



Vapes that contain nicotine are the most used tobacco products among youth.

Vaping can be harmful, especially to youth.

Vaping puts youth at risk for addiction and other health consequences.

VAPING

Facts about e-cigarettes

Vapes that contain nicotine are a type of tobacco product called electronic nicotine delivery systems (ENDS). Other names for vapes include e-cigarettes, e-cigs, vape pens, vaporizers and e-pipes. These vapes contain high levels of nicotine, a highly addictive drug. Under federal law, consumers must be age 21 or older to buy vape products. Vapes come in many size and shapes. Some look like cigarettes, cigars, or pipes. Others look like everyday objects such as flash drives or asthma inhalers, which can make them easier to hide from adults.



Vapes contain batteries and an “e-liquid” Vapes use a substance called e-liquid that may contain nicotine, the same highly addictive chemical found in tobacco. E-liquid also may contain flavorings, propylene glycol, vegetable glycerin and other ingredients. Other names for e-liquid include e-juice or vape juice.

Vapes have different shapes and designs but generally works in similar ways. They contain batteries and heat e-liquid to create an aerosol that the user inhales. Tobacco product use remains the leading cause of preventable disease, disability, and death in the United States. Nearly all tobacco use begins during youth and young adulthood.

1 IN 5
high school students
USES E-CIGS



TEENS ARE MORE SUSCEPTIBLE TO NICOTINE ADDICTION than adults because their brains are still developing.

Approximately 2.55 Million Students Reported Currently Using a Tobacco Product in 2021

The 2021 National Youth Tobacco Survey (NYTS) was conducted among U.S. middle and high school students during the COVID-19 pandemic and revealed that youth tobacco use remains a serious public health concern. About 2.55 million U.S. middle and high school students reported current (past 30-day) use of a tobacco product in 2021.

Among middle and high school students who currently used tobacco products about 1 in 3 (860,000) used at least one type of combustible tobacco product, and about 3 in 10 (740,000) used two or more tobacco products.



As previously reported, e-cigarettes were the most common tobacco product currently used among middle and high school students (2.06 million) in 2021. This was followed by cigarettes (410,000), cigars (380,000), smokeless tobacco (240,000), hookahs (220,000), nicotine pouches (200,000), heated tobacco products (170,000), and pipe tobacco (80,000).

“Youth use of tobacco products is unsafe in any form – combustible, smokeless, or electronic,” said Karen Hacker, M.D., M.P.H., director of CDC’s National Center for Chronic Disease Prevention and Health Promotion.

Disparities Persist Among Subgroups

Among middle and high school students combined, current use of any tobacco product was higher among students who identified as lesbian, gay, or bisexual (14.2%) than those who identified as heterosexual (7.9%) and those who were “not sure” about their sexual identity (5.5%); and higher among students who identified as transgender (18.9%) compared to those not transgender (8.2%) or not sure (9.1%).

Current use of any tobacco product was higher among students who had severe (14.2%), moderate (11.2%), or mild (9.6%) symptoms of psychological distress compared to those with no psychological distress (5.5%).

Additionally, among all race and ethnicity groups, non-Hispanic Black students reported the highest prevalence of current combustible tobacco product use (5.2%), and specifically cigar use (3.1%). While youth use of tobacco products in any form is unsafe, the death and disease from tobacco product use in the United States is primarily caused by combustible tobacco products.

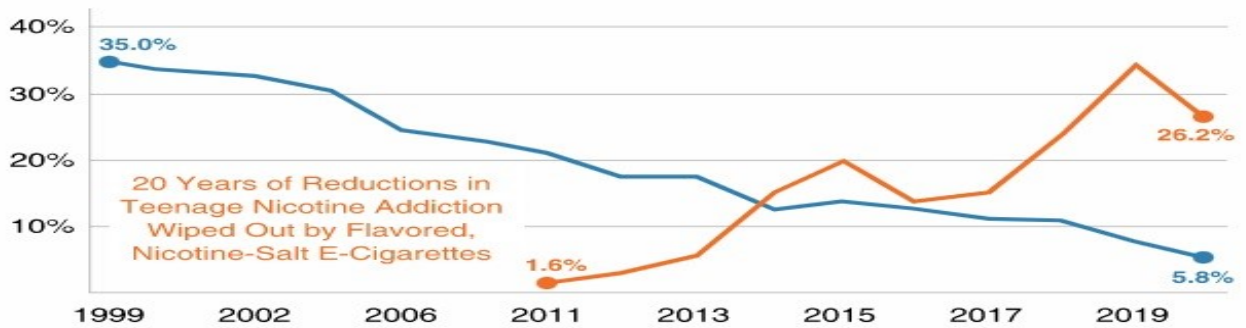
NYTS 2022 More than **3 million** students currently use a tobacco product in 2022.

Among current youth users:



12 Grade Cigarette vs. E-Cigarette Use

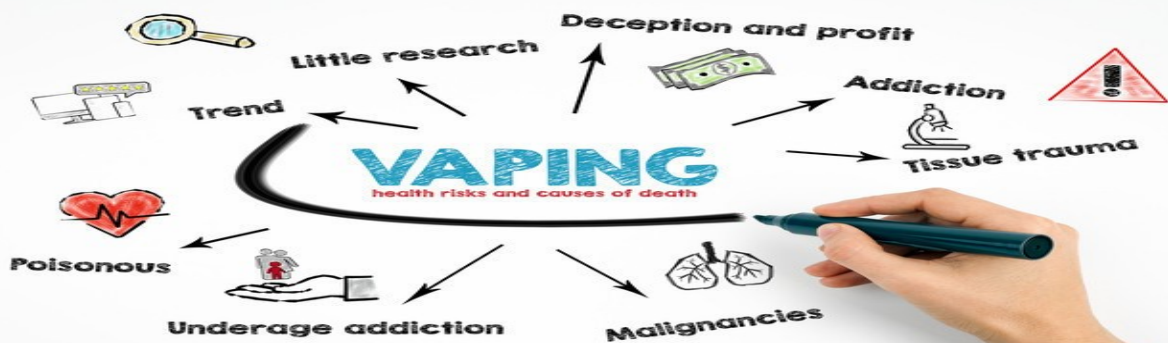
Use in Past 30 Days – National Youth Tobacco Survey



Many factors influence youth tobacco product use Multiple factors continue to promote tobacco product use and initiation among youth, including flavors, marketing, and misperceptions of harm. Among the approximately 2.55 million middle and high school students who currently used any tobacco product, most (about 8 in 10 or 1.95 million) reported using flavored tobacco product(s) in the past 30 days. Approximately 76% of students in 2021 reported exposure to tobacco product marketing through traditional media (e.g., newspapers or magazines), and approximately 74% of students who used social media had ever seen e-cigarette-related posts or content.

Among students who had ever used e-cigarettes, peer use and curiosity were the most cited reasons for first trying e-cigarettes in 2021. However, among students who currently used e-cigarettes, the most cited reasons for use were feelings of anxiety, stress, or depression and the “high or buzz” associated with nicotine use. Importantly, nicotine withdrawal is commonly accompanied by symptoms of anxiety and depression, and temporary relief of these symptoms through use of a nicotine-containing product might perpetuate continued nicotine use.

Among the approximately 2.55 million students who currently used any tobacco product, 65.3% reported that they were seriously thinking about quitting all tobacco products. In addition, 60.2% of students who currently used tobacco products reported that they stopped using all tobacco products for 1 or more days during the past 12 months because they were trying to quit.



Why Is Nicotine Unsafe for Kids, Teens, and Young Adults?

- A CDC study found that 99% of the e-cigarettes sold in assessed venues in the United States contained nicotine.
- Some vape product labels do not disclose that they contain nicotine, and some vape liquids marketed as containing 0% nicotine have been found to contain nicotine.
- Nicotine can harm the developing adolescent brain. The brain keeps developing until about age 25.
- Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control.
- Each time a new memory is created or a new skill is learned, stronger connections – or synapses – are built between brain cells. Young people’s brains build synapses faster than adult brains. Nicotine changes the way these synapses are formed.
- Using nicotine in adolescence may also increase risk for future addiction to other drugs.

How Does Nicotine Addiction Affect Youth Mental Health?

- When a person is dependent on (or addicted to) nicotine and stops using it, their body and brain have to get used to not having nicotine. This can result in temporary symptoms of nicotine withdrawal.
- Nicotine withdrawal symptoms include irritability, restlessness, feeling anxious or depressed, trouble sleeping, problems concentrating, and craving nicotine. People may keep using tobacco products to help relieve these symptoms.
- Youth may turn to vaping to try to deal with stress or anxiety, creating a cycle of nicotine dependence. But nicotine addiction can be a source of stress.
- What may start as social experimentation can become an addiction.
- The most common reason U.S. middle and high school students give for trying an e-cigarette is “a friend used them.”
- The most common reason youth give for continuing to use e-cigarettes is “I am feeling anxious, stressed, or depressed.”



Despite what some kids think, vaping is not safe. In fact, one Juul pod contains **AS MUCH NICOTINE AS A WHOLE PACK OF CIGARETTES.**

- Youth e-cigarette and cigarette use have been associated with mental health symptoms such as depression.

Does quitting vaping improve mental health?

Quitting smoking cigarettes is associated with lower levels of anxiety, depression, and stress, as well as improved positive mood and quality of life



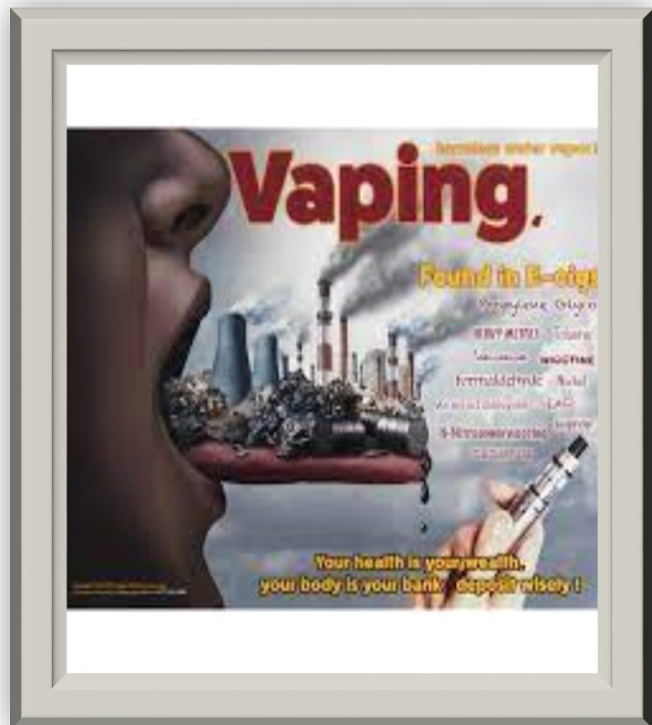
E-cigarette aerosol is NOT harmless “water vapor”

The e-cigarette aerosol that users breathe from the device and exhale can contain harmful and potentially harmful substances, including:

- Ultrafine particles that can be inhaled deep into the lungs
- Heavy metals such as nickel, tin, and lead
- Flavorings such as diacetyl, a chemical linked to a serious lung disease
- Nicotine
- Volatile organic compounds
- Cancer-causing chemicals

The aerosol that users inhale and exhale from e-cigarettes can expose both themselves and bystanders to harmful substances.

It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.



2022 Findings on Youth E-Cigarettes use

E-cigarette use among youth remains a top concern for the FDA and CDC. In 2022, about one in ten or more than 2.5 million US middle and high school students currently used e-cigarettes (past 30-day).

Current Use: 14.1% (2.14 million) high school students and 3.3% (380,000) of middle school students reported e-cigarette use

Flavored E-cigarette Use: Overwhelmingly, current users (nearly 85%) used flavored e-cigarettes, with fruit flavorings being the most popular, followed by candy, desserts, or other sweets.



Frequency of Use

- More than a quarter (27.6%) of current e-cigarette users use this product daily
- More than 4 in 10 youth e-cigarette users report using e-cigarettes at least 20 of the last 30 days

Type of Device: The most commonly used device among current users was disposables (55.3%), followed by pre-filled/refillable pods or cartridges (25.2%)

Commonly Used Brands: Current users reported their usual brands as: Puff bar (14.5%) Vuse (12.5%) Hyde (5.5%) and SMOK (4%)



MANY TEENS DO NOT KNOW IT IS EASY TO BECOME ADDICTED.

Young people are the most at risk for nicotine addiction because their brains are still developing, making it easier to get hooked. In fact, the younger people are when they start using tobacco, the more likely they are to become addicted. And once addicted, a person will keep using harmful tobacco products, even if they want to quit.

Teens who vape may end up addicted to nicotine faster than teens who smoke cigarettes. This is because vapes may expose users to more nicotine and may be used more frequently. Plus, e-cigarettes may come in flavors that appeal to youth. Appealing flavors may cause teens to vape longer and more often, putting them at risk for nicotine addiction.

KNOW THE SIGNS OF VAPING AND ADDICTION.

Sometimes it is hard to tell if a teen is using e-cigarettes. Vaping is easier to hide than smoking cigarettes. Vapes do not smell like cigarette smoke or cause fingernails to change color. Also, vapes can look like everyday objects, such as a smartwatch, asthma inhaler, or flash drive. Knowing the signs and symptoms of vaping and addiction can help you see when a teen needs help.



Signs of vaping:

- New behaviors, such as secrecy or anger
- Change in school performance
- Dry cough or increased wheezing



Symptoms of nicotine addiction:

- Needing to vape after waking up in the morning
- Feeling anxious or irritable due to cravings
- Vaping without thinking about it
- Having trouble concentrating or sleeping
- Thinking about vaping throughout the day
- Vaping after learning the health risks

HITS VAPE

Hitting the vape is when E-liquid, also known as vape juice (containing heavy metals, flavoring, propylene glycol, vegetable glycerin, and other unknown properties), or nicotine salts (allowing for a higher - and more addictive - concentration of nicotine) is electrically heated and aerosolized into vapor to be inhaled by the user.

VOICE OF ADDICTION

Withdrawal symptoms can cause discomfort and may even be painful. With the body wanting to return to feelings of relief and pleasure, addiction will influence one to return to their source of instant relief, even if it's not good for them. This is referred to as the voice of addiction.

"Can I get away with hitting my vape in here?"

"I have to make sure to get more vape juice before I run out."

"I need to take a JUUL break."

HALF-LIFE

The nicotine effects peak after around 2 hours, inviting the onset of withdrawal symptoms (*feeling stressed or anxious, irritability, increased depression, etc.*) as nicotine slowly leaves the blood. This is referred to as nicotine's half-life and can arrive sooner than 2 hours with frequent use.

NICOTINE TRAVELS

When inhaling, nicotine is carried into the lungs by attaching onto vapor droplets, then travels to and communicates with the brain within 7-10 seconds. This is why your vape may give you a more immediate reaction.

ALTERS FRONTAL LOBE

Reaching the "reward center" of the brain, nicotine effects release a rush of dopamine, allowing for one to feel a resemblance of relief and pleasure.

Addiction is a form of learning, making it easier for youth to form addictions. With the brain being in development until around age 25, frequent vaping in youth can lead to long-term cognitive challenges, in addition to being at risk for other health complications.



Signs and Symptoms of Vaping Addiction

Nicotine is a highly addictive chemical that is found in the tobacco plant. Tobacco products—including cigarettes, cigars, smokeless tobacco, hookah, and most vapes—contain nicotine.



Answering yes to any of these questions means it's time to get help quitting. Do you or someone you know...

- ☑ Need to vape as soon as you wake up or during class
- ☑ Feel anxious or irritable when you want to vape
- ☑ Have trouble concentrating or sleeping
- ☑ Keep vaping even though you know it's bad for you
- ☑ Find yourself reaching for your vape without thinking about it
- ☑ Get interrupted by thoughts about vaping throughout the day

Help for Teens: teen.smokefree.gov

Help for Teachers: scholastic.com/youthvapingrisks

FDA Exchange Lab: digitalmedia.hhs.gov/tobacco

Vaping Can Be Very Addictive

Nicotine can change the way your brain works, causing cravings for more of it. If you vape you might end up addicted to nicotine faster than if you smoked.^{1,2} Nicotine from vapes reaches your brain within 10 seconds.^{3,4}

Teen Brain Development

If you think that getting addicted could never happen to you, think again. You're actually more vulnerable than adults to addiction because your adolescent brain is still developing. Nicotine exposure during adolescence can disrupt normal brain development and may have long-lasting effects, such as increased impulsivity and mood disorders.⁵ Nicotine can also cause long-term changes to your brain, affecting memory and the ability to focus and learn—which all promote addiction.^{6,7,8,9}

Selinsgrove Area School District



**500 N. Broad St
Selinsgrove Pa 17870**

TIPS TO HELP YOU QUIT VAPING:

- ✓ Do not start or resume smoking tobacco cigarettes
- ✓ Call your primary care doctor
- ✓ Use nicotine replacement therapy with patches, lozenges and gum
- ✓ Call or text "Start My Quit" to 855-891-9989 or visit www.mylifemyquit.com

Tobacco dependence is a chronic, relapsing disorder that, like other chronic diseases, often requires repeated intervention and long-term support. The majority of people who use tobacco want to quit, but most try to quit multiple times before succeeding.

A broad range of cessation support resources are available for persons who want to quit using tobacco. Combined with your ongoing monitoring, support, and treatment, physician referral to a quitline or other cessation resource can improve chances of quitting.

Quitlines are telephone-based resources available in every US state, the District of Columbia, Puerto Rico, and Guam.

Free quit help:

1-800-QUIT-NOW

(1-800-784-8669)

TOBACCO-FREE KIDS :
WEBSITES

⇒ CDC.gov/TobaccoHCP

⇒ Teen.smokefree.gov

⇒ [Take Down Tobacco](http://TakeDownTobacco.org)

⇒ TakingDownTobacco.org

⇒ TobaccoControlLaws.org

⇒ TobaccoControlGrants.org

⇒ TakeApart.org

⇒ DigitalAdvocacyCenter.com

⇒ TobaccoFreeBaseball.org

Web-Based Support can connect persons to cessation-related links and resources for more information. Examples include:

- CDC's Tips From Former Smokers® campaign
- National Cancer Institute's Smokefree.gov website
- Text Messaging Programs like SmokefreeTXT can help patients who need on-demand encouragement.
- Smartphone Apps may support patients in quitting for good. The National Cancer Institute's quitSTART app offers tips, information, and challenges to keep app users engaged on their quit journey.
- Cessation Support Programs, including support groups or intensive counseling, may be available in your health system or local community.



How to stop vaping

1. Know why you're quitting. Make a list of all the reasons why you want to stop.
2. If you use cigarettes, you should plan to quit smoking and vaping at the same time.
3. Set your quit date. Give yourself time to get ready but don't put it off for too long.
4. Take it one day at a time and prepare for the challenges.
5. Learn your triggers and try to avoid them.
6. Think about how you'll fight the cravings and deal with withdrawal.
7. Avoid places and situations where other people are vaping.
8. Imagine your vape-free self. Focus on the positive.
9. Ask for help from family, friends and your doctor.
10. Chat with or call a quitting counselor in your area.

Source: teen.smokefree.gov