2020 DELAWARE STATE
EPIDEMIOLOGICAL PROFILE
SUBSTANCE USE AND RELATED ISSUES

Tobacco and Electronic Cigarettes (Vaping)

prepared 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](https://www.udel.edu/cdhs), Department of Sociology and Criminal Justice: [lrapp@udel.edu](mailto: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 provides an overview of tobacco and electronic cigarette use or vaping 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
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.

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:
Cheryl Ackerman, Jessica Arnold, Rochelle Brittingham, David Borton, Darryl Chambers, Bill Gratton, James Hightberger, Dana Holz, Lin Liu, Steve Martin, Sharon Merriman-Nai, Dan O’Connell, Aila Prieto, Brandie Pugh, 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.
Table of Contents

Notes on Data Reporting and Interpretation iv

1. Tobacco and Electronic Cigarettes (Vaping) 1-1
   National Overview 1-1
   Delaware Overview 1-2
   Data in Action: E-cigarette or Vaping-use Associated Lung Injury (EVALI) 1-4

2. References 2-5
   Tobacco 2-5
   Data Sources 2-8
Table of Figures

Figure 1: Tobacco/cigarette use & perceptions of great risk .............................................................. 1-5
Figure 2: Cigarette use, 5th graders .................................................................................................... 1-6
Figure 3: Cigarette use, 8th graders .................................................................................................. 1-7
Figure 4: Cigarette use, 11th graders ................................................................................................ 1-8
Figure 5: Electronic cigarette/vaping device use, 5th graders ......................................................... 1-9
Figure 6: Electronic cigarette/vaping device use, 8th graders ......................................................... 1-10
Figure 7: Electronic cigarette/vaping device use, 11th graders ...................................................... 1-11
Figure 8: Cigarette use, lifetime prevalence and age of onset among smokers, MS ................... 1-12
Figure 9: Cigarette smoking in past 30 days, by sex and grade, HS ................................................ 1-13
Figure 10: Electronic vapor product use in lifetime, by sex, grade, and race/ethnicity, MS ......... 1-14
Figure 11: Electronic vapor product use in lifetime, by sex, grade, and race, HS ......................... 1-15
Figure 12: Electronic vapor product use in past month, by sex, grade, and race/ethnicity, HS .. 1-16
Figure 13: Average age of onset for cigarette use, 8th and 11th graders ...................................... 1-17
Figure 14: Smoking whole cigarette before age 13, HS ................................................................. 1-17
Figure 15: Cigarette smoking by sex, adult ...................................................................................... 1-18
Figure 16: Cigarette smoking by race/ethnicity, adult ................................................................... 1-18
Figure 17: Cigarette smoking by educational level, adult ............................................................. 1-19
Figure 18: Cigarette smoking by age group, adult ........................................................................... 1-19
Figure 19: Perception that second-hand smoke is harmful, MS & HS ............................................ 1-20
Figure 20: Cigarette smoking rules, MS .......................................................................................... 1-21
Figure 21: Cigarette smoking rules, HS .......................................................................................... 1-22
Figure 22: Exposure to secondhand smoke in past week, MS ....................................................... 1-23
Figure 23: Exposure to secondhand smoke in past week, HS ....................................................... 1-24
Figure 24: One of four closest friends uses tobacco product, MS .................................................. 1-25
Figure 25: One of four closest friends uses tobacco product, HS .................................................. 1-26
Figure 26: Attitudes toward smoking, MS ........................................................................................ 1-27
Figure 27: Attitudes toward smoking, HS ........................................................................................ 1-28
Figure 28: Trends in students’ past-month cigarette use, 8th and 11th grade .............................. 1-29
Figure 29: Trends in vaping, 11th grade ........................................................................................... 1-30
Figure 30: Emerging trends in vaping device use, HS ................................................................. 1-31
Figure 31: Tobacco product use, past month, by age group and region ........................................ 1-32
Figure 32: Cigarette use, past month, by age group and region .................................................... 1-32
Figure 33: Trends in tobacco product use, past month, HS ............................................................. 1-33
Figure 34: Trends in cigarette use, past-month, national & Del., ages 12+ ..................................... 1-34
Figure 35: Trends in cigarette use, past-month, national & Del., ages 12-17 .............................. 1-35
Figure 36: Trends in cigarette use, past month, national, 8th, 10th, and 12th grades ............... 1-36
Figure 37: Trends in perceived great risk from smoking pack daily ............................................. 1-37
Figure 38: Perception of risk in smoking 1+ packs/day by age group and region ...................... 1-38
Figure 39 Map of cigarette use, past month, 8th grade .............................................................. 1-1
Figure 40 Map of cigarette use, past month, 11th grade ............................................................ 1-2
Figure 41 Map of vaping, past month, 8th grade ................................................................. 1-3
Figure 42 Map of vaping, past month, 11th grade ............................................................... 1-4
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. Tobacco and Electronic Cigarettes (Vaping)

National Overview

More than 50 years ago, the U.S. surgeon general released a comprehensive report documenting strong evidence that linked cigarette smoking to lung cancer and other conditions. In addition to cancers, tobacco use has been linked to heart and respiratory diseases, fetal distress, and other dangerous health conditions. Over the decades, increased knowledge of the risks of smoking has had a positive impact; however, tobacco use remains an issue nationally and locally. Despite significant declines in tobacco use, more than 16 million Americans have at least one disease caused by smoking, which is associated with approximately $170 billion of direct medical costs annually (Centers for Disease Control and Prevention [CDC], 2020). Currently, almost one in five deaths in the United States are linked to cigarettes, and these deaths are entirely preventable.

Nationwide, there has been a decrease in the use of tobacco products over the past several decades. In 2017, roughly 14% of adults in the U.S. reported being current cigarette smokers, reflecting a 67% decrease in cigarette use since 1965 (Wang, Asman, Gentzke, et al., 2018). Among adults who smoke, more than two-thirds report that they want to quit, although rates of quitting decrease with age (Babb, Malarcher, Schauer, Asman, & Jamal, 2017). High school respondents to the National Youth Risk Behavior Survey (NYRBS) reported current smoking at 27.5% in 1991 and 6% in 2019 (CDC, 2020). During that same time period, the number of high school youth who reported ever trying cigarette smoking declined from approximately 70% of respondents to 24.1% (CDC, 2020). The CDC reports that the rate of decline has slowed in recent years. In addition, sharp disparities in use between populations are apparent (CDC, n.d.).

Increasingly, youth and adults are using electronic cigarettes or “vaping” in place of, or in addition to, cigarettes. Nationally, youth vape at a greater rate than they use any other tobacco product, including cigarettes (Jamal et al., 2017). A 2016 surgeon general’s report estimated a 900% increase in youth use of e-cigarettes between 2011-2015. One analysis of results from the 2016 National Youth Tobacco Survey found that the three main reasons middle and high school students give for using e-cigarettes are a friend or family member used them, there are multiple flavor options, and there is a perception of lower risk (Tsai et al., 2018). While e-cigarettes are marketed as less dangerous than regular cigarettes, they still contain nicotine, aerosol, and additional chemicals that may be toxic to the health of the user (Office of the Surgeon General, 2016). Vaping has also been linked to a greater risk of using other tobacco products, including regular cigarettes. The health impacts of e-cigarettes are still being studied, and some risks may not be known at this time. The use of e-cigarettes is particularly problematic for youth: nicotine is addicting and has been shown to interfere with healthy brain development during adolescence and young adulthood. E-cigarette devices can also be used for
marijuana and other illegal substances (Office of the Surgeon General, 2016). New products, such as JUUL (a brand featuring small devices that look like flash drives and thus are deceptive in appearance), seem to be specifically designed to appeal to youth.

**Delaware Overview**

According to the CDC, 16.5% of adults in Delaware smoked cigarettes in 2018 and there are approximately 1,400 related deaths reported each year (CDC, 2020). In 2009, an estimated $532 million was spent throughout the state on healthcare costs related to smoking. Efforts to control and prevent tobacco use also have high costs; the CDC provided $768K to the State of Delaware for tobacco prevention and control activities in FY2019 (CDC, 2020). If current tobacco usage trends stay stable, the CDC projects that approximately 17,000 Delawareans who were minors in 2012 will die from a smoking-related illness at some point in their lives (Office of Surgeon General, 2014, p. 693).

Mirroring national trends, data from five major survey sources (Behavioral Risk Factor Surveillance System, National Survey of Drug Use and Health, Youth Risk Behavior Survey, Delaware School Survey, and Youth Tobacco Survey) illustrate a steady decline in cigarette use among Delaware residents since the late 1990s. Twenty years ago, more than a third of 11th graders reported regularly using cigarettes; today, approximately 3% of 11th graders report currently smoking cigarettes (Delaware School Survey [DSS], 2019). The reported age of first use has increased slightly since 2001. The average age of onset for cigarette use is 12.4 years among 8th graders and 14.7 years among 11th graders who responded to the 2019 DSS. According to the 2019 YRBS, 8% of students reported first trying a cigarette before age 13. Adult rates have declined as well; self-reports of past month smoking among Delaware adults decreased from 21.8% in 2011 compared to 16.5% in 2018 (Behavioral Risk Factor Surveillance System [BRFSS], 2018).

The CDC’s Youth Tobacco Survey (YTS) is conducted every other year at both state and national levels and allows us to gain insights regarding tobacco use behaviors. Findings of the 2018 Delaware YTS indicate that 18% of high school and 15% of middle school students report someone smoking in their home in the past seven days. One in five high school students report riding in a vehicle with someone who was smoking in the past seven days. Along with the associated health risks of secondhand smoke, exposure to cigarette use increases the likelihood of smoking later in life. Peer pressure can also play a major role; however, according to the 2018 YTS, most students do not believe people who smoke have more friends or that smoking helps you to “fit in.” Students in high school are more likely than students in middle school to report having a close friend who smokes.

While the decline in cigarette use in Delaware is promising, there has been a troubling concern over the past decade in the use of e-cigarettes or vaping devices for both youth and adults. Consistent with national trends, youth in Delaware currently report higher rates of vaping than use of regular cigarettes, and 33% of high school students report that one of their four closest friends uses a vaping product. Of note, twice as many middle school students report a close
friend using a vaping device or electronic cigarette (16%) as smoking a cigarette (8%) (Delaware Youth Tobacco Survey [DYTS], 2018). A preference for vaping over cigarettes may be due to individuals perceiving these products as safer alternatives to cigarettes. Students responding to the 2019 Delaware YRBS report a lifetime vaping rate of 43% among high school students, with more than one in four teens reporting current use (28%). Thirteen percent of middle school students report vaping at least once in their lifetime. (For a detailed profile of vaping among Delaware youth and a discussion of statewide prevention efforts compiled by SEOW stakeholders, please see the Delaware Journal of Public Health August 2020.)
Data in Action: E-cigarette or Vaping-use Associated Lung Injury (EVALI)

In 2019, healthcare professionals across the country began reporting increases in E-cigarette or Vaping Associated Lung Injury (EVALI). According to the Centers for Disease Prevention and Control (CDC) and the Delaware Department of Health and Social Services (DHSS), symptoms of EVALI may include: rapid heartbeat, shortness of breath, nonproductive cough, chest pain, fever, chills, fatigue, gastrointestinal distress, low blood-oxygen levels, and in severe cases, respiratory failure. The number of cases began increasing at the end of the summer and peaked in September 2019; since then, cases of EVALI have declined. By February 2020, a total of 2,807 hospitalized cases or deaths from EVALI had been reported to the CDC from across the country, with 68 confirmed deaths. One of these deaths occurred in the state of Delaware. The symptoms of EVALI can present similarly to influenza and other respiratory illness, and EVALI can also co-occur with these conditions, so it can be difficult for providers to properly diagnose (CDC, 2020; Delaware DHSS, 2020). Recognizing this, in November 2019, the CDC published a *Morbidity and Mortality Weekly Report (MMWR)* providing clinical guidance to health care providers when interviewing patients about their use of e-cigarettes and other vaping devices in cases of suspected EVALI (Jatlaoui, T. et al., 2019).

Data from patients suggest that products containing tetrahydrocannabinol (THC) and the compound Vitamin E acetate have both been strongly linked to the outbreak of lung injury. It is recommended that, regardless of the legal status in their respective state, individuals do not vape THC products or, if they currently vape THC products, they discontinue this practice due to the strong link between THC-containing products and lung injury. While many proponents of vaping argue that use of e-cigarettes and vaping devices has helped them to quit using combustible cigarettes, experts caution that there is still no good evidence that e-cigarettes or vaping are a safe alternative, especially in the light of vaping-associated lung injuries. Our own survey data shows that adolescents in Delaware hold a relatively low perception of harm associated with vaping compared to other substances such as cigarettes or prescription drug misuse, although in recent years the percentage of students who agree that vaping or using an e-cigarette poses a great risk of harm has increased. It is possible that this changing perception of risk may be connected to the news coverage of EVALI and the more widespread understanding of potential risks associated with vaping. People who do not currently use e-cigarettes or vape are strongly discouraged from starting, and for people who wish to quit, resources are available through the [Healthy Delaware Vaping Toolkit](#).
National Survey on Drug Use and Health
Past-Month Tobacco and Cigarette Use
and Perceptions of Great Risk in Delaware
by Age Group, 2017-2018
(annual average percentages)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total 12 or Older</th>
<th>AGE GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>12-17</td>
</tr>
<tr>
<td>Tobacco products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past month tobacco product use^b</td>
<td>23.59</td>
<td>4.94</td>
</tr>
<tr>
<td>Past month cigarette use</td>
<td>18.99</td>
<td>2.81</td>
</tr>
<tr>
<td>Perceived great risk of smoking one or more packs of cigarettes per day</td>
<td>71.54</td>
<td>67.52</td>
</tr>
</tbody>
</table>

Figure 1: Tobacco/cigarette use & perceptions of great risk

Notes:
^a Estimates are based on a survey-weighted hierarchical Bayes estimation approach.
^b Tobacco products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.

Back to table of figures
2019 Delaware School Survey
Cigarette Use among Delaware 5th Graders
(in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
<th>Perceived “Great Risk” from Pack or More a Day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>59*</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>58*</td>
</tr>
</tbody>
</table>

Figure 2: Cigarette use, 5th graders

Notes:
“-” indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
*Estimates were not statistically significant at the p<.05 level.
2019 Delaware School Survey
Cigarette Use among Delaware 8th Graders
(in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
<th>Perceived “Great Risk” from Pack or More a Day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>56</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>52</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>61</td>
</tr>
</tbody>
</table>

Figure 3: Cigarette use, 8th graders

Notes:
“-“ indicates that the prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
All estimates significant at the p<.05 level unless otherwise noted.

Back to table of figures
2019 Delaware School Survey
Cigarette Use among Delaware 11th Graders
(in percentages)

![Bar chart showing cigarette use among Delaware 11th graders](image)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
<th>Perceived &quot;Great Risk&quot; from Pack or More a Day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>68</td>
</tr>
<tr>
<td>Male</td>
<td>9*</td>
<td>7*</td>
<td>-</td>
<td>62</td>
</tr>
<tr>
<td>Female</td>
<td>8*</td>
<td>5*</td>
<td>-</td>
<td>74</td>
</tr>
</tbody>
</table>

Figure 4: Cigarette use, 11th graders

Notes:
“-” indicates that prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
**2019 Delaware School Survey**

**Electronic Cigarette/Vaping Device Use among Delaware 5th Graders (in percentages)**

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>3*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>3*</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Notes:*

- "-" indicates that prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
- *Estimates were not statistically significant at the p<.05 level.


[Back to table of figures]
2019 Delaware School Survey
Electronic Cigarette/Vaping Device Use
among Delaware 8th Graders
(in percentages)

![Bar chart showing breakdown of electronic cigarette/vaping device use among Delaware 8th graders.](chart)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
<th>Perceived &quot;Great Risk&quot; from Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>21</td>
<td>15</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>19*</td>
<td>14*</td>
<td>6*</td>
<td>26</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>22*</td>
<td>16*</td>
<td>8*</td>
<td>33</td>
</tr>
</tbody>
</table>

Figure 6: Electronic cigarette/vaping device use, 8th graders

Notes:
“*” indicates that prevalence estimate was not reported because the unweighted sample size represented fewer than 30 students.
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2019 Delaware School Survey
Electronic Cigarette/Vaping Device Use
among Delaware 11th Graders
(in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime Use</th>
<th>Past Year Use</th>
<th>Past Month Use</th>
<th>Perceived “Great Risk” from Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>39</td>
<td>31</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>37*</td>
<td>31*</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>41*</td>
<td>31*</td>
<td>16</td>
<td>31</td>
</tr>
</tbody>
</table>

Figure 7: Electronic cigarette/vaping device use, 11th graders

Notes:
*Estimates were not statistically significant at the p<.05 level.
2019 Delaware Youth Risk Behavior Survey
Middle School Students and Cigarette Use,
Lifetime Prevalence and Age of Onset (in percentages)

Figure 8: Cigarette use, lifetime prevalence and age of onset among smokers, MS


Back to table of figures
Figure 9: Cigarette smoking in past 30 days, by sex and grade, HS

Notes:
*Estimates were not statistically significant at the p<.05 level.
Estimates for past month cigarette use by race and ethnicity were too small (n<30) to report with 2019 data.

[Back to table of figures]
2019 Delaware Youth Risk Behavior Survey
Middle School Students Who Have Ever Used an Electronic Vapor Product\textsuperscript{a}
(in percentages)

<table>
<thead>
<tr>
<th>Category</th>
<th>6th/7th grade</th>
<th>8th grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino/a/x*</td>
<td>9</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Non-Hispanic White*</td>
<td>11</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Non-Hispanic Black*</td>
<td>12</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Female*</td>
<td>12</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Male*</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Figure 10: Electronic vapor product use in lifetime, by sex, grade, and race/ethnicity, MS

Notes:
\textsuperscript{a}Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods (such as JUUL, Vuse, MarkTen, and blu).
*Estimates were not statistically significant at the $p<.05$ level.


Back to table of figures
2019 Delaware Youth Risk Behavior Survey
High School Students Who Have Ever Used
an Electronic Vapor Product\textsuperscript{a}, 2019
(in percentages)

Figure 11: Electronic vapor product use in lifetime, by sex, grade, and race, HS

Notes:
\textsuperscript{a} Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods (such as JUUL, Vuse, MarkTen, and blu).
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2019 Delaware Youth Risk Behavior Survey
High School Students Who Used
an Electronic Vapor Product\textsuperscript{a} in the Past Month
(in percentages)

Figure 12: Electronic vapor product use in past month, by sex, grade, and race/ethnicity, HS

Notes:
\textsuperscript{a}Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods (such as JUUL, Vuse, MarkTen, and blu).
\textsuperscript{*}Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2019 Delaware School Survey
Average Age of Onset for Cigarette Use

<table>
<thead>
<tr>
<th>8th Grade</th>
<th>11th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.4 years</td>
<td>14.7 years</td>
</tr>
</tbody>
</table>

Figure 13: Average age of onset for cigarette use, 8th and 11th graders

2019 Delaware Youth Risk Behavior Survey
High School Students First Tried a Cigarette Before Age 13
(in percentages)

Figure 14: Smoking whole cigarette before age 13, HS

Notes:
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
Delaware Behavior Risk Factor Surveillance System

Adult Cigarette Smoking by Sex, 2018

<table>
<thead>
<tr>
<th>Sex</th>
<th>Current Smokers</th>
<th>Smoke Everyday</th>
<th>Smoke Some Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>16.5%</td>
<td>11.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Male</td>
<td>18.3%</td>
<td>13.0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Female</td>
<td>14.9%</td>
<td>10.6%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Figure 15: Cigarette smoking by sex, adult

Adult Cigarette Smoking by Race/Ethnicity, 2018

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Current Smokers</th>
<th>Smoke Everyday</th>
<th>Smoke Some Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>16.5%</td>
<td>11.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>17.0%</td>
<td>12.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>17.4%</td>
<td>12.4%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15.6%</td>
<td>6.9%</td>
<td>8.7%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native, non-Hispanic</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 16: Cigarette smoking by race/ethnicity, adult

Notes:
“-” indicates that the prevalence estimate was not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3.

Back to table of figures
Delaware Behavior Risk Factor Surveillance System

Adult Cigarette Smoking by Educational Level, 2018

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Current Smokers</th>
<th>Smoke Everyday</th>
<th>Smoke Some Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>16.5%</td>
<td>11.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Less Than High School</td>
<td>29%</td>
<td>20.4%</td>
<td>8.6%</td>
</tr>
<tr>
<td>High School / G.E.D.</td>
<td>21.6%</td>
<td>16.3%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Some Post-H.S.</td>
<td>14.8%</td>
<td>10.2%</td>
<td>4.6%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>7.7%</td>
<td>5.0%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Figure 17: Cigarette smoking by educational level, adult

Adult Cigarette Smoking by Age Group, 2018

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Current Smokers</th>
<th>Smoke Everyday</th>
<th>Smoke Some Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>16.5%</td>
<td>11.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>18 - 24</td>
<td>10.5%</td>
<td>6.9%</td>
<td>-</td>
</tr>
<tr>
<td>25 - 34</td>
<td>22.1%</td>
<td>15.0%</td>
<td>7.1%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>22.5%</td>
<td>15.8%</td>
<td>6.6%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>19.4%</td>
<td>14.9%</td>
<td>4.5%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>18.3%</td>
<td>13.3%</td>
<td>5.0%</td>
</tr>
<tr>
<td>65 and Older</td>
<td>8.5%</td>
<td>5.9%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Figure 18: Cigarette smoking by age group, adult

Notes:
“-” indicates that the prevalence estimate was not available if the unweighted sample size for the denominator was <50 or the Relative Standard Error (RSE) is >0.3.

Back to table of figures
2018 Delaware Youth Tobacco Survey
Students Who Reported Perception that Second-Hand Smoke is Harmful
(in percentages)

![Bar Chart](chart.png)

<table>
<thead>
<tr>
<th></th>
<th>Middle School</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>86</td>
<td>84</td>
</tr>
<tr>
<td>Male</td>
<td>84</td>
<td>82</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>86</td>
</tr>
</tbody>
</table>

Figure 19: Perception that second-hand smoke is harmful, MS & HS

Notes:
Weighted data.
*Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

[Back to table of figures]
2018 Delaware Youth Tobacco Survey
Middle School Students’ Reported Smoking Rules
(in percentages)

Smoking is allowed inside the student’s home

<table>
<thead>
<tr>
<th></th>
<th>Smoking is Allowed Inside the MS Student’s Home</th>
<th>Smoking is Allowed Inside MS Family Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Female</td>
<td>11*</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>13*</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 20: Cigarette smoking rules, MS

Notes:
Weighted data.
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2018 Delaware Youth Tobacco Survey
High School Students’ Reported Smoking Rules
(in percentages)

<table>
<thead>
<tr>
<th>Smoking is Allowed Inside the HS Student’s Home</th>
<th>Smoking is Allowed Inside HS Family Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Overall</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Statewide</td>
<td>14</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
</tr>
<tr>
<td>Statewide</td>
<td>22</td>
</tr>
<tr>
<td>Male</td>
<td>22*</td>
</tr>
<tr>
<td>Female</td>
<td>22*</td>
</tr>
</tbody>
</table>

Figure 21: Cigarette smoking rules, HS

Notes:
Weighted data.
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2018 Delaware Youth Tobacco Survey
Middle School Students’ Exposure to Secondhand Smoke in the Past Week (in percentages)

<table>
<thead>
<tr>
<th></th>
<th>At Home</th>
<th>In a Vehicle</th>
<th>At School</th>
<th>In an Indoor Public Place Last Week</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>15</td>
<td>16</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>14*</td>
<td>15*</td>
<td>8*</td>
<td>8*</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>15*</td>
<td>17*</td>
<td>10*</td>
<td>10*</td>
</tr>
</tbody>
</table>

Figure 22: Exposure to secondhand smoke in past week, MS

Notes:
Weighted data.
*Estimates were not statistically significant at the p<.05 level.

[Back to table of figures]
# 2018 Delaware Youth Tobacco Survey
High School Students’ Exposure to Secondhand Smoke in the Past Week (in percentages)

![Bar chart showing exposure to secondhand smoke by location and gender]

<table>
<thead>
<tr>
<th>Location</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Home</td>
<td>18</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>In a Vehicle</td>
<td>20</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>At School</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Indoor Public Place</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

**Statewide**

<table>
<thead>
<tr>
<th>Statewide</th>
<th>At Home</th>
<th>In a Vehicle</th>
<th>At School</th>
<th>In an Indoor Public Place Last Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>20</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>19</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>19</td>
<td>21</td>
</tr>
</tbody>
</table>

**Notes:**
- Weighted data.
- *Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

[Back to table of figures](#)
2018 Delaware Youth Tobacco Survey
Middle School Students Who Reported at Least
One of their Four Closest Friends Uses Tobacco Product
(in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Smokes Cigarettes</th>
<th>Smokes Cigars</th>
<th>Uses Vaping Device</th>
<th>Uses Chewing Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>8</td>
<td>6</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>7</td>
<td>5*</td>
<td>15*</td>
<td>2*</td>
</tr>
</tbody>
</table>

Figure 24: One of four closest friends uses tobacco product, MS

Notes:
Weighted data.
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
### 2018 Delaware Youth Tobacco Survey
High School Students Who Reported at Least One of their Four Closest Friends Uses a Tobacco Product (in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Smokes Cigarettes</th>
<th>Smokes Cigars</th>
<th>Uses Vaping Device</th>
<th>Uses Chewing Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>13</td>
<td>11</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>13</td>
<td>13</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>12</td>
<td>9</td>
<td>33</td>
<td>7</td>
</tr>
</tbody>
</table>

Figure 25: One of four closest friends uses tobacco product, HS

Notes:
Weighted data
*Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

[Back to table of figures]
2018 Delaware Youth Tobacco Survey
Middle School Students’ Attitudes Toward Smoking
(in percentages)

Smoking makes young people look cool or fit in
Young people who smoke have more friends

<table>
<thead>
<tr>
<th></th>
<th>Smoking Makes Young People Look Cool or Fit In</th>
<th>Young People Who Smoke Have More Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Male</td>
</tr>
<tr>
<td>Statewide</td>
<td>8</td>
<td>10*</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 26: Attitudes toward smoking, MS

Notes:
Weighted data
*Estimates were not statistically significant at the p<.05 level.

Back to table of figures
2018 Delaware Youth Tobacco Survey
High School Students’ Attitudes Toward Smoking (in percentages)

<table>
<thead>
<tr>
<th></th>
<th>Smoking Makes Young People Look Cool or Fit In</th>
<th>Young People Who Smoke Have More Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Male</td>
</tr>
<tr>
<td>Statewide</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 27: Attitudes toward smoking, HS

Notes:
Weighted data
*Unless otherwise noted, all estimates are statistically significant at the p<.05 level.

Back to table of figures
Delaware School Survey
Trends in Past Month Cigarette Use, 8th and 11th grade, 1999-present (in percentages)

![Graph showing trends in past month cigarette use for 8th and 11th grade students from 1999 to 2019.](image)

**Figure 28:** Trends in students’ past-month cigarette use, 8th and 11th grade

**Notes:**
In 2019, the number of 8th grade students reporting past month cigarette use was too small to report.

Delaware School Survey
Trends in Vaping among 11th Grade Students
(in percentages)

Figure 29: Trends in vaping, 11th grade

Notes:
Vaping includes use of e-cigarettes, Juul, or any other vaping device.

Back to table of figures
Delaware Youth Risk Behavior Survey
Emerging Trends in High School Students’
Electronic Vapor Product Use\(^a\), 2015-2019

![Emerging trends in vaping device use, HS](chart.jpg)

**Figure 30: Emerging trends in vaping device use, HS**

**Notes:**
\(^a\) Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods (such as JUUL, Vuse, MarkTen, and blu).
*Data is weighted except for 2019.

**Back to table of figures**
### National Survey on Drug Use and Health

Past-Month Tobacco Product Use by Age Group and Region, 2016-2017 and 2017-2018 (in percentages)

<table>
<thead>
<tr>
<th></th>
<th>12 or Older</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total U.S.</td>
<td>22.99</td>
<td>21.96</td>
<td>.000</td>
<td>5.10</td>
<td>4.55</td>
<td>.000</td>
<td>29.52</td>
<td>27.46</td>
<td>.000</td>
</tr>
<tr>
<td>Northeast</td>
<td>21.91</td>
<td>20.30</td>
<td>.000</td>
<td>4.59</td>
<td>4.18</td>
<td>.051</td>
<td>29.91</td>
<td>27.70</td>
<td>.000</td>
</tr>
<tr>
<td>Delaware</td>
<td>21.77</td>
<td>23.59</td>
<td>.077</td>
<td>4.02</td>
<td>4.94</td>
<td>.064</td>
<td>27.74</td>
<td>27.40</td>
<td>.825</td>
</tr>
</tbody>
</table>

Figure 31: Tobacco product use, past month, by age group and region

### Past-Month Cigarette Use by Age Group and Region, 2016-2017 and 2017-2018 (in percentages)

<table>
<thead>
<tr>
<th></th>
<th>12 or Older</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total U.S.</td>
<td>18.47</td>
<td>17.52</td>
<td>.000</td>
<td>3.29</td>
<td>2.93</td>
<td>.002</td>
<td>22.90</td>
<td>20.73</td>
<td>.000</td>
</tr>
<tr>
<td>Northeast</td>
<td>17.54</td>
<td>16.22</td>
<td>.000</td>
<td>2.94</td>
<td>2.60</td>
<td>.041</td>
<td>22.38</td>
<td>20.28</td>
<td>.000</td>
</tr>
<tr>
<td>Delaware</td>
<td>18.36</td>
<td>18.99</td>
<td>.489</td>
<td>2.56</td>
<td>2.81</td>
<td>.458</td>
<td>21.69</td>
<td>20.65</td>
<td>.428</td>
</tr>
</tbody>
</table>

Figure 32: Cigarette use, past month, by age group and region

Notes:

a Estimates are based on a survey-weighted hierarchical Bayes estimation approach.
b p value: Bayes significance levels for the null hypothesis of no change between the 2016-2017 and 2017-2018 population percentages.

Source: "National Survey on Drug Use and Health: Comparison of 2016-2017 and 2017-2018 Population Percentages (50 States and District of Columbia).” Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures
Delaware Youth Risk Behavior Survey
National and Delaware, 1999-2019
Past Month Use of Tobacco Products among High School Students
(cigarette, smokeless tobacco, cigar, or electronic cigarette\(^a\))
(in percentages)

<table>
<thead>
<tr>
<th>Year</th>
<th>National</th>
<th>Delaware</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>40</td>
<td>37</td>
</tr>
<tr>
<td>2001</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>2003</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>2005</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>2007</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>2009</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>2011</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>2013</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>2015</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>2017</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>2019*</td>
<td>37</td>
<td>30</td>
</tr>
</tbody>
</table>

Figure 33: Trends in tobacco product use, past month, HS

Notes:
\(^a\) Electronic cigarette was added to the overall past month tobacco use measure in 2015; this had a noticeable impact on the past month tobacco rate.
*National data is weighted; Delaware data is weighted except for in 2019.

[Back to table of figures]
National Survey on Drug Use and Health
National and Delaware
People (12 and Older) Reporting Cigarette Use in Past Month
(in percentages)

Figure 34: Trends in cigarette use, past-month, national & Del., ages 12+

Source: "National Survey on Drug Use and Health: Comparison of 2016-2017 and 2017-2018 Population Percentages (50 States and District of Columbia)." Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Figure 35: Trends in cigarette use, past-month, national & Del., ages 12-17

Source: “National Survey on Drug Use and Health: Comparison of 2016-2017 and 2017-2018 Population Percentages (50 States and District of Columbia).” Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
Monitoring the Future, 1999-2019
National Trends in Past Month Cigarette Use among 8th, 10th, and 12th Grade Students
(in percentages)

Figure 36: Trends in cigarette use, past month, national, 8th, 10th, and 12th grades


Back to table of figures
Delaware School Survey, 2002-2019
Students’ Perceptions of Great Risks from Smoking a Pack of Cigarettes Daily (in percentages)

Figure 37: Trends in perceived great risk from smoking pack daily


Back to table of figures
### National Survey of Drug Use and Health

**Perceptions of Great Risks from Smoking One or More Packs of Cigarettes per Day by Age Group and Region, 2016-2017 and 2017-2018**

(in percentages)\textsuperscript{a}

<table>
<thead>
<tr>
<th>State</th>
<th>12 or Older</th>
<th>12-17</th>
<th>18-25</th>
<th>26 or Older</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016-2017</td>
<td>2017-2018</td>
<td>p value\textsuperscript{b}</td>
<td>2016-2017</td>
</tr>
<tr>
<td>Total U.S.</td>
<td>72.21</td>
<td>71.73</td>
<td>.013</td>
<td>68.24</td>
</tr>
<tr>
<td>Northeast</td>
<td>74.26</td>
<td>74.17</td>
<td>.800</td>
<td>71.19</td>
</tr>
<tr>
<td>Delaware</td>
<td>71.90</td>
<td>71.54</td>
<td>.715</td>
<td>69.23</td>
</tr>
</tbody>
</table>

**Notes:**

\textsuperscript{a} Estimates are based on a survey-weighted hierarchical Bayes estimation approach.

\textsuperscript{b} p value: Bayes significance levels for the null hypothesis of no change between the 2016-2017 and 2017-2018 population percentages

**Source:** “National Survey on Drug Use and Health: Comparison of 2016-2017 and 2017-2018 Population Percentages (50 States and District of Columbia).” Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Back to table of figures
Figure 39 Map of cigarette use, past month, 8th grade
Figure 40 Map of cigarette use, past month, 11th grade
Figure 41 Map of vaping, past month, 8th grade
Figure 42 Map of vaping, past month, 11th grade
2. References

**Tobacco**


http://dx.doi.org/10.15585/mmwr.mm6744a2
## 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>
</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