

2017 Delaware State Epidemiological Profile: Substance Use and Related Issues



Executive Summary

June 2017



Introduction

History and Context of the State Epidemiological Outcomes Workgroup (SEOW) and the 2017 Profile

All States, including Delaware, have received support from the Substance Abuse and Mental Health Services Administration's (SAMHSA's) Center for Substance Abuse Prevention (CSAP) to establish a statewide epidemiological workgroup or SEOW. Some SEOWs, including Delaware's, are incorporated as part of the Strategic Prevention Framework (SPF), and more specifically, the Strategic Prevention Framework – Partnerships for Success Grant (SPF-PFS). In Delaware, the Division of Substance Abuse and Mental Health (DSAMH) in the Delaware Department of Health and Social Services (DHSS) is the recipient of the current SPF-PFS grant. The SEOW is a group of people and organizations in the state that have and use analytical data concerning drug and alcohol use and abuse and related behaviors and consequences, which can be used to establish and monitor indicators related to substance abuse prevention. Delaware's SEOW mission is: to bring data on substance abuse and related behavioral problems to the forefront of the prevention planning process. This Epidemiological Report is one product developed by the SEOW to disseminate data for strategic planning, decision-making, and evaluation. Using indicators which are available on an ongoing basis, it briefly describes Delaware-specific patterns of consumption, context, consequences, and trends of substance use, especially among young people.

An Overview of the 2017 Delaware State Epidemiological Profile Report

The 2017 Delaware State Epidemiological Profile Report highlights the most recently available data on substance use among various populations. Eleven chapters on the following topics are included in this report: State Demographic Background (pg. 11), Overview of Statewide Consumption Patterns and Select Substances (pg. 16), Tobacco and Electronic Cigarettes (Vaping) (pg. 22), Alcohol (pg. 49), Marijuana (pg. 79), Opioid Use and Other Trends (pg. 102), Other Illegal Drugs (pg. 111), Mental Health (pg. 130), Adverse Childhood Experiences (ACES) (pg. 132), and Protective Factors (pg. 151). Individual chapters also present narrative summaries for each substance category, which highlight select findings. Finally, the report includes data related to protective factors, which are key to prevention efforts. The 2017 Epidemiological Report includes 123 tables of figures from over 16 data sources.

Highlights of the 2017 State Epidemiological Report

Tobacco and Electronic Cigarettes (Vaping)

The Centers for Disease Control (CDC) reports that approximately 1,400 adults die due to illness related to smoking every year in Delaware. 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 (Office of Surgeon General, 2014, p. 693). Mirroring national trends, data from four major survey sources (Behavioral Risk Factor Surveillance System/BRFSS, National Survey on Drug Use and Health/NSDUH, Youth Risk Behavioral Survey/YRBS, Delaware School Survey/DSS) show that Delaware youth and adults report a steady decline in cigarette use since the late 1990s. Younger age groups show larger rates of decrease than older cohorts. Youth data from the DSS indicates that the reported age of first use has increased slightly since 2001. Preventing smoking at a younger age should decrease the public health consequences associated with smoking in the future. Consistent with national trends, youth in Delaware currently report a greater use of e-cigarettes/vaping than regular cigarettes. However, trend data on usage is limited because of the infancy of data collection on the use of e-cigarette and vaping devices. An increase in use may be explained by individuals perceiving these products as safer alternatives to cigarettes—less than 15% of 11th graders and 8th graders reported “great risk” in the use of e-cigarettes/vaping devices. As we continue to learn about the health risks associated with vaping devices it will become increasingly important to inform Delaware adolescents, parents, and educators of these risks because research illustrates, smoking habits form at a young age.

Alcohol

Among students, alcohol is the most commonly used substance reported. Though alcohol use among Delaware students has been declining 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 misuse. Decreased perception of risk can lead to an increase in dangerous behavior among teens. Eleventh grade students report binge drinking at the same rate as adults in Delaware, which suggests the possibility that problem drinking patterns may begin to emerge before adulthood. Early intervention can reduce some of the risk associated with alcohol misuse. Data from the Delaware BRFSS show a decrease in adult past month drinking, from a high of 60% in 2011 to 53% in 2015, although Delaware adults drink at a slightly higher rate than the national average. One in six adults surveyed by the Delaware BRFSS reported binge drinking (which is the same 2016 rate as 11th graders); and one in 20 met the criteria for heavy drinking. Data from the Treatment Episode Data Set (TEDS) indicates that nearly 10% of all 2015 treatment admissions in Delaware were alcohol related. Long-term alcohol use increases the risk of serious health impacts and costs in Delaware. Alcohol was involved in 47% of fatal car crashes in Delaware in 2015, an increase of 18% from the previous year. Binge drinking is also associated with an increased risk of victimization (Delaware State Police, 2015). Similarly, binge drinkers were also twice as likely to be victims of sexual assault (Center for Drug & Health Studies/CDHS, 2016). Nationally, researchers have consistently shown a clear association between alcohol use and intimate partner violence (Deveries, et al., 2013), and this is also true in Delaware. However, it is important to note that this type of data does not allow us to draw conclusions that binge drinking causes victimization, or that being victimized causes binge or frequent drinking, simply that students who experience one are more likely to experience the other.

Marijuana

DSS data show that the perception of risk involved with the use of marijuana has declined among students over the past ten years. Decreases in perception of risk may lead to increases in use over time. YRBS data indicates that Delaware youth smoke marijuana at a slightly higher rate (24%) than the national average (22%) (CDC, 2015). Increasingly, youth are finding alternate ways to ingest marijuana other than smoking, including edibles, concentrates, and vaporizing. A third of all 11th graders who completed the DSS reported that they had ridden in a car after the driver smoked marijuana at some point in their lives, and one in ten reported that they had driven a car after smoking marijuana in the past. Delaware allows medical marijuana for specific conditions. The State also decriminalized the possession of small amounts of marijuana in 2015. Now, if an adult has less than an ounce of marijuana he or she will have to pay a \$100 fine, rather than face arrest and prosecution (Delaware Code, n.d.).

Opioid Use and Other Trends

In 2014, Delaware had the 8th highest heroin fatality rate in the US (NSC, 2016). Delaware's drug overdose rate, across all categories of drugs, has increased in the past few years. Fentanyl-related overdoses are a major public health concern; such overdoses tripled in 2016, with 120 confirmed fentanyl-related deaths (Horn, 2017a). Emergency responders in Delaware have responded to the increase in opioid-related overdoses by carrying the opioid antagonist, Naloxone, which can reverse the symptoms of opioids on the nervous system, and potentially save the life of a person suffering an overdose. Yet, even with increased access to potentially life-saving medication, tragic overdoses still occur frequently in Delaware. Prescription drug overdoses account for a larger portion of drug overdose deaths in Delaware than heroin (Prescription Behavior Surveillance System/PBSS, 2016). Prescription Monitoring Programs have been established in many states, including Delaware, to provide data on prescribing patterns, as well as patient use. These data can help to identify "pill mills" (doctors that prescribe disproportionate amounts of opioids to patients) as well as "doctor shoppers" (individuals who change doctors frequently in order to obtain prescribed opioids). These data can also help doctors identify whether patients are already taking prescriptions that may interfere with opioids, such as benzodiazepines. A recent analysis from the University of Delaware of the Prescription Drug Monitoring Program demonstrated that only 1% of doctors wrote a quarter of opioid prescriptions in the state (Anderson, Martin, Fang, & Li, 2016). Delaware data from the Prescription Behavior Surveillance System at Brandeis University's Center of Excellence, which reports to the CDC, shows a 26% decline between 2012-2015 in opioid prescriptions with high dosages (over 100 morphine milligram equivalents, or MMEs) that have been associated with greater risk of overdose and death. During the same period, there was a decline of over 50% in the rate of multiple provider episodes, which corresponds with "doctor shopping." Despite these significant improvements, Delaware still has the highest rate of patients with prescriptions of over 100 MMEs, compared to other states also analyzed by the PBSS, which suggests that there is still much room for improvement, and that successful intervention should include prescribers (PBSS, 2016). Data from the DSS show that less than 1% of 8th and 11th grade students in school report using heroin in the past year, and only 3% of students reported using prescription painkillers. In Delaware 9.5% of adults reported misusing these drugs in the past year, higher than the national average response rate of 8.3%.

Other Illegal Drugs

According to NSDUH, in Delaware, nearly 11% of all people over the age of twelve used an illicit drug in the past year. Ten percent of Delaware youth reported past illicit drug use, over a quarter of adults age 18-25, and 8% of adults over the age of 26 used illicit drugs during the past year. Data from the DSS shows

that 4% of 8th graders and 7% of 11th graders used illicit drugs, other than marijuana, during the past year. By far, the largest category of drugs misused by Delaware students is prescription drugs.

Crack/Cocaine

Crack/cocaine has particularly troubling health implications. Cocaine is very addictive, leads to various long-term health concerns, and can lead to overdose. Nationwide, 13% of all drug overdose deaths in 2015 were linked to cocaine use (Hedegaard, Warner, & Menio, 2017). Fentanyl has also been found mixed with cocaine, which increases the risk of overdose and death. In Delaware, 5% of adults between the ages of 18-25 reported using cocaine in Delaware in the past year during 2013-2014 time period; 1.4% of adults over the age of 26, and 0.5% of youth between the ages of 12-17 used cocaine in the past year during that same period (Center for Behavioral Health Statistics and Quality, 2016).

Prescription Drugs

Twelve percent of 11th graders in Delaware reported misusing prescription drugs within the past year. Codeine/Tylenol with Codeine was reported as the most used by both 8th and 11th graders. Of the 11th graders in Delaware who reported misusing prescription drugs, 23% reported the primary reason for misuse was to relieve pain. In contrast, 13% of 11th graders reported using prescription drugs to get high or to have fun. (CDHS, 2016). The DSS asks students about past month and past year use of certain drugs. With the exception of prescription drugs and painkillers, past month use of these drugs is fairly low, with only 1% of 11th graders reporting past month stimulant, hallucinogen, or Ritalin misuse.

Mental Health

People with poor mental health and/or serious mental illness may find it challenging to navigate social and economic systems and follow daily routines. For example, only one in five adults served by Delaware's public mental health system in 2014 was employed (SAMHSA, n.d.). Untreated mental illness can have fatal results. In 2014, the suicide rate in Delaware was 13.5 deaths per 100,000 in the population, which is comparable to the national suicide rate of 13.4 during the same time period (CDC, n.d.). As of the 2010 Census, Kent County had the highest rate of suicide in the state (PolicyMap [CDC data], n.d.). According to the BRFSS, in 2016, Delawareans reported that they did not have good mental health on 3.6 days out of the last 30 days. The largest disparities are related to income, educational attainment, and age. From 2013-2014, nearly 4% of adults in Delaware suffered from a serious mental illness. Almost half of the people surveyed who reported having any mental illness received treatment or counseling within the past year (SAMHSA, n.d.). According to the Health Resources and Services Administration (HRSA), Sussex County has a shortage of mental health facilities, and received a Health Professional Shortage Area score of 18 or above, which qualifies as a high priority area by HRSA (HRSA, 2017). Data from the 2015 High School Delaware Youth Risk Behavior Survey indicate that about one in four youth report they had felt sad or hopeless for two weeks or more in the past year. Thirteen percent reported that they had purposely hurt or cut themselves during the past year. An even greater percent of students (15%) reported they had considered suicide during the past year while 11% of students had a plan for suicide, and 7% reported that they had attempted suicide.

Adverse Childhood Experiences (ACES)

In 2015, the Delaware Public Health Institute conducted the Delaware Household Health Survey, which asked respondents about their experiences with childhood trauma. The most commonly identified ACEs were parental divorce or separation (31.7%), followed by living in a household with someone who had abused substances (20.6%). When factoring in being bullied and/or experiencing discrimination, two

indicators added to the Delaware survey, 59% of adults reported having at least one ACE, with 16% reporting four or more (Public Health Management Corporation, 2016). In an effort to assess the prevalence of ACEs among youth, the 2011-2012 National Survey of Children's Health also included a number of ACE indicators. However, the survey, administered to parents who report on the health of their children, did not include questions on abuse or neglect. Nonetheless, 48% of Delaware children were reported to have at least one ACE, most commonly economic hardship (25%), divorce/separation (21%), and exposure to neighborhood violence (12%, which is above the national average) (Fink, 2016). Perhaps not surprisingly, youth who report experiencing trauma have higher rates of all substance use as well as symptoms of depression, including self-harm and suicide attempts (YRBS, 2015).

Protective Factors

Prevention research and work is grounded in the identification of risk factors that increase the probability of substance abuse, and protective factors, that help reduce the risk of substance abuse in the future. Targeted interventions that decrease risk factors, increase protective factors, or combines both approaches, have been shown to be effective in decreasing problem substance use. Generally, researchers identify several levels, or domains, for intervention: the individual level, family level, peer level, and community level. Effective prevention programming should target risk and protective factors that are most salient at each life stage, and best-suited for the domain in which the intervention will be implemented. Many of the risk and protective factors that are associated with problem substance misuse or abuse are also associated with mental health conditions, so efforts to reduce risk factors and increase protective factors associated with substance abuse should also have an impact on future mental health status. Individual risk factors include personality traits, such as impulsivity, risk-taking, antisocial behaviors, and emotional problems. Protective factors include traits such as adaptability, empathy, and good social skills. Attitudes about life are also important: academic achievement, hopes for the future, self-efficacy, and the willingness to follow rules, to name a few. Family protective factors include: consistent discipline, parental involvement, family stability, and clear expectations. Data from the 2015 YRBS show that the way parents interact with their children has significant impact on not only youth substance abuse, but also their mental health status. Relationships with peers can also reduce or increase the risk of substance abuse. Schools operate at the intersection of the peer and community level—they are the location where most peer interactions occur, but can also provide a powerful protective function if school leaders find ways to enhance school connectedness and promote healthy norms (Centers for Disease Control and Prevention, 2009). Schools can promote school connectedness by providing adult support, supporting the formation of positive peer groups, promoting the importance of education, and creating a safe and positive school environment. The literature on risk and protective factors is extensive, and these are just a few examples at each level of intervention (see: CDC; SAMSHA; Cleveland, et al., 2008; etc.).

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2016 Delaware School Survey

Percent of Delaware 8th and 11th grade students reporting use of selected substances in the past 30 days

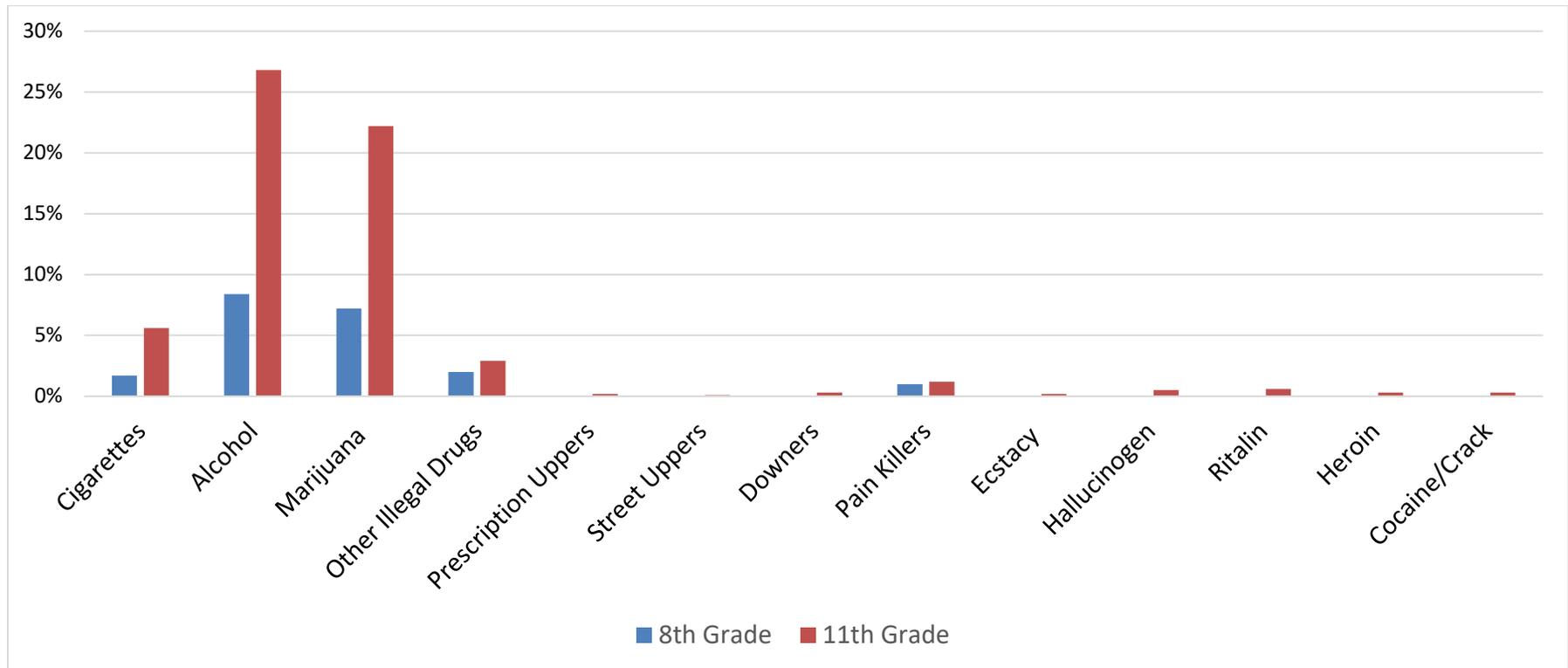


Figure 1 Reported use of selected substances in the past 30 days among Delaware 8th/11th graders

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Source: ["2016 Delaware School Survey." Center for Drug and Health Studies, University of Delaware.](#)