



TOBACCO AND NICOTINE USE AMONG YOUTH

A TOOLKIT FOR ADULTS

Information and resources about electronic nicotine delivery systems, vapes, and other forms of tobacco use.



TABLE OF CONTENTS

TFCC CONTACT INFORMATION	3
PURPOSE OF TOOLKIT	3
BACKGROUND	4
WHAT ARE ELECTRONIC NICOTINE DELIVERY SYSTEMS (ENDS)?	5
EVOLUTION OF ENDS	6
E-LIQUID/E-JUICE	8
E-CIGARETTE AEROSOL	9
NICOTINE	9
NICOTINE SALTS	10
NICOTINE ADDITION AND WITHDRAWAL	11
E-CIGARETTE OR VAPING ASSOCIATED LUNG INJURY (EVALI)	11
WHY ARE WE WORRIED ABOUT ENDS?	12
WHY YOUTH USE ENDS	14
INACCURATE KNOWLEDGE OF PRODUCTS	14
OTHER TOBACCO PRODUCTS OVERVIEW	16
VIRGINIA LEGISLATION	17
RESOURCES	18
REFERENCES	23

TFCC CONTACT INFORMATION

The Tobacco Free Community Coalition (TFCC) is made up of representatives from local organizations and businesses who work together to encourage tobacco-free living in our community.

This toolkit is available online at www.vdh.virginia.gov/blue-ridge/tobacco-nicotine-2/. For more information about this toolkit, please email TFCC at CvilleTFCC@gmail.com.

Disclaimers:

Information provided in this toolkit is meant to be for informational purposes only. The information in this toolkit does not reflect the official position of the agencies who supported its creation.

The tobacco product landscape is constantly evolving and the products listed are intended, but not guaranteed, to be up-to-date at the time of publishing.

The TFCC acknowledges the spiritual and ceremonial value that traditional tobacco has in American Indian and indigenous cultures. The term “tobacco” in this toolkit refers to commercial tobacco products only and not traditional tobacco.

Toolkit last updated on February 23, 2023.

PURPOSE OF THE *TOBACCO AND NICOTINE USE AMONG YOUTH* TOOLKIT

Since the introduction of electronic nicotine delivery systems (ENDS) in 2006, the United States has seen a rapid increase of electronic cigarettes (e-cigarettes) and other vaping devices used among our youth. ENDS products are commonly known as e-cigarettes, vapes, vape-pens, mods, and electronic smoking devices. The Tobacco Free Community Coalition (TFCC) created this toolkit in response to the community and schools’ requests for more information and resources pertaining to ENDS.

This toolkit provides educational resources for addressing youth ENDS use and aims to prevent middle and high school students’ use of tobacco and nicotine.

Parents, teachers, and school administrators can use this toolkit as a resource for:

- Research
- School curriculum
- Parent education
- Cessation resources
- Conversations with youth

New electronic nicotine delivery systems, such as Puff Bar and JUULs, have made quitting tobacco and nicotine use more challenging. The design of ENDS has continued to evolve over time. The most current ENDS are sleek, emit limited odor, and can be easily hidden. Flavors, like fruit and candy, make them appealing to youth.

In this toolkit, TFCC provides information on:

- The definitions of current electronic nicotine delivery systems (ENDS)
- Data demonstrating the surge in youth ENDS/e-cigarette use
- Overview of other tobacco products
- Virginia legislation regarding tobacco
- Resources and tools for parents, schools, and students

BACKGROUND

Despite the progress we have made, tobacco is still the leading cause of preventable deaths in the United States. Tobacco kills over 480,000 people every year in the United States.¹ The tobacco product landscape continues to evolve to include a variety of new tobacco products, including electronic cigarettes (e-cigarettes). Most e-cigarettes contain nicotine, the addictive drug derived from tobacco, which is in conventional cigarettes, cigars, and other products.² Current electronic nicotine delivery systems (ENDS) use – also known as “vaping” and/or Electronic Smoking Devices (ESDs) – among youth continues to be a major public health concern.

In 2018, the U.S. Surgeon declared youth e-cigarette use an epidemic.³ Today, the epidemic continues. According to the 2022 National Youth Tobacco Survey (NYTS), over 3 million middle and high school students were current users of tobacco products (current use is defined as use within the past 30 days).⁴ Since 2014, e-cigarettes have been the most commonly used tobacco products among these vulnerable groups. In 2022, over 2.5 million middle and high school students were current users of e-cigarette products.⁵ Due to changes in NYTS methodology in recent years and due to the COVID-19 pandemic, including differences in survey administration and data collection procedures, the ability to compare estimates from 2022 with those from prior NYTS waves is limited.

Use this toolkit to learn more about the latest trends in youth ENDS use or if you or someone you know is using ENDS.

WHAT ARE ELECTRONIC NICOTINE DELIVERY SYSTEMS (ENDS)?

Electronic nicotine delivery systems (ENDS) also known as e-cigarettes, vapes, vape-pens, mods, electronic smoking devices, and JUULs, are battery operated devices that allow the user to inhale an aerosol (NOT a harmless water vapor) containing nicotine, flavorings, heavy metals, and other harmful toxins.⁶

All e-cigarettes have essentially the same three main components:

1. The battery, which are either rechargeable or single use (disposable)
2. The cartridge, which contains the e-liquid
3. The microprocessor, which heats up the e-liquid

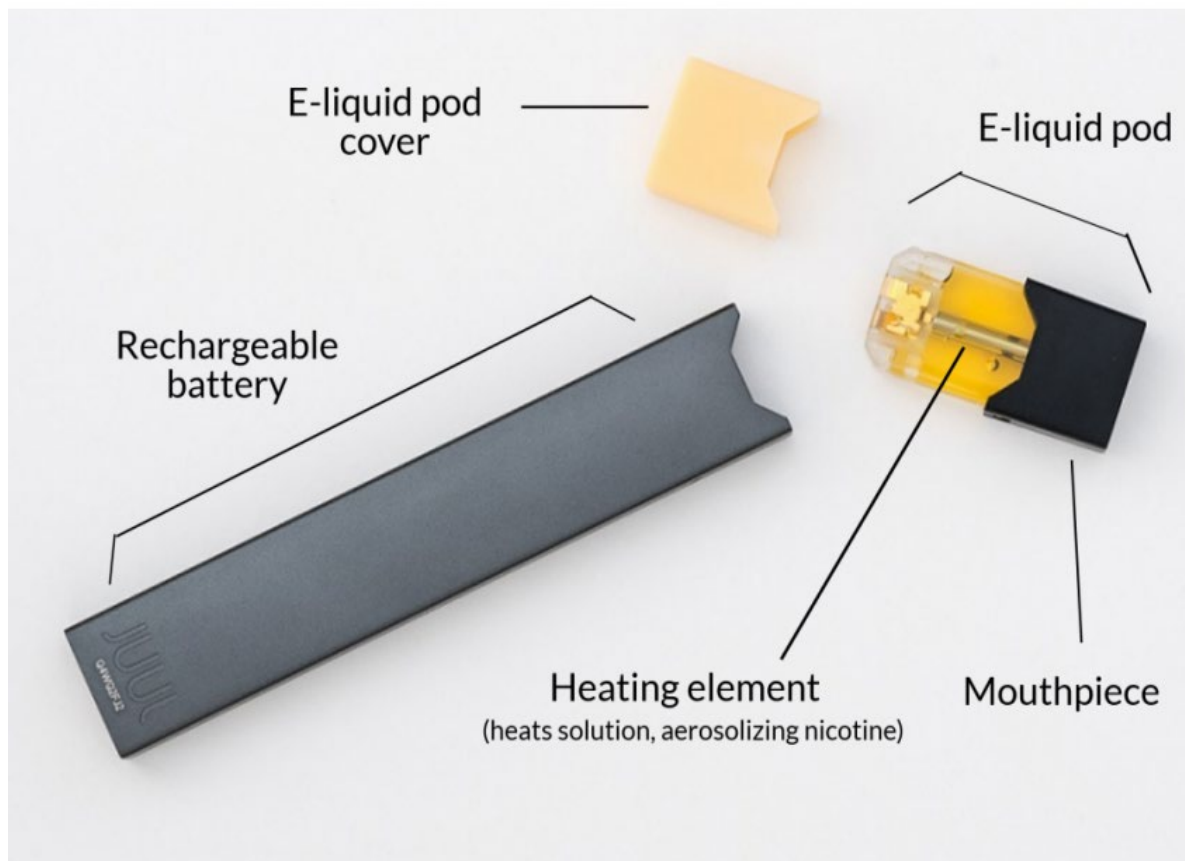


Figure 1: E-Cigarettes and vapor products (Kingcounty.gov)

EVOLUTION OF ENDS PRODUCTS ⁷

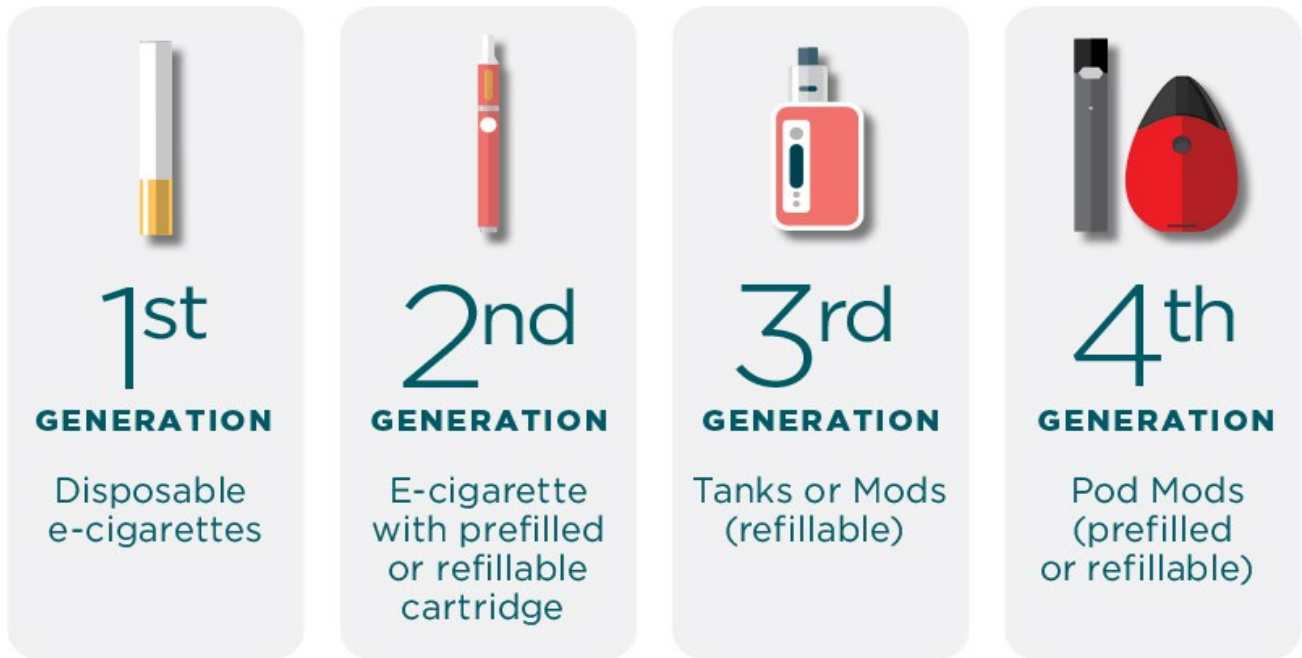


Figure 2: E-Cigarette, or Vaping, Products Visual Dictionary (cdc.gov)

First Generation – Disposable E-Cigarettes, Cig-A-Like

- A type of e-cigarette designed to be used one time, only.
- These devices are not rechargeable or refillable.
- They are discarded when it runs out of charge or e-liquid.
- They are designed to mimic the look and feel of combustible cigarettes. These are sometimes referred to as “cigalikes.”



Second Generation – E-Cigarettes with Prefilled or Refillable Cartridge, Vape Pens

- A type of rechargeable e-cigarette product designed to be used multiple times.
- E-liquid comes in prefilled or refillable cartridges. Substances may include nicotine, cannabis (THC, CBD), flavoring, solvents, or other substances.
- The cartridge is attached to a battery pen.
- Cartridge and battery pen are typically purchased separately. They can be bought in starter packs.



Third Generation – Mods/Tanks

- A type of rechargeable e-cigarette, or vaping, product designed to be used multiple times.
- They are modifiable devices (“mods”), allowing users to customize the substances in the device.



Fourth Generation – Pod Mods

- Pod Mod is an e-cigarette product with a prefilled or refillable “pod” or pod cartridge with a modifiable (mod) system (“Pod-Mods”)
- Pod Mods come in many shapes, sizes, and colors.
- Common Pod Mod brands include JUUL® and Suorin®
- There are compatible prefilled pod cartridges that contain nicotine, THC, or CBD with or without flavoring.



“Stealth” and “Zero” Vaping

Certain ENDS devices have become harder to distinguish from everyday items. Users have also found ways to discreetly vape by using vaping techniques that emit little to no visible vapor. Vapes could be hiding in plain sight!

- **Stealth vaping** is using vapes discreetly, to avoid drawing attention from others. This is done by using e-cigarettes disguised as or within everyday items such as backpacks or smartwatches.
- **Zero vaping** is a type of stealth vaping where the user takes a hit but exhales no vapor. Instead, they hold the vapor in their mouth/lungs, similar to using an inhaler.

Examples:



E-LIQUID/E-JUICE

E-liquid (also known as e-juice and vape juice) is a flavored liquid used in ENDS/e-cigarettes. E-liquid almost always contain nicotine.

E-liquids are made up of thousands of chemicals including:⁸

- nicotine
- propylene glycol
- vegetable glycerin
- flavorings



As of 2018, there were over 15,500 different e-cigarette flavors on the market.⁹

A study from Johns Hopkins University found that e-liquids and aerosols contain nearly 2,000 chemicals and substances, with the majority of them being unknown and not disclosed by manufacturers.¹⁰

E-CIGARETTE AEROSOL

When e-cigarettes are heated, they create an aerosol that users inhale. The aerosol that is emitted is **not harmless water vapor**. The aerosol can expose both users and bystanders to nicotine and other harmful substances, including heavy metals, volatile organic compounds, and ultrafine particles.¹¹

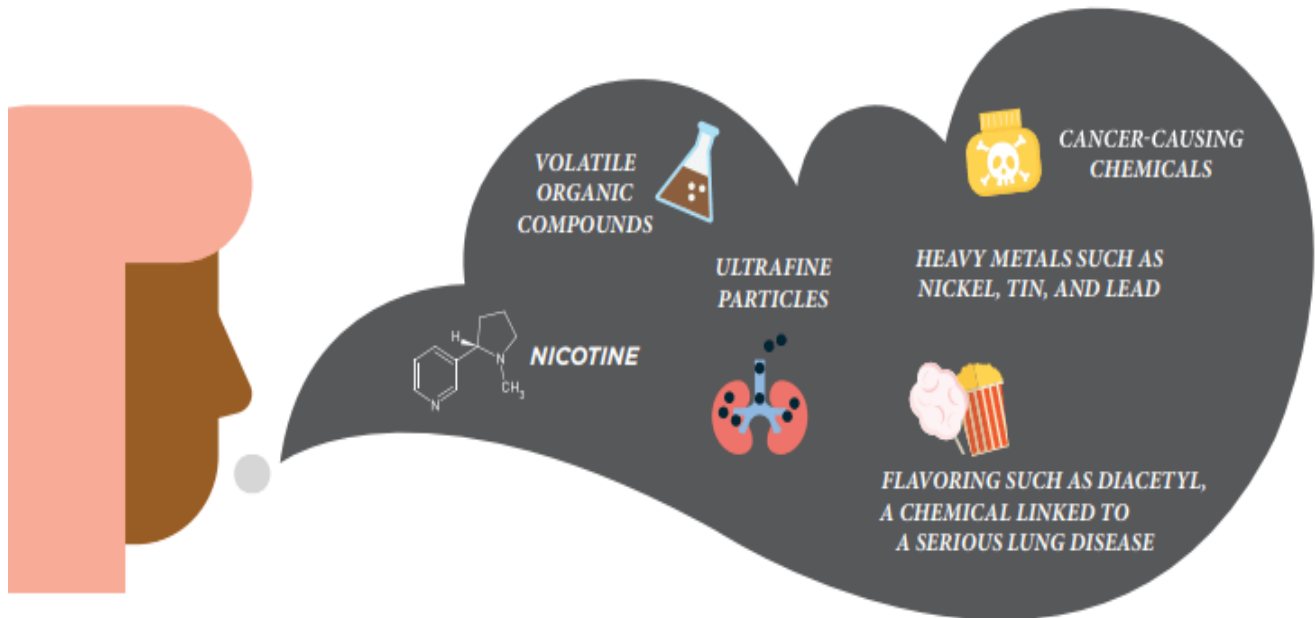


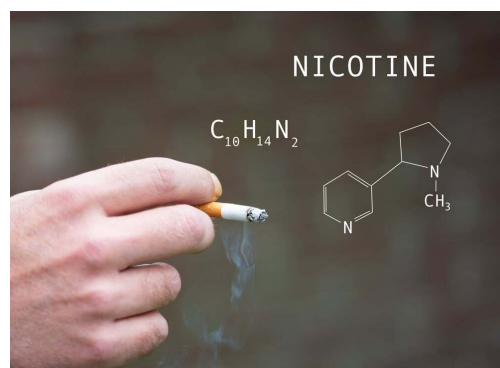
Figure 3: Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults (cdc.gov)

NICOTINE

Almost all tobacco and ENDS products contain nicotine, a **highly addictive** chemical.

Some key points about nicotine:

- The human brain continues to develop until the age of 25. Nicotine can have long lasting effects on brain development, making it harder to concentrate and learn. It can also worsen anxiety, irritability, and impulsivity.¹²
- The nicotine in e-cigarettes and other tobacco products can prime the adolescent brain for addiction to other drugs and substances. Youth whose brains are exposed to nicotine are more likely to use other substances.¹³



NICOTINE SALTS

Many ENDS products include nicotine salts, also known as “nic salt.” Nicotine salts are composed of the same nicotine found in its natural state in tobacco leaves. Nicotine salts are made by mixing pure nicotine with benzoic acids, which reduces the PH level of the nicotine solution, resulting in less irritation. This allows the manufacturers to increase the nicotine level without irritation to the throat, providing users with a smoother and easier vaping experience. Nicotine salt e-liquid enters the bloodstream faster than traditional e-liquid.¹⁴

Today’s tobacco companies have added ingredients designed to make the products more user-friendly and addictive such as:

- More nicotine to the products
- Chemicals to increase how fast the nicotine reaches the brain.
- Ingredients like sugar to make tobacco smoke easier to inhale.

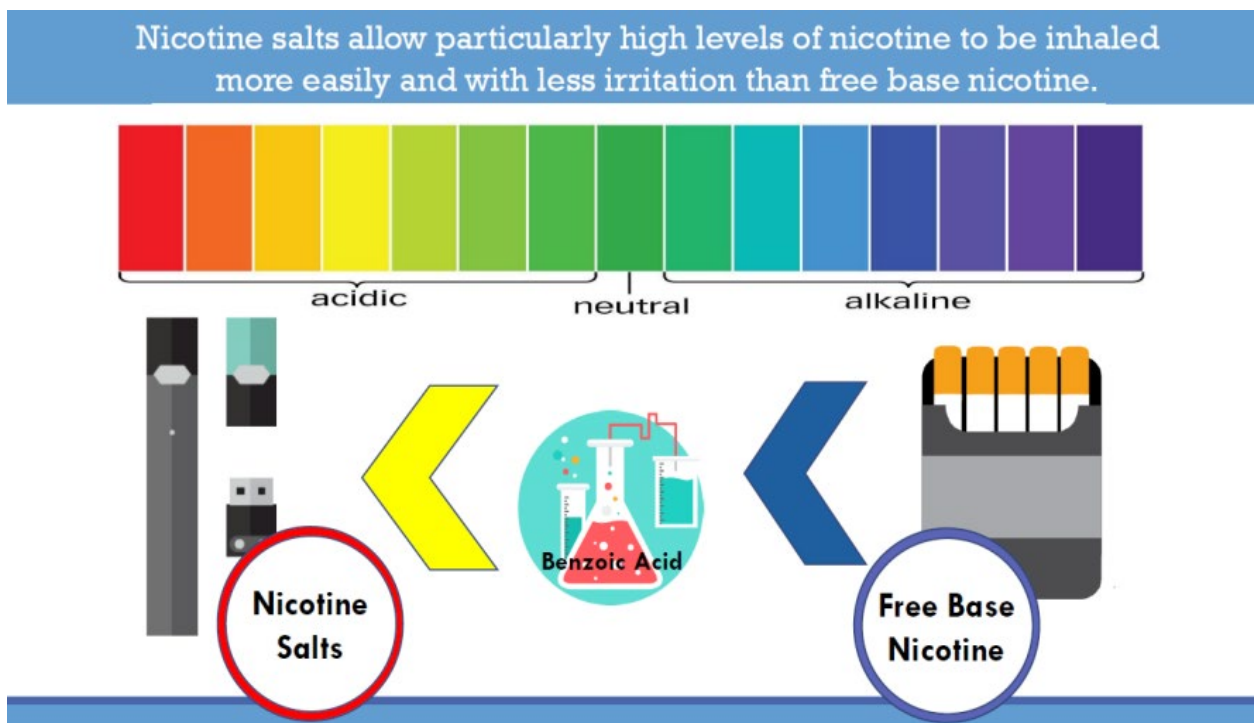


Figure 4: Vaping: What Health Professionals Need to Know (piedmont.org)

NICOTINE ADDICTION AND NICOTINE WITHDRAWAL

Nicotine addiction looks different from person to person. Even if a person only uses tobacco or ENDS every once in a while, they can experience nicotine addiction. Signs of nicotine addiction include the following: strong cravings, going out of the way to get “a hit,” feeling anxious or irritable if unable to use ENDS, and continuing to use ENDS until it is hard to stop.

Signs that a body is withdrawing from nicotine include cravings, agitation and anxiety, increased appetite, nausea, feeling sad or irritable, headaches, and trouble sleeping. Withdrawal symptoms usually go away within a few weeks. Medication and changing one’s routine may help manage withdrawal. For support and resources for managing withdrawal symptoms, consult with a healthcare provider and see the Resources section at the end of this toolkit.

Signs and symptoms of nicotine withdrawal include:



Figure 5: Dealing with Cravings (nicotinedependenceclinic.com)

E-CIGARETTE OR VAPING PRODUCT USE-ASSOCIATED LUNG INJURY (EVALI)

This lung injury, referred to as EVALI, has had serious health implications. According to the CDC: ¹⁵

- As of February 2020, a total of 2,807 hospitalizations and 68 deaths related to EVALI were reported to the CDC.



- 82% of patients hospitalized with EVALI reported THC-containing product use (As of January 2020).
- Vitamin E acetate is strongly linked to the EVALI outbreak.
- To see updated information on the CDC's investigation, [visit the CDC EVALI website.](#)

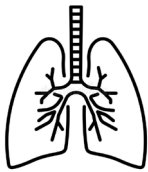
WHY ARE WE WORRIED ABOUT ENDS?

E-cigarette use can be harmful to youth. Vaping carries real health and safety risks including nicotine addiction and other health hazards.



Nicotine exposure is harmful for youth.¹⁶

- Nicotine can harm a teen's developing brain. Nicotine can rewire their brains to crave more nicotine and can create an addiction.
- Brain changes related to nicotine exposure may have effects on attention, learning, and memory that promote addiction to the drug.
- Teens who vape may become addicted to nicotine faster than teens who smoke cigarettes.
- Teens who vape are more likely to start smoking. Cigarette smoke includes a mix of chemicals that cause serious disease and death.



Vaping may be harmful to lungs.^{15, 17}

- Vaping can expose users to toxic chemicals and metal particles—such as lead, chromium, and nickel—that can harm the lungs.
- Some chemicals found in cigarette smoke—such as formaldehyde, acrolein, and acetaldehyde— also are found in some e-cigarette aerosols. Inhaling these chemicals can cause irreversible lung damage.
- Several lung diseases are associated with vaping including lipid pneumonia, collapsed lung, and “popcorn lung”.



E-liquid is dangerous.¹⁵

- E-liquid that contains nicotine and other harmful chemicals that may be toxic if swallowed. Accidental exposure to e-liquids in children can lead to nicotine poisoning and even death.



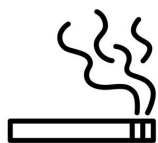
ENDS can explode.¹⁵

- ENDS can explode and cause serious injuries. These explosions have been related to the batteries in these devices.



ENDS can cause environmental harm.¹⁵

- Vape batteries and e-liquid can hurt the environment. When vapes are not disposed properly, the nicotine solution in e-liquid can seep into the ground or water and become dangerous for people and animals.



Can increase the likelihood of future conventional cigarette use.¹⁸

- Research has shown that young people who had ever used e-cigarettes had 7x higher odds of becoming smokers compared with those who had never vaped.

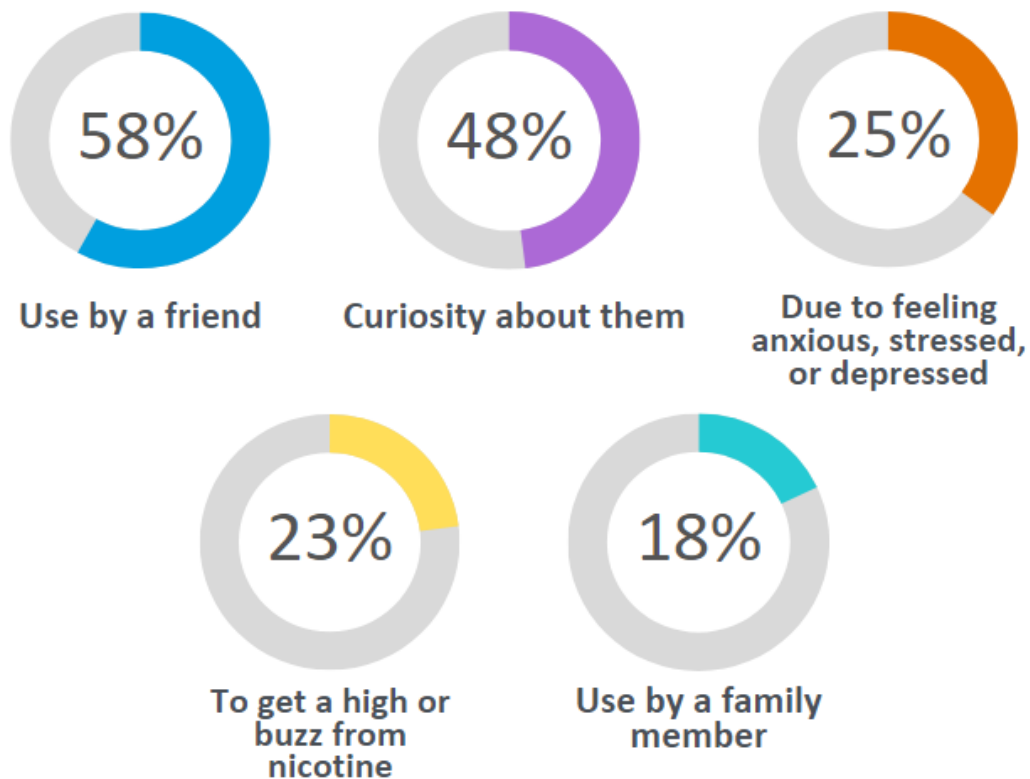


Can have a negative mental health effect.¹⁹

- Research has shown that nicotine use can worsen symptoms of depression and anxiety.
- Current e-cigarette users have double the odds of being diagnosed with depression than those who never have vaped.
- E-cigarette use is associated with higher levels of ADHD symptoms.
- For more mental health related resources, please see the Resources section of this toolkit.

WHY YOUTH USE E-CIGARETTES

Data from the 2021 National Youth Tobacco Survey shows among middle and high school students who had ever used an e-cigarette, some of the most commonly selected reasons for use were:²⁰



INACCURATE KNOWLEDGE OF PRODUCTS

Many young users are unaware that the products they are using almost always contain nicotine and are unaware of the effects of nicotine addiction. Many are also unaware of how much nicotine is in the products. A research study from Stanford University found that the majority of young people do not know the amount of nicotine in their e-cigarette.²¹

It is important to note that manufacturers **do not** have to report e-cigarette ingredients, so users do not know what is actually in these products.

What Teens Believe is in their E-Cigarettes

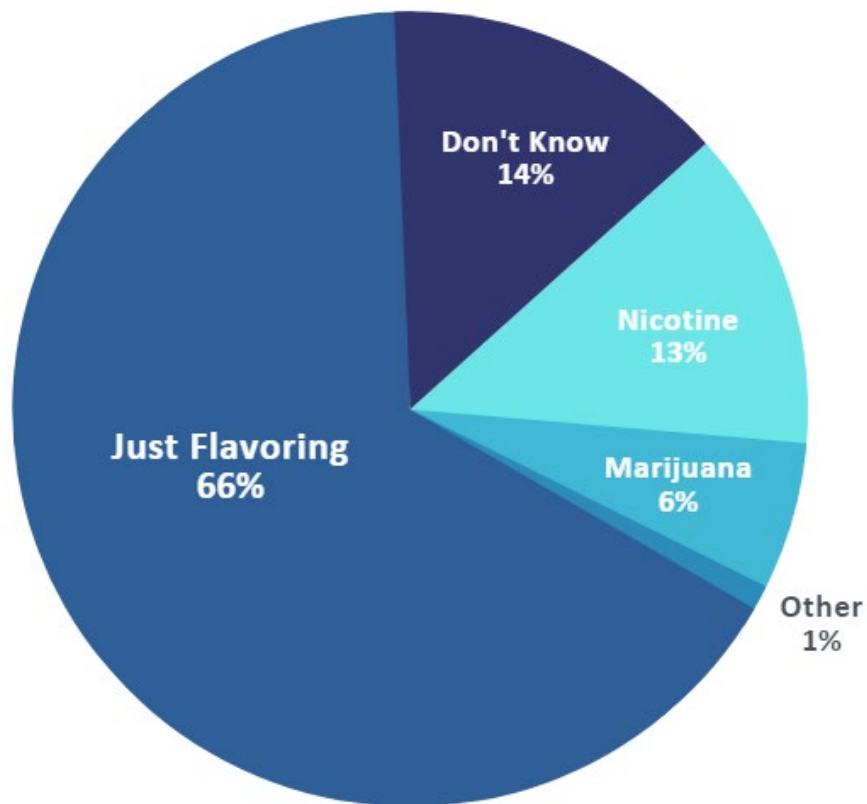


Figure 6 Data Source: *Teens and E-cigarettes (drugabuse.gov)*

Data from the National Institute on Drug Abuse show that 66% of teens believe only flavoring is in their e-cigarette. It is important to note that manufacturers **do not** have to report e-cigarette ingredients, so users do not know what is actually in these products.

A study from Brigham Young University looking at e-liquid samples found that samples labeled 18 mg/mL of nicotine actually ranged from 11.6 to 27.4 mg/mL of nicotine. Nicotine was detected in 91.4% of samples labeled as having 0 mg/mL of nicotine.²²

OTHER TOBACCO PRODUCTS OVERVIEW

Cigarettes

Contains ~600 ingredients. When burned, cigarettes create more than 7,000 chemicals. At least 69 of the ingredients are known to cause cancer and many are poisonous.



Smokeless Tobacco

The amount of nicotine absorbed in one 30-minute “dip” is equivalent to the amount of nicotine in three cigarettes.



Cigarillos and Cigars

Cigars are similar to cigarettes, but they are wrapped in a substance that contains tobacco (and nicotine) instead of just paper.

Cigar smokers both inhale nicotine and absorb it through the lining of their mouths. Cigarillos are typically cheap and flavored which make them appealing to youth.



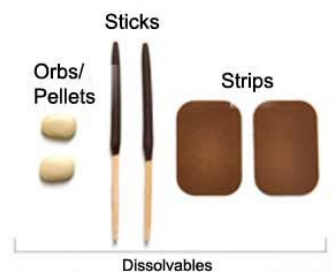
Hookah

Hookahs are water pipes that are used to smoke specially made tobacco mixtures that come in different flavors. A typical hour-long hookah session may involve 100 - 200 puffs, while an average cigarette requires 8 - 10 puffs.²³



Orbs, Sticks and Strips

Dissolvable tobacco products made of finely milled tobacco. They dissolve in your mouth and do not require spitting. Last from 2 minutes - 30 minutes depending on the product. Contain 1.2 mg - 2.4 mg nicotine per dissolvable tobacco product.



Heated Tobacco Products

Heated tobacco products are sometimes marketed as “heat-not-burn” products. Heated tobacco products are similar to e-cigarettes, however, heat-not-burn heats the actual tobacco whereas e-cigarettes heats the e-liquid. Both products contain high levels of nicotine.

IQOS and ECLIPSE heated products are currently the only heat-not-burn tobacco products authorized by the FDA to be sold in the U.S., as of February 2022.²⁴



VIRGINIA LEGISLATION ²⁵



HB 2384 — Tobacco-Free Schools

This bill requires every school board, as of July 1, 2019, develop and implement a policy that prohibits the use and distribution of tobacco products on school buses, school property, and at any off- or on-site school activity.

HB 2748 — Tobacco 21:20

This bill requires the minimum age to purchase tobacco products (including traditional cigarettes, ENDS products, smokeless tobacco and all nicotine products) to increase to the age of 21 as of July 1, 2019.



HB 1881 — Vaping Prevention Education in Schools

As of July 1, 2019, this bill requires the Virginia Foundation for Healthy Youth (VFHY) to develop educational materials concerning health and safety risks of using tobacco and e-cigarettes. This will be distributed to every elementary and secondary school in VA.

§ 15.2-2824 — Indoor Clean Air Act

Effective December 1, 2009, this act was amended to be a statewide ban on a variety of locations including some workplaces and restaurants and bars except for the latter two where there is a structurally separate area that also has separate ventilation.



§ 46.2-810.1 — Smoking in vehicle with a minor present

Effective July 1, 2016, it is unlawful for a person to smoke in a motor vehicle when a minor under the age of eight is present.

HB 1842 — Adopting Smoking Restrictions

Effective July 1, 2021, the Virginia Condominium Act and Virginia Property Owners' Association Act that established express authority for governing boards to restrict smoking. It includes tobacco and marijuana.



RESOURCES

RESOURCES FOR SCHOOLS

TOBACCO AND NICOTINE FREE SCHOOL POLICIES:

24/7 Campaign – Virginia Foundation for Healthy Youth

Initiative to help all schools in Virginia create comprehensive tobacco-free policies.

<https://247campaignva.com/>

SCHOOL LESSON PLANS:

Tobacco Prevention Tool Kit – Stanford Medicine

Theory-based and evidence-informed resources created by educators, parents, and researchers aimed at preventing student use of tobacco and nicotine.

<https://med.stanford.edu/tobaccopreventiontoolkit.html>

Nicotine Products Prevention Modules – Virginia Foundation for Healthy Youth

These modules provide prevention education to youth from sixth to twelfth grade about products that contain nicotine like cigarettes, e-cigarettes, and more.

<https://www.vfhy.org/programs/tobacco/nicotine-products-prevention-modules/>

ASPIRE (A Smoking Prevention Interactive Experience) – University of Texas

Free online prevention education resource that delivers tobacco prevention education to teens and adolescents at a self-directed pace.

<https://www.mdanderson.org/about-md-anderson/community-services/aspire.html>

SmokeSCREEN

Web-based video game for 10 to 16 year olds focused on prevention of tobacco use by addressing decision-making challenges faced by youth.

<https://www.smokescreengame.org>

CATCH My Breath

Presentation to provide parents and teachers with information about e-cigarettes and JUULs and what can be done to combat it.

<https://catch.org/program/vaping-prevention/>

Taking Down Tobacco – Campaign for Tobacco-Free Kids

Free online courses to get knowledge, skills, and tools needed to fight tobacco use in your community.

<http://takingdowntobacco.org>

HECAT: Module T – Tobacco Use: Prevention – Centers for Disease Control and Prevention

HECAT: Module T – Tobacco Use: Prevention Curriculum includes tools to analyze and score curricula that are intended to promote a tobacco-free lifestyle.

https://www.cdc.gov/healthyyouth/hecat/pdf/2021/hecat_module_t.pdf.

Vaping Prevention & Education - Teachers – FDA

Free classroom resources for teachers to learn more about the dangers of vaping nicotine and aim to prevent vaping among middle and high school students.

https://digitalmedia.hhs.gov/tobacco/educator_hub/teachers?locale=en

Vaping: Know the Truth – Truth Initiative

A youth vaping prevention curriculum to educate students (grades 8-12) about the dangers of e-cigarette use.

<https://truthinitiative.org/curriculum>

TOOLKITS:

Address Student Use of E-cigarettes and Other Vaping Products

Developed by the Minnesota Department of Health to address ENDS products in school.

<https://www.health.state.mn.us>

Know the Risks: A Youth Guide to E-Cigarettes – Centers for Disease Control and Prevention

CDC's Office on Smoking and Health (OSH) developed this presentation to educate youth on e-cigarettes.

<https://www.cdc.gov/tobacco>

What You Need to Know and How to Talk with Your Kids – Partnership for Drug-Free Kids Vaping

<https://drugfree.org/wp-content/uploads/2018/11/What-You-Need-to-Know-and-How-to-Talk-to-Your-Kids-About-Vaping-Guide-Partnership-for-Drug-Free-Kids.pdf>

RESOURCES FOR PARENTS

Partnership for Drug Free Kids

What You Need to Know and How to Talk with Your Kids about Vaping: Toolkit with resources for parents about vaping and how to talk to kids about the dangers of vaping.

<https://drugfree.org>

CATCH My Breath

Presentation to provide parents and teachers with information about e-cigarettes and JUULs and what can be done to combat it.

<https://catch.org/program/vaping-prevention/>

Surgeon General

Know the Risks: E-Cigarettes and Young People: Surgeon General's 2016 report on e-cigarette use in youth and young adults with data and information about how to talk to your teen about it.

<https://e-cigarettes.surgeongeneral.gov>

Quit Now Virginia

Quitline Info - 1-800-QUIT-NOW—Free information and coaching for VA residents wanting to quit using tobacco.

<https://quitnow.net/virginia>

Live Vape Free

Live Vape Free Virginia is a free service from Virginia’s Department of Health and offers professional support and expert advice to parents and teens.

<https://livevapefreeva.org/>

Vaping Prevention & Education - Parents

Free resources for parents to learn more about vapes, how they work, and how to start an open conversation with children about the dangers of vaping nicotine.

https://digitalmedia.hhs.gov/tobacco/educator_hub/parents?locale=en

Talking with Your Teen About Vaping: Keeping Your Kids Safe

A brochure for parents and caregivers about the risks associated with vaping for teens and the importance of having conversations with their children to help them avoid substance use.

<https://store.samhsa.gov/sites/default/files/pep20-03-01-080.pdf>

RESOURCES FOR STUDENTS

Surgeon General: Know the Risks: E-Cigarettes and Young People

<https://e-cigarettes.surgeongeneral.gov>

1-800-QUIT-NOW

Free state tobacco Quitline

<https://quitnow.net/virginia>

Smokefree.gov

Quitting resource aimed at teens

<https://teen.smokefree.gov>

Rethink Vape

Eastern Virginia Medical School Campaign

<http://rethinkvape.org>

Truth Initiative

Youth Smoking Prevention Campaigns

<https://truthinitiative.org>

Calling it Quits

Resources for teenagers on vaping and nicotine cessation

<https://www.publichealthdegrees.org/resources/teenagers-vaping-and-nicotine-cessation/>

Live Vape Free

Live Vape Free Virginia is a free service from Virginia's Department of Health and offers professional support and expert advice to parents and teens.

<https://livevapefreeva.org/>

Vaping Prevention & Education - Students

Free resources for students to learn about the consequences of vaping and help prevent vaping in your school and community.

https://digitalmedia.hhs.gov/tobacco/educator_hub/students?locale=en

Mental Health and Nicotine Resources

Educational information and support resources for youth about nicotine use and mental health.

<https://truthinitiative.org/mental-health-and-nicotine-resources>

INFOGRAPHICS & FLYERS

Electronic Cigarettes - What's the Bottom Line?

CDC

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/Electronic-Cigarettes-Infographic-508.pdf

Going Smokefree Matters: Multiunit Housing

CDC

<https://www.cdc.gov/tobacco/secondhand-smoke/going-smokefree-matters/multi-unit/pdf/going-smokefree-matters-multiunit-housing-infographic-h.pdf>

E-Cigarettes and Youth: What Educators and Coaches Need to Know

CDC

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/OSH-E-Cigarettes-and-Youth-What-Educators-and-Coaches-Need-to-Know-508.pdf

E-Cigarettes and Youth: What Parents Need to Know

CDC

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/OSH-E-Cigarettes-and-Youth-What-Parents-Need-to-Know-508.pdf

How FDA Regulates Vapes

FDA

<https://www.fda.gov/media/159412/download#:~:text=FDA%20regulates%20the%20manufacture%2C%20import,certain%20batteries%2C%20and%20even%20software.>

Nicotine Effect on Brain Development

CDC

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/assets/OSH-2019-E-Cigarette-Print-Ad-508.pdf

Electronic Nicotine Delivery Systems: Juuling, Other Trends, and Community Prevention

CADCA

https://www.cadca.org/wp-content/uploads/2023/05/cadca_pt_11-final.pdf

E-Cigarette Ads and Youth

CDC

<https://www.cdc.gov/vitalsigns/youth-tobacco-use/pdf/vs-0211-youth-tobacco-use-H.pdf>

MEDIA CAMPAIGNS

The Real Cost Campaign

FDA's award-winning tobacco prevention campaign geared to educate youth about the harmful effects of tobacco products.

<https://www.fda.gov/tobacco-products/public-health-education-campaigns/real-cost-campaign>

Behind The Haze

Behind the Haze is a Ready-Made Media Campaign for health organizations in need of an evidence-based youth vaping prevention campaign that can be implemented quickly.

<https://rescueagency.com/ready-made/behind-the-haze>

Facts Over Flavor

Video campaign created for teens to gain knowledge about the dangers of vaping.

<https://www.azdhs.gov/prevention/tobacco-chronic-disease/facts-over-flavor/index.php>

Breath of Stress Air

Campaign debunking the marketing of e-cigarettes as stress relievers and calls out the tobacco industry for selling vaping as a way to deal with stress.

www.thetruth.com/

REFERENCES

- ¹ https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/index.htm
- ² https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html
- ³ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/surgeon-general-advisory/index.html
- ⁴ <https://www.fda.gov/tobacco-products/youth-and-tobacco/results-annual-national-youth-tobacco-survey>
- ⁵ https://www.cdc.gov/mmwr/volumes/71/wr/mm7140a3.htm?s_cid=mm7140a3_w
- ⁶ <https://e-cigarettes.surgeongeneral.gov/knowtherisks.html>
- ⁷ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/ecigarette-or-vaping-products-visual-dictionary-508.pdf
- ⁸ <https://www.fda.gov/tobacco-products/products-ingredients-components/e-cigarettes-vapes-and-other-electronic-nicotine-delivery-systems-ends>
- ⁹ <https://www.jmir.org/2018/3/e80/>
- ¹⁰ <https://hub.jhu.edu/2021/10/07/vaping-unknown-chemicals/>
- ¹¹ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html
- ¹² <https://www.undo.org/addicting-kids/the-effects-of-nicotine-on-the-adolescent-brain>
- ¹³ <https://e-cigarettes.surgeongeneral.gov/knowtherisks.html>
- ¹⁴ <https://truthinitiative.org/research-resources/emerging-tobacco-products/e-cigarettes-facts-stats-and-regulations>
- ¹⁵ https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#what-we-know
- ¹⁶ <https://digitalmedia.hhs.gov/tobacco/hosted/Vaping-ECigarettes-Youth-Toolkit.pdf>
- ¹⁷ <https://www.hopkinsmedicine.org/health/wellness-and-prevention/what-does-vaping-do-to-your-lungs>
- ¹⁸ <https://truthinitiative.org/research-resources/emerging-tobacco-products/young-people-who-vape-are-much-more-likely-become>
- ¹⁹ <https://truthinitiative.org/research-resources/emerging-tobacco-products/colliding-crises-youth-mental-health-and-nicotine-use>
- ²⁰ <http://dx.doi.org/10.15585/mmwr.ss7105a1>
- ²¹ [Young adults don't know what's in nicotine products they vape | News Center | Stanford Medicine](#)
- ²² <https://pubmed.ncbi.nlm.nih.gov/29280749/>
- ²³ <https://www.lung.org/quit-smoking/smoking-facts/health-effects/facts-about-hookah>
- ²⁴ https://www.cdc.gov/tobacco/basic_information/heated-tobacco-products/index.html
- ²⁵ <https://lis.virginia.gov/>