

2022 Region 1 Epidemiological Profile: Tobacco & ENDS

Problem Statement

According to the National Survey of Drug Use and Health (NSDUH) and the Youth Risk Behavior Surveillance Survey (YRBSS), tobacco use has decreased for all age groups over the past decade. NSDUH data show that past month tobacco product use among Connecticut residents 12+ declined significantly from 25.3% in 2008-2009 to 18.8% in 2018-2019.¹ Tobacco product use includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco. According to the 2018-2019 NSDUH, Connecticut young adults 18-25 continue to have the highest rates of cigarette use of any age group.¹ Despite significant decreases, smoking remains a health concern due to serious adverse physical effects of tobacco use.

Vaping refers to the use of electronic cigarettes or electronic nicotine delivery systems (ENDS), which are metal or plastic tubes that aerosolize liquids, usually with nicotine, via a battery-powered heating element. The resulting aerosol is inhaled by the user and exhaled into the environment. There are many types of electronic smoking devices, including: e-hookahs, vape pens, e-cigarettes, and hookah pens. The liquid that is utilized in the device is called “e-juice” and is available in a variety of flavors and nicotine levels.

Vaping is an emerging problem nationally and in Connecticut, as rates continue to rise at a steady pace. According to the 2022 National Youth Tobacco Survey (NYTS), over 2.5 million U.S. kids used e-cigarettes in 2022.² Although youth e-cigarette use has declined since 2019, from 2017 to 2019, e-cigarette use among high school students more than doubled to 27.5% resulting in the U.S. Surgeon General and public health authorities to declare it an “epidemic”.² According to Connecticut’s Behavioral Risk Factor Surveillance Survey (CT BRFS), the prevalence of ever using e-cigarettes has increased each year since 2012. The 2019 CT BRFS showed that one in five CT adults in 2019 had tried vapor, vape pen or e-cigarettes. Compared to their counterparts in the state, the prevalence of using vapor, vape pens, or e-cigarettes was significantly greater for: • Adults 18–34 years old (42.2%) and 35–54 years old (17.9%); • Males (23.1%); • Adults from households earning less than \$35,000 (23.7%) and \$35,000–\$74,999 (22.0%); and • Adults with a disability (25.3%); and • Adults with no more than a high school education (23.7%)³

Magnitude

The 2019 Connecticut School Health Survey shows current use of cigarettes among high school students is 3.7%, down significantly from 17.8% in 2009 and may potentially be lower in 2021.^{4,5} While cigarette use among this age group has declined, e-cigarette smoking or vaping has increased, suggesting e-cigarettes are replacing tobacco smoking as the main mechanism for nicotine delivery. The 2019 Connecticut School

Health Survey (CSHS) found current use of electronic vapor products to be 27.0% among high school students.⁴

According to Connecticut’s 2021 Community Wellbeing Survey, 22% of all respondents reported using vape pens or e-cigarettes.⁵ Of those, half of them reported using them every day during the past 30 days. Vape and e-cigarette use is higher in suburban (28%) and urban core (26%) communities, and lower in wealthy communities (8%).⁶

According to the NSDUH, Southwestern CT reported prevalence of past month tobacco use dropped from 18.4% based on 2014-2016 data, to 17.4% in 2016-2018.¹ For both time periods, the region was lower than the state (22.2% in 2014-16 and 21.3% in 2016-18) and all other CT regions.¹ Since that time, report past month tobacco use among those 12 and older has dropped further. 2021 NSDUH prevalence estimates show past month tobacco use in CT to be 2.9%. CT reported use is lower than the Northeast US and the US as a whole (3.3%).⁷

NSDUH Substate Estimates: Percent Reporting Past Month Tobacco Product Use, ages 12+

	CT	Region 1	Region 2	Region 3	Region 4	Region 5
2014-2016	22.2	18.4	22.8	27.0	22.4	21.9
2016-2018	21.3	17.4	21.6	22.5	22.0	23.1

*Tobacco Products include cigarettes, smokeless tobacco, cigars, or pipe tobacco

In the hub stakeholder focus groups held in 2022, youth reported that they thought their peers were vaping less, and that those who were still vaping were the ones who were dependent.⁸ Youth surveys conducted during 2022 in some suburban towns in SW CT found lower 7th-12th grade vaping rates than prior to the pandemic. However, high school seniors report having the highest vaping rates. Among students who vaped, up to the 2/3 reported vaping marijuana. The Hub Stakeholder Focus groups also stated there has been an increase in smokeless tobacco use among youth throughout the region that included nicotine pouches, ZYN, being the most popular. Youth feel it is “easier to hide and be discrete” and there are no “odors or smoke”.⁸

¹ NSDUH 2018-2019

² [Tobacco Free Kids 2022](#)

³ Zheng X. (2019) CT BRFS.

⁴ Connecticut School Health Survey, 2019 (YRBS)

⁵ Connecticut School Health Survey, 2021 (YRBS)

⁶ [DataHaven- and Siena College Research Institute \(2021\). 2021 DataHaven Community Wellbeing Survey](#)

⁷ NSDUH 2021 Model-Based Prevalence Estimates

⁸ The Hub Stakeholder Focus Group, 2022



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Risk Factors and Subpopulations at Risk

Populations at-risk for smoking cigarettes are⁷:

- American Indians/Alaska Natives
- Certain Hispanic adult subpopulations in the US, including Puerto Rican adults
- LGBTQ+ individuals
- Military service members and veterans
- Adults living with HIV
- Adults experiencing mental illness

Populations most at-risk for using ENDS are:

- Youth (12-17)⁸
- Young adults (18-34)¹
- Males¹
- Hispanics¹
- Current smokers
- Those living in urban communities⁵
- Adults from households earning less than \$35,000²
- Adults with disabilities⁹
- Those with a high school diploma or less⁹
- Adults without health insurance⁹
- Youth whose parent use these products.¹⁰
- Youth experiencing depression, anxiety, and stress¹⁰
- Youth with low self-image or self-esteem¹⁰

NSDUH Substate Estimates:

Percent Reporting Perception of Great Risk from Smoking One or More Packs of Cigarettes per day, ages 12+

	CT	Region 1	Region 2	Region 3	Region 4	Region 5
2016-2018	74.5	77.1	75.3	72.2	73.2	74.4

According to the 2021 Community Wellbeing Survey, 37% of CT residents have had at least 100 cigarettes in their lifetime and 22% use every day.⁵ Within SW CT, rates of residents having smoked at least 100 cigarettes in their lifetime are similar to the state rate with higher rates in older adults. Rates of residents who smoke every day differ throughout the region. In more urban towns, the rate of everyday cigarette use is higher compared to suburban towns. In Fairfield, individuals between the

ages of 35- 49 are most likely to smoke every day. In Bridgeport (30%) and Stratford (46%), it is most likely to be 18–34-year-olds. In all towns, males are more likely than females to smoke except for Trumbull.⁶

The 2019 Connecticut School Health Survey shows the prevalence of current cigarette smoking among high school students to be similar across gender and race, however prevalence increases with grade (2.0% of 9th graders compared to 6.6% of 12th graders).³ Additionally, students identifying as gay, lesbian, or bisexual reported higher prevalence (9.2%) than their heterosexual peers (2.3%).³ The 2019 survey also found higher rates of current use of electronic vapor products in females (30.0%) than males (24.1%). White students reported significantly higher use (30.0%) than Black students (19.4%). Current use among Hispanic students (26.0%) is also significantly higher than Black students. According to youth surveys conducted in Region 1 in 2022, youth have overall reported less vaping usage as low as 5%. These same survey's reported increased youth's perception of risk and harm of vapes.

During the hub's stakeholder focus groups, factors such as access, policy change, increased retailer education, increased parental and youth education may have led to the decrease in youth vaping trends post COVID-19 pandemic. However, public health officials theorize vaping usage may revert to pre-pandemic findings. We have begun to see some of this in SW CT.

Burden (consequences)

- Evidence shows that young people who use e- cigarettes may be more likely to smoke cigarettes in the future.⁶
- A recent CDC study found that 99% of e-cigarettes sold in the US contained nicotine, which can cause harm to parts of the adolescent brain that control attention, learning, mood, and impulse control.⁶
- E-cigarette aerosol can contain several potentially harmful substances, including diacetyl (in flavorings), which is a chemical linked to serious lung disease. It can also contain volatile organic compounds, cancer causing chemicals, and heavy metals such as nickel and lead.⁶

⁷ CDC (2020), Current Cigarette Smoking Among Specific Populations–United States

⁸ Centers for Disease Control and Prevention. (2019). Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults. Retrieved from https://www.cdc.gov/tobacco/basic_information/e-cigarettes/

⁹ Zheng X. (2018) CT BRFSS.

¹⁰ [Centers for Disease Control and Prevention \(2022\). Youth and Tobacco Use](https://www.cdc.gov/tobacco/basic_information/youth_tobacco_use/)

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- Some ENDS devices, including those that are particularly popular among youth, have been modified to allow for higher doses of nicotine to be delivered. They also facilitate the use of THC and in higher potency. This is especially problematic in youth use, because of the increased risk of tobacco and cannabis use disorders later in life.¹¹
- New “Health Vapes” or “Wellness Vapes” are being illegally offered for sale with unproven health or wellness claims.¹² Some of these claims include, improving mental clarity, treating tumors or asthma, anemia, ADHD, anxiety, depression and better sleeping habits. Some also claim to be “nicotine free”. These claims may prevent or delay appropriate diagnosis and treatment from a health care professional.¹²

Capacity and Service System Strengths

Community Readiness Survey: Mean Stage of Readiness for Substance Misuse Prevention

	CT	Region 1	Region 2	Region 3	Region 4	Region 5
2020	5.37	5.14	5.55	5.21	5.59	5.25
2022	5.31	5.72	5.36	4.89	5.25	5.12

Prevention: Region 1 has the highest mean stage of readiness for substance misuse prevention compared to other regions and the state in 2022. Region one’s overall readiness has also increased from 2020 to 2022. Tobacco control efforts are largely conducted through Local Prevention Councils (LPCs), municipal health departments, and school systems, with unequal levels of investment that depend on local community resources and grants. Local communities are all addressing vaping as a growing epidemic; for example, all 14 towns have the same goal: to reduce vaping amongst youth ages 12–18- year-old by 5% by 2025.

Towns have previously created vaping task forces or vaping education campaigns that have continued to grow and be utilized throughout SW CT. Some school districts in Region 1 have also included vaping in their youth’s school health curriculum.

Treatment and Recovery: Some behavioral health providers have focused on reducing smoking and increasing healthy behaviors. Some schools in Region 1 now offer alternatives to students who vape and provide referrals to treatment for them.

Legislation and Enforcement: State law prohibits the sale of tobacco products to individuals under the age of 21. State Bill 326 was introduced in the 2021 legislative season which prohibited the sale of flavored tobacco products in Connecticut. It was not passed, leaving Connecticut in the middle of

surrounding states who have banned flavors. It has been reintroduced in the 2022 legislative session. Additionally, House Bill 6488 was introduced in 2023’s legislative session to include the ban of flavor sales and prohibit the use of electronic nicotine delivery systems (ENDS) and vapor products in a motor vehicle while a minor is present in such vehicle.

Attorney General William Tong helped lead Connecticut and 34 states and territories in announcing a \$438.5 million agreement with JUUL labs that would force JUUL to comply with a series of strict terms limiting their marketing and sales practices.¹³ Connecticut will receive a minimum of \$16.2 million through the settlement that will be used for cessation, prevention, and mitigation.

Most schools in SW CT have revised their district’s student’s handbooks to include policies that address tobacco and ENDS specifically. Policies have also been modified to include alternatives to out of school suspension for those students caught vaping or with tobacco/ENDS products. Some schools provide resources or have a vaping education program for these students.

With the support of DMHAS Prevention and Health Promotion Division Tobacco Prevention Enforcement Program (TPEP), SW CT police departments conducted tobacco compliance inspections in all 14 towns in 2022. There were 587 inspections resulting in 129 violations and 125 cases in which tobacco products were sold to a minor.

¹¹ King B.A., Jones, C.M., Baldwin G.T., & Briss P.A. (2020)

¹² [U.S. Food & Drug Administration, Beware of Vaping Products with Unproven Health Claims](#)

¹³ [The Office of the Attorney General William Tong -Press Releases](#)



