2020 DELAWARE STATE
EPIDEMIOLOGICAL PROFILE
SUBSTANCE USE AND RELATED ISSUES

Substance-Exposed Infants

preparing for

Acting Director Alexis Teitelbaum and the
Delaware Division of Substance Abuse and Mental Health
&
The Delaware State Epidemiological Outcomes Workgroup

with funding from the
Strategic Prevention Framework - Partnerships for Success Program

Sponsored by Award SP020704 to the Division of Substance Abuse and Mental Health, Delaware Health and Social Services, from the Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration. Please address all inquiries to Laura Rapp, PhD, University of Delaware Center for Drug and Health Studies, Department of Sociology and Criminal Justice: lrapp@udel.edu.
The Role of the Delaware State Epidemiological Outcomes Workgroup and the Purpose of the Epidemiological Profile

All states, including Delaware, have 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 supported the establishment of the Delaware SEOW through SAMHSA Strategic Prevention Framework grants awarded previously. The SEOW is a group of people and organizations that have and use analytical data concerning substance use and related behaviors and consequences; this information can be used to establish and monitor indicators related to substance use prevention. Formerly known as the Delaware Drug and Alcohol Tracking Alliance (DDATA), Delaware’s SEOW mission is to bring data on substance use and associated issues to the forefront of the prevention process 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 planning and policies
- To train agencies and communities in understanding, using, and presenting data effectively

The annual Delaware State Epidemiological Profile was developed by the SEOW to disseminate data for strategic planning, decision-making, and evaluation. Using indicators that are available on an ongoing basis, the report describes patterns of consumption, context, consequences, and trends of substance use, as well as other risk and protective factors, especially among young people in Delaware. The report also highlights crosscutting issues that warrant attention as well as populations that may experience disproportionate risk for these concerns.

This chapter highlights the issue of substance-exposed infants in Delaware. To review the complete Delaware Epidemiological Profile, other chapters, infographics, or SEOW data products, please visit the UD Center for Drug and Health Studies Delaware Epidemiological Reports page.
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 Information and Analysis Center
Delaware Multicultural and Civic Organization
Delaware Prevention Coalition
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
Nemours Health and Prevention Services
Planned Parenthood of Delaware
Red Clay Consolidated School District
Sussex County Health Coalition
Transitions Delaware
Trauma Matters Delaware
United Way of Delaware
Wesley College
West End Neighborhood House
University of Delaware
  College of Health Sciences
  College of Arts and Sciences
  Student Health & Wellness Promotion
Wilmington University

SEOW Facilitator Team at the University of Delaware Center for Drug and Health Studies:
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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 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 recently updated its guidelines for reporting and interpreting data from surveys that it administers to students across the state of Delaware. As a result, in the 2020 Delaware State Epidemiological Profile, data in some tables and figures have been aggregated or otherwise reported differently than in years prior. The following notes summarize the guidelines for interpreting data presented in this report:

- **Reporting small numbers:** 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 data (DSS, YRBS, YTS) 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:** With respect to the Delaware YRBS survey, there may be slight discrepancies in how CDHS reports some data points compared to how the Centers for Disease Control and Prevention (CDC) and their national technical advisors (Westat, Inc.) report the data. This is largely due to differing practices when conducting analysis with 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. Prevalence data from the Youth Risk Behavior Survey and Youth Tobacco Survey are usually weighted, however, data is not weighted when exploring small subpopulations to ensure an accurate analysis that is not influenced due to the small number of individuals in those subpopulations.
  - **2019 Weighted Data:** In previous years, advisors to the CDC have provided weights with the Youth Risk Behavior Survey data, and frequencies have been estimated using weighted data. In 2019, the YRBS sample population in Delaware did not meet threshold requirements for weighting data, so any prevalence estimates relying on YRBS data for this year are unweighted.

In 2019, a total of 10,765 Delaware students responded to either the Delaware School Survey (DSS) or the Delaware Youth Risk Behavior Survey (YRBS). By survey, the total number of respondents are as follows:

<table>
<thead>
<tr>
<th>Survey Administration</th>
<th># of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DSS</strong></td>
<td></td>
</tr>
<tr>
<td>5th Grade</td>
<td>2,992</td>
</tr>
<tr>
<td>8th Grade</td>
<td>2,126</td>
</tr>
<tr>
<td>11th Grade</td>
<td>2,299</td>
</tr>
<tr>
<td><strong>Delaware YRBS</strong></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>1,162</td>
</tr>
<tr>
<td>High School</td>
<td>2,186</td>
</tr>
</tbody>
</table>
1. Substance-Exposed Infants

National Overview

Infants who are born exposed to opioids and other illicit substances (substance-exposed infants, or SEI) are at increased risk for a host of challenges to healthy development. In addition to physical health risks related to direct substance exposure, continued substance use by the parent or caregiver may likely contribute to an unstable home life for the infant. Substance use is often identified among child abuse and neglect cases within child welfare systems (Child Welfare Information Gateway, 2014). Such traumas, in turn, are associated with increases in risk behaviors and negative health outcomes throughout the child’s lifespan.

Delaware Overview

In Delaware, the Office of the Child Advocate tracks notifications of SEI and examines associated characteristics. In October 2016, Delaware received a Substance-Exposed Infants In-Depth Technical Assistance (SEI-IDTA) grant from the National Center on Substance Abuse and Child Welfare. Governor Carney’s “Action Plan for Delaware,” published in January 2017, included the reduction in number of children born exposed to substances as one of his administration’s primary policy objectives (Transition Team Report, 2017). In Spring 2018, the Delaware General Assembly passed “Aiden’s Law,” which requires healthcare professionals to notify the Delaware Division of Family Services (DFS) of substance-exposed births and to provide for a collaborative, coordinated, and multidisciplinary plan of safe care (POSC) for the infant and their affected family or caregivers. As of August 2018, all six Delaware birthing hospitals had implemented POSCs (State of Delaware Child Death Review Commission, 2019).

Parallel to these developments, SEI notifications have increased since 2015. In 2019, 705 notifications of prenatally exposed infants were reported to DFS, up 13% from 2018 (Delaware Office of the Child Advocate, 2020). More than two-thirds involved a single substance exposure, with marijuana the most commonly identified substance. Among the 135 births involving exposure to two substances, marijuana was most prevalent followed by opioids. In cases of polysubstance exposure (three or more substances present at birth) opioids followed by cocaine were most commonly identified.

Among the more dramatic findings, 40% of the mothers who gave birth to prenatally exposed infants report that they themselves have a history of involvement with family services as youths or a history of childhood trauma. More than half also report a mental health condition. Early, coordinated intervention and family support are critical to ameliorating negative impacts. In 2019, POSCs were established for 661 cases with the father identified as a plan participant in 430 of them. Pediatric referrals were made in each of these cases. The following figures highlight key findings from the 2019 program review by the Office of the Child Advocate.
Five Year Comparison of SEI Notifications to DFS, 2015-2019

![Comparison of SEI birth notifications to DFS (2015-2019)](image)

**Figure 1:** Comparison of SEI birth notifications to DFS

**Note:**
The figure depicts the annual count of substance exposed infant birth notifications (SEI) made to the Division of Family Services from 2015 to 2019.

**Source:** Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

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**2019 SEI Notifications by County (count and percentage)**

![Chart showing SEI birth notifications by county, 2019](chart1)

- **New Castle**: 339, 48%
- **Kent**: 160, 23%
- **Sussex**: 203, 29%

*Figure 2: SEI birth notifications by county, 2019*

**2019 Reports by 1, 2, or 3 Substances (count and percentages)**

![Chart showing SEI birth notifications by substance, 2019](chart2)

- **1 Substance**: 481, 68%
- **2 Substances**: 135, 19%
- **3 or More**: 89, 13%

*Figure 3: SEI birth notifications by 1, 2, or more substances*

Note: The figures include both the count and percentage of a given category.

Source: Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

[Back to table of figures]
2019 SEI Notifications
Prevalence of Substances in Single Substance Exposure
(n=481)

Figure 4: Prevalence of substances in single substance exposure among SEI notifications

Note: The figure includes the count of cases for each identified substance among single substance exposures.
Source: Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

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2019 SEI Notifications

Prevalence of Substances in Two Substance Exposure (n=135)

Figure 5: Prevalence of substances in two substance exposure among SEI notifications

Note: The figure includes the count of cases for each identified substance among two substance exposures.
Source: Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

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Figure 6: Prevalence of substances in two substance exposure among SEI notifications

Note:
The figure includes the count of cases for each identified substance among poly (3 or more) substance exposures.
Source: Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.
## 2019 SEI Notifications
### Maternal Risk Factors, 2017-2019

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFS History/Trauma as Child</td>
<td>40%</td>
<td>43%</td>
<td>40%</td>
</tr>
<tr>
<td>Mental Health Condition</td>
<td>34%</td>
<td>46%</td>
<td>56%</td>
</tr>
<tr>
<td>Prior SEI Birth</td>
<td>28%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Prior DFS Substantiation</td>
<td>-</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Unknown/Unnamed Father/Partner</td>
<td>-</td>
<td>16%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Figure 7: Table of maternal risk factors among cases involving SEI births

Note:
“-” No data was gathered for prior Division of Family Services substantiation and unknown/Unnamed father or partner in 2017.
Source: Delaware Infants with Prenatal Substance Exposure 2019 Year in Review, Division of Family Services, State of Delaware, Office of the Child Advocate.

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2. References

**Substance-Exposed Infant Births**


## Data Sources

<table>
<thead>
<tr>
<th>Data Instrument</th>
<th>Administered/Compiled by</th>
<th>Most Recent Data</th>
<th>Trend Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware Annual Traffic Statistical Report</td>
<td>Delaware State Police/Delaware Statistical and Analysis Center</td>
<td>2019</td>
<td>-</td>
</tr>
<tr>
<td>Delaware Behavioral Risk Factor Surveillance System (BRFSS)</td>
<td>DE Division of Public Health (sponsored by the CDC)</td>
<td>2018</td>
<td>-</td>
</tr>
<tr>
<td>Delaware Prescription Monitoring Program (PMP)</td>
<td>DE Department of State, Division of Professional Regulation</td>
<td>2018</td>
<td>2012- 2018</td>
</tr>
<tr>
<td>Delaware School Survey (DSS) – 5th, 8th, and 11th grades</td>
<td>Center for Drug and Health Studies, UD</td>
<td>2019</td>
<td>1999 - 2019</td>
</tr>
<tr>
<td>Delaware Youth Risk Behavior Survey (YRBS) – High School</td>
<td>Center for Drug and Health Studies, UD (sponsored by DE Division of Public Health and the CDC)</td>
<td>2019</td>
<td>1999 - 2019</td>
</tr>
<tr>
<td>Delaware Youth Risk Behavior Survey (YRBS) – Middle School</td>
<td>Center for Drug and Health Studies, UD (sponsored by Nemours)</td>
<td>2019</td>
<td>1999 - 2019</td>
</tr>
<tr>
<td>Delaware Youth Tobacco Survey – 6th – 12th grades</td>
<td>Center for Drug and Health Studies, UD (sponsored by DE Division of Public Health)</td>
<td>2018</td>
<td>-</td>
</tr>
<tr>
<td>Monitoring the Future – 8th, 10th, and 12th grades</td>
<td>University of Michigan (sponsored by the National Institute on Drug Abuse)</td>
<td>2019</td>
<td>1999 - 2019</td>
</tr>
<tr>
<td>Performance Measures, Delaware</td>
<td>National Highway Safety Administration</td>
<td>2018</td>
<td>2014-2018</td>
</tr>
<tr>
<td>National Survey on Children’s Health (NSCH)</td>
<td>US Health Resources &amp; Services Administration</td>
<td>2018</td>
<td>2016 - 2018</td>
</tr>
<tr>
<td>National Survey on Drug Use and Health (NSDUH)</td>
<td>US Substance Abuse and Mental Health Services Administration</td>
<td>2016 - 2018</td>
<td>2002 - 2018</td>
</tr>
<tr>
<td>Substance-Exposed Infant Program</td>
<td>Office of the Child Advocate</td>
<td>2019</td>
<td>2017-2019</td>
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### Treatment Admissions Data

<table>
<thead>
<tr>
<th>Source</th>
<th>Data Collection Period</th>
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<tbody>
<tr>
<td>US Substance Abuse and Mental Health Services Administration, collected by Delaware Division of Substance Abuse and Mental Health</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>2002 - 2019</td>
</tr>
</tbody>
</table>

In addition to the data sources for the figures and tables in the 2020 report, the following data sources are also cited throughout the narrative:

- America’s Health Rankings
- Bureau of Labor Statistics
- Centers for Disease Control and Prevention
- Delaware Department of Education
- Delaware Department of Safety and Homeland Security, Division of Forensic Science
- Delaware Health Tracker
- Delaware Household Health Survey
- Drug Enforcement Administration
- Health Resources and Services Administration
- KIDS COUNT in Delaware
- National Center for Health Statistics
- National Conference of State Legislatures
- National Institute on Drug Abuse
- National Institute on Mental Health
- RTI International
- State of Delaware Economic Development Office
- The Trevor Project
- U.S. Census Bureau