
YOUTH AND E-CIGARETTES

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SCHOOL OF MEDICINE





KNOW THE RISKS:

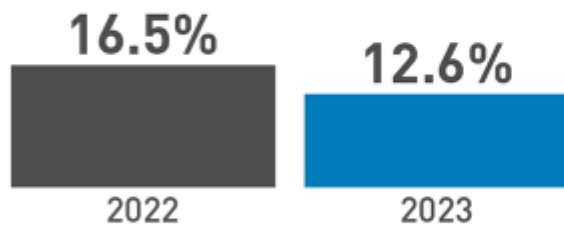
YOUTH AND E-CIGARETTES

2023 NYTS DATA: YOUTH TOBACCO USE

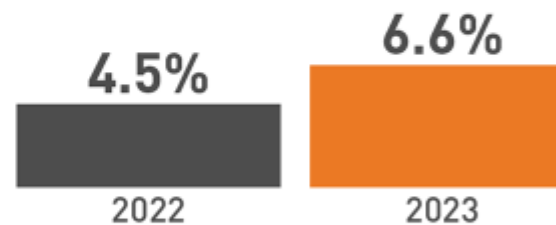
NYTS
2023

About **2.8 million**
youth currently use any tobacco product

Any tobacco use **decreased** among
high school students



Any tobacco use **increased** among
middle school students



Driven by a **drop**
in high school e-cigarette use



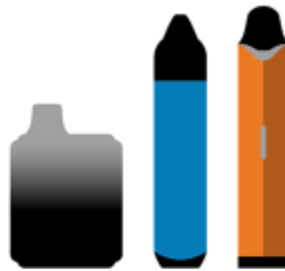
2023 NYTS DATA: YOUTH USE FOR ALL TOBACCO PRODUCTS

NYTS
2023

10% of students
reported current use of any tobacco product

Among those who currently use a tobacco product:

E-Cigarettes
were the most popular
product for the
10th year in a row



**Cigarette
and Cigar**



use remain at an all-time low

2023 NYTS DATA: YOUTH USE FOR E-CIGARETTE PRODUCTS

Findings on Youth Use for E-Cigarette Products

NYTS
2023

More than **2.1 million**

youth currently use e-cigarettes,

with a decline in high school students currently using e-cigarettes in 2022-2023

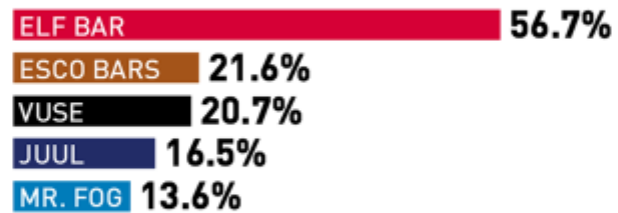
Among youth who reported current use of e-cigarettes:

More than **1 in 4**



use e-cigarettes daily

The most popular brands include disposable and cartridge-based products, and the most commonly reported products were:



Almost **9 out of 10**



use flavored e-cigarettes

QUIZ

Some
e-cigarettes
are safe for youth.



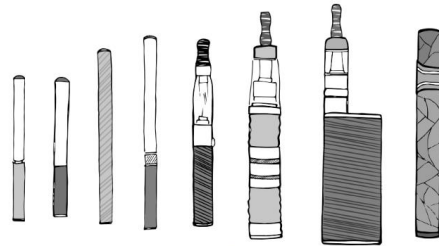
QUIZ (1)

Some
e-cigarettes
are safe for youth.

 **FALSE**



1



What Are
E-cigarettes?

2



What Are The
Health Risks?

3



What Leads
To E-cigarette
Use?

4



What Can You
Do About It?

NO MATTER WHAT YOU CALL IT, IT'S AN E-CIGARETTE



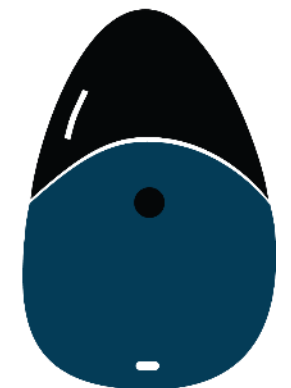
1st Gen



2nd Gen



3rd Gen



4th Gen

E-CIGARETTES COME IN MANY DIFFERENT SHAPES

E-cigarettes are devices that heat a liquid into an aerosol that the user inhales.



QUIZ



E-cigarettes create a harmless water vapor.



QUIZ

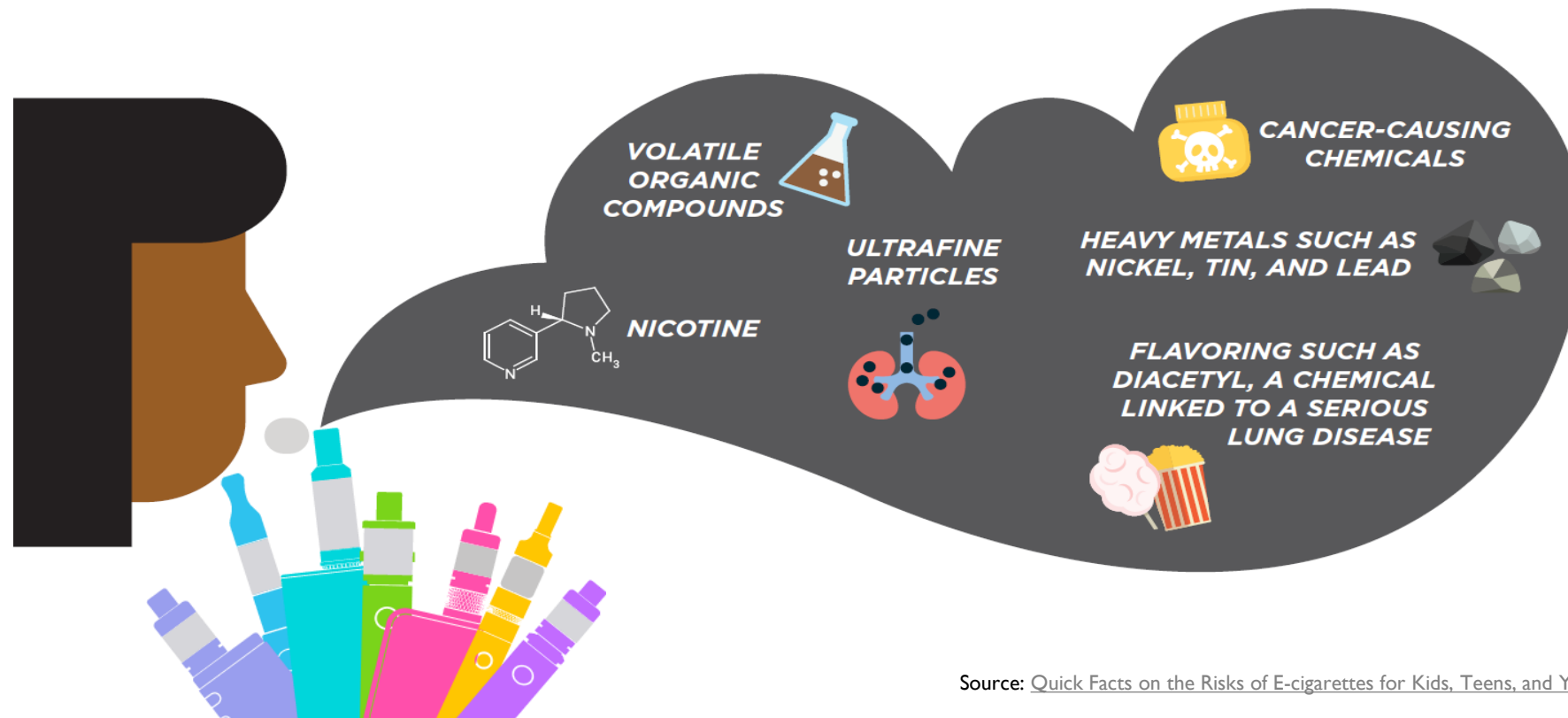
E-cigarettes create a
harmless water vapor.

✘ FALSE



E-CIGARETTES MAKE AEROSOL, NOT VAPOR

THE E-CIGARETTE AEROSOL THAT USERS BREATHE FROM THE DEVICE AND EXHALE CAN CONTAIN HARMFUL AND POTENTIALLY HARMFUL SUBSTANCES:



Source: [Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults](#) | CDC

QUIZ



Most
e-cigarettes
contain nicotine.



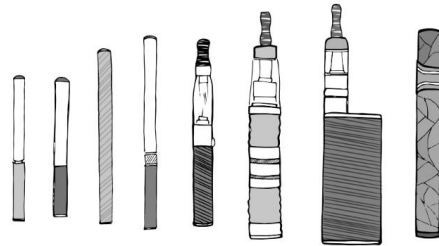
QUIZ



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WHAT IS NICOTINE?

nicotine 

[**nik**-uh-teen, -tin, nik-uh-**teen**]

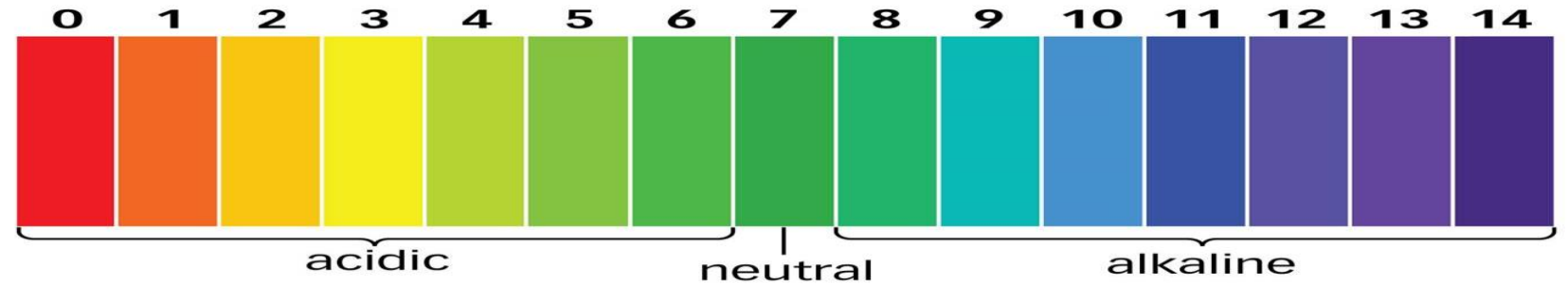
[Examples](#) [Word Origin](#)

noun *Chemistry.*

1. a colorless, oily, water-soluble, highly toxic, liquid alkaloid, $C_{10}H_{14}N_2$, found in tobacco and valued as an insecticide.

NICOTINE COMES IN DIFFERENT TYPES

pH
Scale



QUIZ



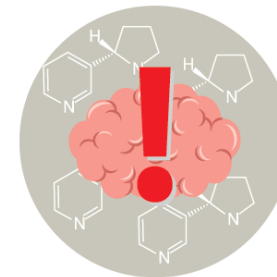
Nicotine harms
brain
development.



QUIZ ...



Nicotine harms
brain
development.



HOW DOES NICOTINE IN E-CIGARETTES IMPACT THE BRAIN?

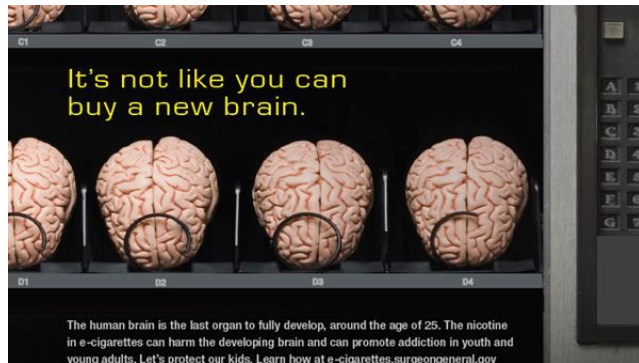
Youth who use nicotine can harm the parts of the brain that control attention, learning, mood, and impulse control.

Source: [Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults](#) | CDC





Food and Drug Administration's MyVaping Mistake: How It Became an Addiction



NICOTINE USE CAN LEAD TO ADDICTION



Food and Drug Administration's The Real Cost Campaign: My Vaping Mistake: How It Affected My Mental Health

NICOTINE
ADDICTION AFFECTS
YOUR MENTAL
HEALTH

BEHAVIOR RISKS

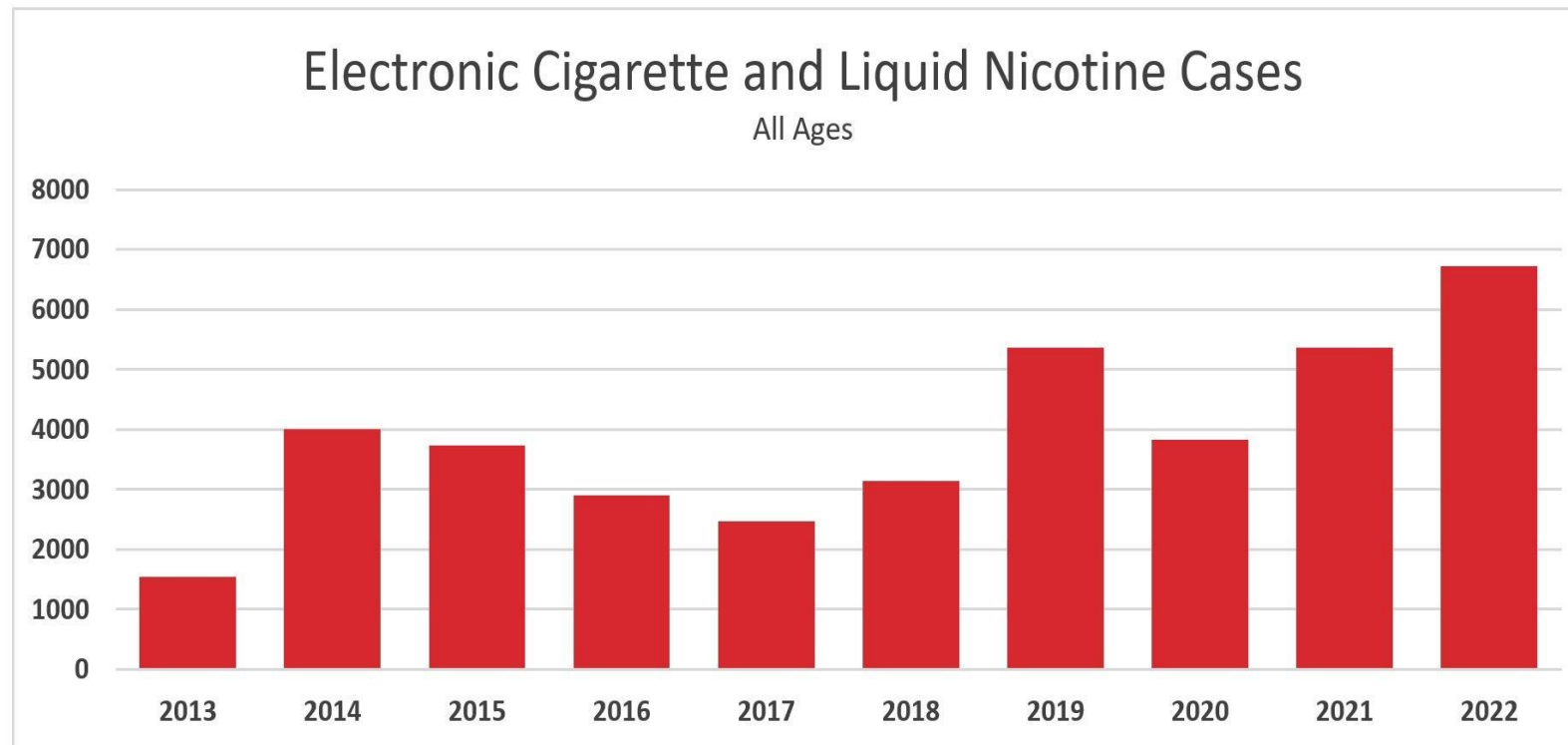


Youth who use e-cigarettes may be more likely to smoke regular cigarettes in the future.

U.S. Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.



E-CIGARETTE POISONINGS



Source: American Association of Poison Control Centers



NICOTINE POISONING AND PETS

truth
initiative
ADVOCACY
RESEARCH
POLICY
CARE & SUPPORT

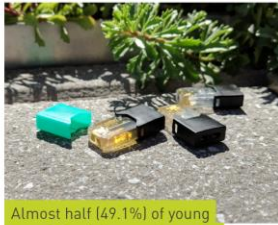
A toxic, plastic problem

E-cigarette waste and the environment

Vaping, still at epidemic levels among youth with about one in five high school students using e-cigarettes in 2020, generates a significant amount of toxic and plastic waste. Many popular e-cigarettes, like JUUL, are pod-based with single-use plastic cartridges containing nicotine. Generating even more waste are disposable e-cigarettes like Puff Bar, which are designed entirely for one-time use and have skyrocketed in popularity with a 1,000% increase in use among high school students between 2019 and 2020.⁷

With a 399.73% increase in retail e-cigarette sales (excluding internet sales and tobacco-specialty stores) from 2015 through 2020⁸, the environmental consequences of e-cigarette waste are enormous. Instead of taking responsibility for the disposal of their products, tobacco companies engage in clean-up initiatives designed to make them appear "green" — just one of many tactics designed to overhaul their reputations (read the Truth Initiative report "Seeing Through Big Tobacco's Spin").

More than half (51%) of young e-cigarette users reported disposing of used e-cigarette pods or empty



Almost half (49.1%) of young people don't know what to do with used e-cigarette pods and disposable devices.



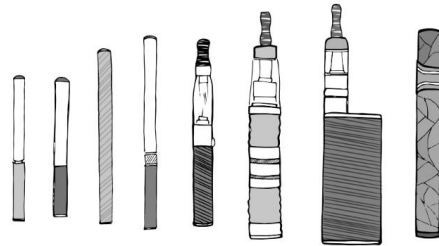
E-CIGARETTES AND THE ENVIRONMENT



Tips for Safe Disposal of E-Cigarettes and E-Liquid Waste

E-cigarettes, including rechargeable batteries and the cartridges and bottles that contain e-liquids (liquid nicotine mixtures), can pose a threat to human health and to the environment if they are not disposed of properly. E-cigarette and e-liquid waste

1



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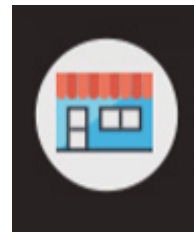


What Can You
Do About It?

Most U.S. Youth Are Exposed to E-Cigarette Advertising, NYTS 2021

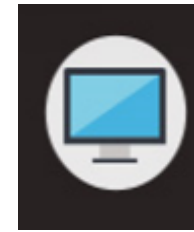
E-CIGARETTE ADVERTISING:

70.3% OF MIDDLE AND HIGH SCHOOL STUDENTS



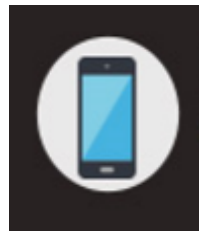
RETAIL STORES

58.7%
14.37 MILLION



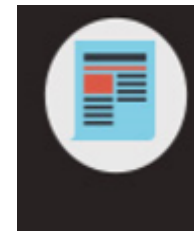
TELEVISION, STREAMING SERVICES, OR MOVIES

21.7%
5.24 MILLION



INTERNET

36.0%
8.97 MILLION



NEWSPAPER OR MAGAZINES

28.7%
3.50 MILLION



USE OF FLAVORS IS PROMINENT AMONG YOUTH



Cooper M, Park-Lee E, Ren C, Cornelius M, Jamal A, Cullen KA. *Notes from the Field: E-cigarette Use Among Middle and High School Students — United States, 2022.* MMWR Morb Mortal Wkly Rep 2022;71:1283–1285. DOI: <http://dx.doi.org/10.15585/mmwr.mm7140a3>

QUIZ ..

✓ TRUE

✗ FALSE

The tobacco industry can sell any type or flavor of e-cigarettes they wish.



QUIZ

 **FALSE**

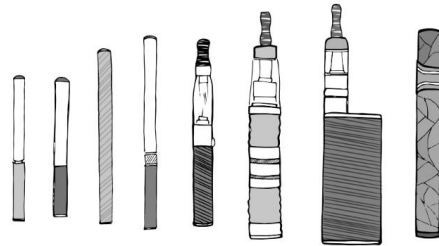
The Food and Drug Administration regulates all tobacco products.





AGE TO BUY E-CIGARETTES

1



What Are
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Do About It?

Teens report seeking relief from stress, anxiety, and depression as top reasons for substance use*

Clinicians and public health professionals:
Promote interventions that

REDUCE STRESS



TEACH HEALTHY COPING SKILLS



IMPROVE MENTAL HEALTH



*Self-reported by U.S. adolescents (aged 13-18 years old) who were assessed for substance use disorder treatment from 2014-2022

bit.ly/mm7305a1

FEBRUARY 8, 2024

FREE QUITTING RESOURCES



Food and Drug Administration's The Real Cost: My Vaping Mistake: How It Impacted My Sports Performance



Quit Vaping

Has coronavirus got you thinking that it might be time to stop vaping? Quitting can be tough, but you are tougher. Use our info and resources to quit vaping and stay vape-free.



Build My Quit Plan

Make your personalized quit plan and get ready.



Vaping Reality Check

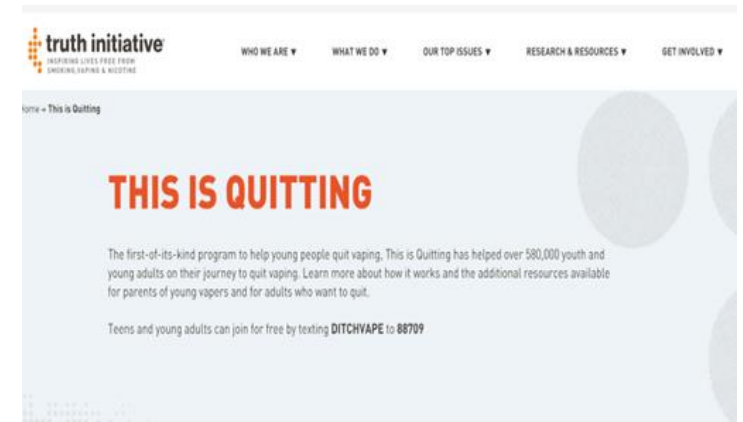
Vaping may be costing you more than you.



How to Quit Vaping

Quitting vapes can be easier when you prepare.

Quit Vaping | Smokefree Teen



What is This is Quitting?

Truth Initiative® This Is Quitting

MARYLAND QUITLINE

- 24/7 support for Maryland residents age 13+
- Offers special programs (pregnancy, youth, behavioral health, etc.)
- Up to 12 weeks of free NRT shipped to patient
- Call 1-800-QUIT-NOW (1-800-784-8669)
- Visit <https://smokingstopshere.com/resources/for-healthcare-providers/> to view different referral methods



- Research
- Prevention and education
- Community engagement
- Partnerships
- Quitting tools
 - This is Quitting
 - Text DITCHVAPE to 88709
 - EX
 - The EX Program



[How the tobacco industry markets vaping nicotine as stress relief \(truthinitiative.org\)](http://truthinitiative.org)

UMMC TOBACCO HEALTH PRACTICE

- Director: pulmonologist Dr. Janaki Deepak
- Clinic is integrated with pulmonary clinic to provide comprehensive lung health exam
- Lung Cancer Screening
- Free sample meds
- Combination med therapies + coaching
- Most insurances accepted, no referral needed
- Appointments: call 410-328-8141 or email Sherri Webster: SWebster@som.umaryland.edu



UMMC THP is located at the Midtown Campus: 800 Linden Ave,
9th Floor, Baltimore, MD 21201

ZYN-MADE BY SWEDISH MATCH ARE NICOTINE POUCHES

ZYN (nicotine pouches), General (snus), Longhorn (moist snuff), Onico (pouch products with neither tobacco nor nicotine), America's Best Chew (chewing tobacco), Thunder (chew bags), Oliver Twist (tobacco bits), White Owl (HTL, homogenized tobacco leaf cigars), Game (natural leaf cigars), Fiat Lux (matches), and Cricket (lighters)





MOST IMPORTANT TAKEAWAY

There is no safe tobacco
product, including e-cigarettes.



[CDC.gov/e-cigarettes](https://www.cdc.gov/e-cigarettes)



QUESTIONS? COMMENTS?

NKHANNA@SOM.UMARYLAND.EDU





HELP YOUR
SCHOOL GO
TOBACCO FREE