemic which resulted in a stay-at-home order in March 2020 that lasted through much of the past year. The availability of vaccines and federal COVID relief measures have enabled many businesses and institutions to re-open or remain operational to some degree. For example, schools resumed in person learning in August 2021, and will operate with the Governor’s recent mask requirement in place (which also applies to child care centers and state facilities). As of August 30th, 2021, 60% of the eligible population were fully vaccinated in Delaware, and three out of four residents aged 18 and over had received at least one vaccination. However, the emergence of COVID-19 variants has resulted in recent increases of infections, hospitalizations, and deaths – predominantly among the unvaccinated – throughout the U.S. as well as in Delaware (My Healthy Community, n.d.). The rise in 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, which is likely to be exacerbated if health care professionals continue to feel overwhelmed. A recent KFF/Washington Post survey indicates that 29% of health care workers have considered leaving their profession as a result of the pandemic (2021). National research suggests that some individuals have experienced higher rates of substance use, depression, anxiety, and other challenges since the onset of COVID-19 (American Psychological Association, 2021; Rapid Assessment of Pandemic Impact on Development – Early Childhood [RAPID-EC], 2021, Czeisler et al., 2021). It will be important to monitor state level data as it becomes available to watch for similar trends and disparities in order to address the needs of Delaware residents.

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*. 

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11 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*. 

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Snapshot:
Substance Use in Delaware
2020 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

Notes: Medication used not as prescribed includes steroids, over-the-counter medication, prescription uppers (diet pills, Ritalin, Concerta, Adderall), downers (Xanax and other benzodiazepines), painkillers, and other prescription drugs used 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.

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2020 Delaware School Survey
Reported Use of Selected Substances in the Past 30 Days
among Delaware 8th Grade Students (in percentages)

Figure 2: Selected substances used in past 30 days, 8th grade

Note: Past month cigarette use among 8th grade students is too small (n<30) to report here.
“Medication used not as prescribed” includes steroids, over-the-counter medication, prescription uppers (diet pills, Ritalin, Concerta, Adderall), downers (Xanax and other benzodiazepines), and painkillers.
“Other illegal drugs” include ecstasy, hallucinogens, street uppers, inhalants, cocaine, crack, heroin, and synthetic marijuana used to get high.

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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.

### Substance Use:

<table>
<thead>
<tr>
<th>Substance</th>
<th>% Reporting Past-Year Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>45%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>34%</td>
</tr>
<tr>
<td>E-cigarette/Vape</td>
<td>17%</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>7%</td>
</tr>
<tr>
<td>At least one other drug</td>
<td>12%</td>
</tr>
<tr>
<td>All of the above categories</td>
<td>2%</td>
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</tbody>
</table>

**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.

Figure 4: Map of past month cigarette use, 8th grade
Figure 5: Map of past month vaping, 8th grade

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

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Figure 7: Map of binge drinking, 8th grade


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

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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.

Figure 10: Map of past year prescription drug 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.


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Figure 11: Map of past month cigarette use, 11th grade
Figure 12: Map of past month vaping, 11th grade
Figure 13: Map of past month alcohol use, 11th grade
Figure 14: Map of binge drinking, 11th grade

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


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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.
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.

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2. References

Executive Summary


## Data Sources

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<tr>
<th>Data Instrument</th>
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<th>Trend Range</th>
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<tbody>
<tr>
<td>Delaware’s Annual Traffic Statistical Report</td>
<td>2020</td>
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<tr>
<td>Delaware Behavioral Risk Factor Surveillance System (BRFSS)</td>
<td>2019</td>
<td>-</td>
</tr>
<tr>
<td>Delaware Prescription Monitoring Program (PMP)</td>
<td>2020</td>
<td>2012- 2020</td>
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<td>Delaware School Survey (DSS) – 5th and 11th grades 8th grade*</td>
<td>*2019 2020</td>
<td>*1999 - 2019 1999 - 2020</td>
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<tr>
<td>Delaware Youth Risk Behavior Survey (YRBS) – High School</td>
<td>2017</td>
<td>1999 - 2017</td>
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<tr>
<td>Delaware Youth Risk Behavior Survey (YRBS) – Middle School</td>
<td>2019</td>
<td>1999 - 2019</td>
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<tr>
<td>DOMIP (Delaware Opioid Metric Intelligence Program)</td>
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<td>-</td>
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<tr>
<td>Monitoring the Future – 8th, 10th, and 12th grades</td>
<td>2020</td>
<td>1999 - 2020</td>
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<td>Performance Measures, Delaware</td>
<td>2018</td>
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<tr>
<td>National Survey on Children’s Health (NSCH)</td>
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<td>Delaware Infants with Prenatal Substance Exposure</td>
<td>2020</td>
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</tr>
<tr>
<td>Treatment Admissions Data</td>
<td>2019</td>
<td>-</td>
</tr>
</tbody>
</table>
In addition to the data sources for the figures and tables in the 2021 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 Department of Safety and Homeland Security, Division of Forensic Science
- Delaware Household Health Survey
- Drug Enforcement Administration
- 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
- RTI International
- State of Delaware Economic Development Office
- The Trevor Project
- U.S. Census Bureau
- U.S. Centers for Disease Control and Prevention
- U.S. Health Resources and Services Administration