



**GEORGIA
CANCER CENTER**
AUGUSTA UNIVERSITY



Tobacco and Cancer: Don't Get Burned

Cancer Information and Awareness

Christine O'Meara, MA, MPH
Community Outreach Coordinator

Maryclaire Regan, MPH
Community Program Coordinator

Teledermatology in Rural Georgia

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Tobacco Use is Dangerous

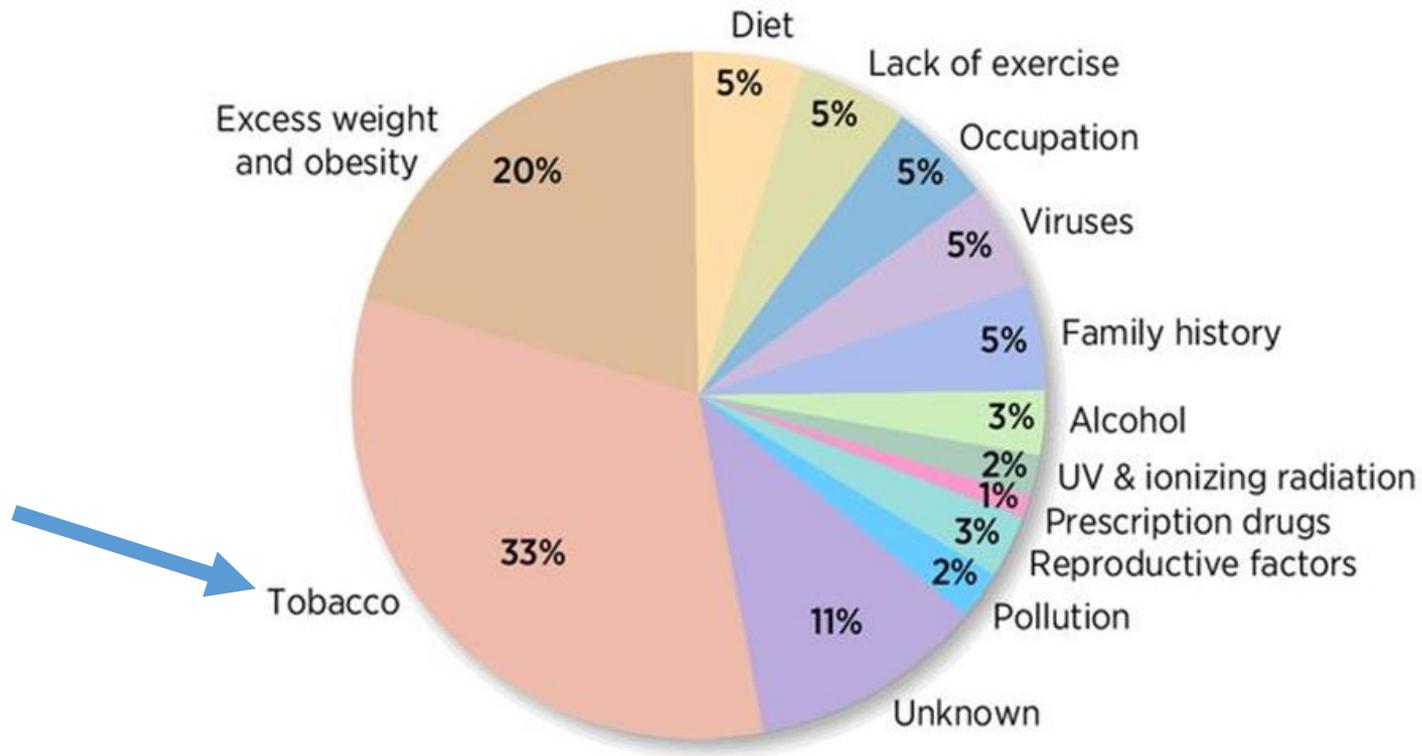
- **#1** cause of preventable disease, disability, and death in the U.S.



Image: Licking Co. Health Department

Causes of Cancer

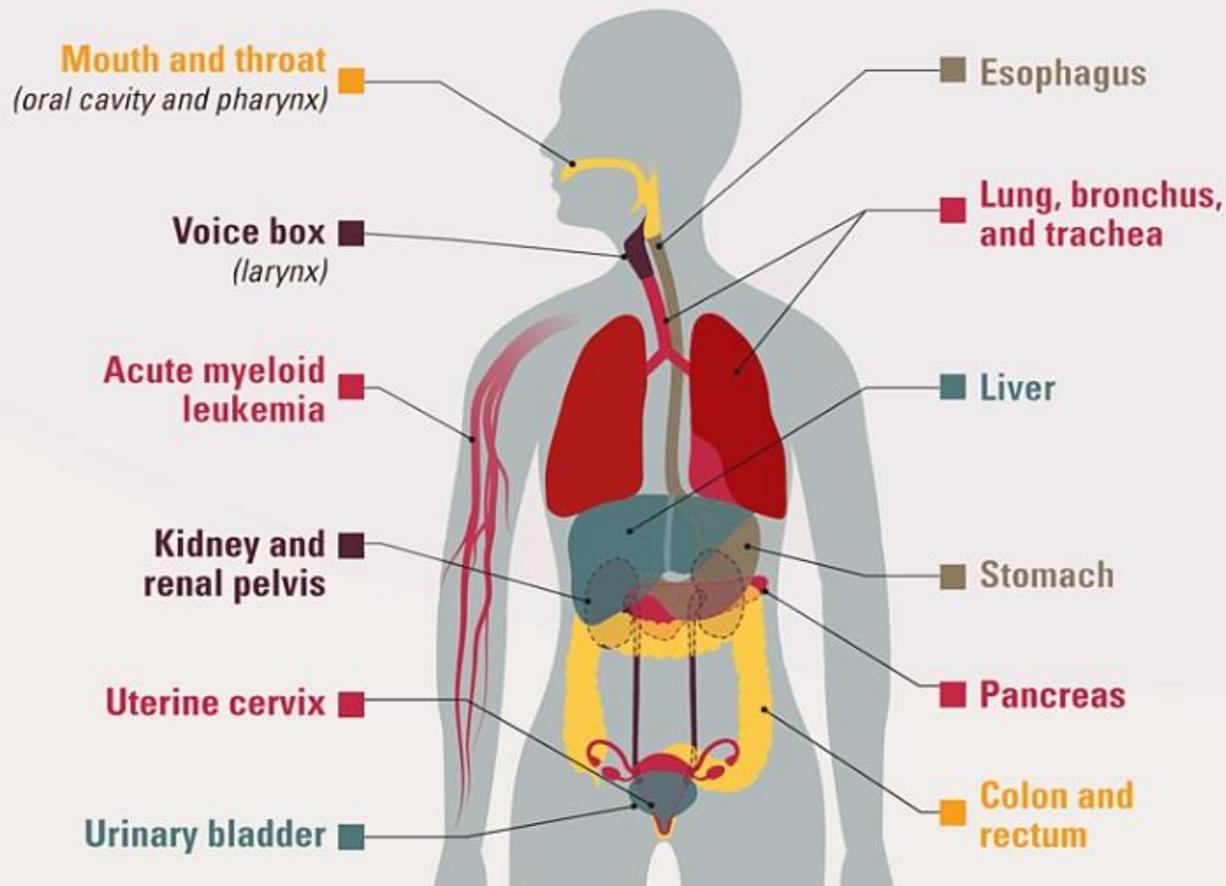
Tobacco use is a leading cause of cancer



About 1/2 of cancer deaths in Western populations are linked to risk factors that can be changed (2018)

Tobacco Use Causes 16 Kinds of Cancer

Tobacco use* causes cancer throughout the body.



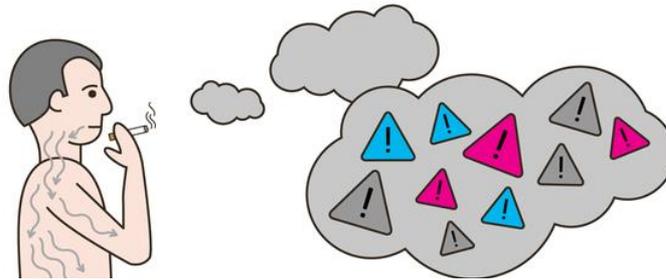
* Tobacco use includes smoked (cigarettes and cigars) and smokeless (snuff and chewing tobacco) tobacco products that, to date, have been shown to cause cancer.

How Does Tobacco Use Cause Cancer?

- Cancer cells are a person's own cells that are abnormal or have been damaged
- When a person's immune system does not destroy abnormal or damaged cells, they can grow and become cancer
- Tobacco products and smoke have many **chemicals that damage the DNA in cells - this damage can cause cancer**
- The chemicals **weaken the body's immune system, making it harder to kill cancer cells before they grow and spread**

How Does Tobacco Use Cause Cancer?

1 Cigarette smoke releases over 5,000 different chemicals.

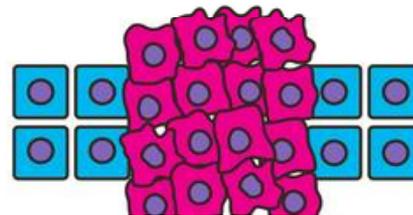
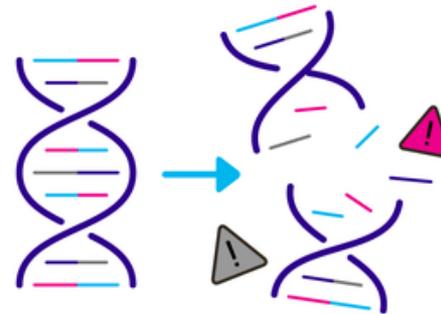


2 Harmful chemicals **enter our lungs** and can then affect the entire body.

3 Chemicals **damage our DNA**, including parts that protect against cancer.

4 Other chemicals make it **harder for cells to repair DNA damage**.

5 This DNA damage can **cause cancer** in cells.



The Bottom Line



Image: stocksnapper

- Using tobacco products can cause cancer and then keep your body from fighting it

Why Do People Use Tobacco Products?

- We know tobacco use is dangerous, but people still use tobacco
 - **1** in **5** U.S. adults (2019)
- Many people struggle to quit because they are addicted.
- Tobacco contains nicotine, a chemical that is highly addictive
 - Nicotine is as addictive as heroine and cocaine



Why Do People Use Tobacco Products?

Nicotine addiction makes quitting tobacco products hard

- Most people who smoke begin as teens and do not understand the harms of tobacco
- Most people who use cigarettes **want to quit**
- It may take a few tries to quit for good
- Help quitting is available and makes it easier to quit for good



Tobacco Companies Need Customers

Sell products that create addiction and kill users

- 480,000 Americans die every year from tobacco use

"Big Tobacco" markets to younger people to replace the customers that their products kill

- Every adult who dies early because of smoking is **replaced by 2 new young smokers**
- **Tactics include:**
 - Marketing to youth
 - Flavors
 - Increased nicotine levels
 - Other tactics to create a new generation of tobacco users



The secret's out.
If your product killed **8 million** people each year,
you'd also target a new generation.

31 MAY | WORLD NO TOBACCO DAY
SPEAK OUT #TobaccoExposed

World Health Organization
FCTC
FINANCIAL CRIMINAL TERRORISM AND PENALTY ORGANIZATION

Cigarettes

- The most commonly used tobacco product in the U.S.
- 34.1 million adults smoke
- 9 in 10 people who smoke started before age 18
- 1/2 of all people who smoke cigarettes long-term die from diseases caused by smoking



Image: Shutterstock

Cigarettes: Are Made for Addiction

9 Ways Tobacco Companies Make Cigarettes More Addictive, More Attractive to Kids and More Deadly

Bronchodilators

Added chemicals expand the lungs' airways, making it easier for tobacco smoke to pass into the lungs.

Flavorings

Added flavors like liquorice and chocolate mask the harshness of smoke and make products more appealing to new users, especially kids.

Increased Nicotine

Tobacco companies control the delivery and amount of nicotine to ensure addiction

Tobacco-specific Nitrosamines

American-style cigarettes are made with blended tobacco that has much higher levels of cancer-causing nitrosamines.

Ammonia Compounds

Adding ammonia compounds increases the speed with which nicotine hits the brain.

Ventilated Filters

Ventilation holes in the filters cause smokers to inhale more vigorously, drawing carcinogens more deeply into the lungs.

Menthol

Menthol cools and numbs the throat to reduce irritation and make smoke feel smoother.

Sugars and Acetaldehyde

Added sugars make tobacco smoke easier to inhale and form acetaldehyde, which enhances nicotine's addictive effects.

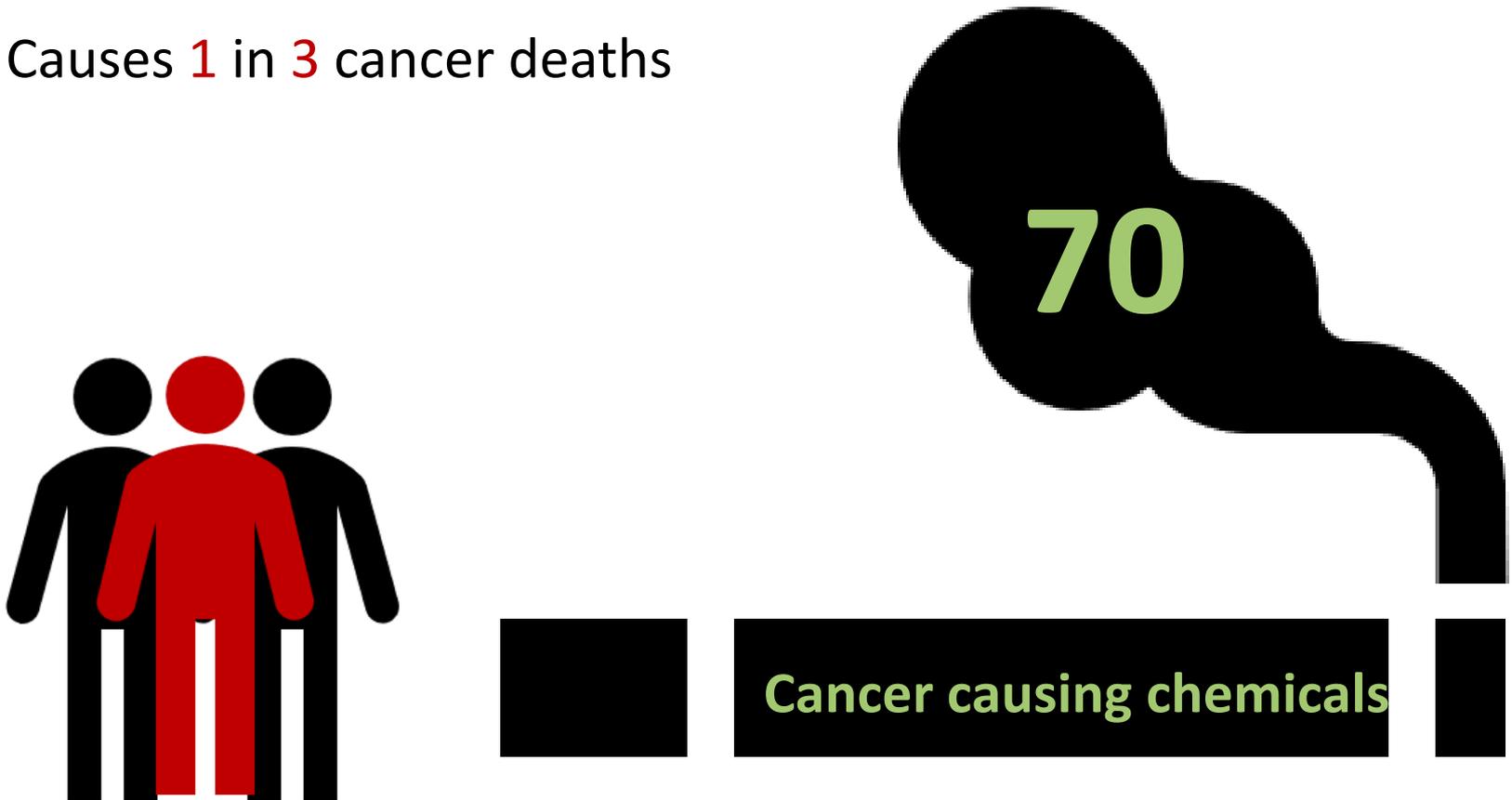
Levulinic Acid

Added organic acid salts reduce harshness of nicotine and make smoke smoother, less irritating.



Cigarette Use and Cancer

- Can cause cancer almost anywhere in the body
- Causes 1 in 3 cancer deaths



Cigarette Use and Cancer

- Cause **9** in **10** lung cancer deaths
- Lung cancer is the **#1** cause of cancer deaths in men and women

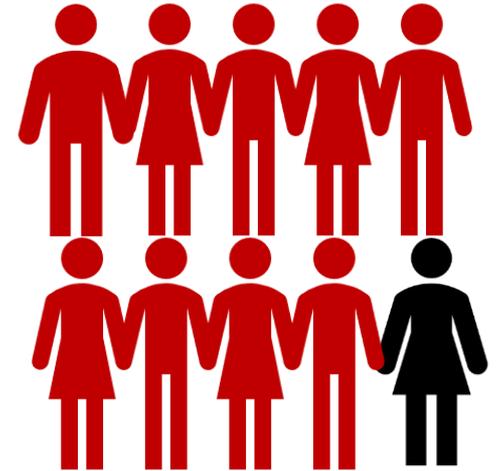


Image: Rankin

Light and Menthol Cigarettes

Made for addiction

- Increase your lung cancer risk as much as regular cigarettes



Other Tobacco Products For Smoking

- Cigars, cigarillos, pipes, and hookas (water pipes) are not safe!
- Have the same harmful chemicals as cigarettes
- Increase your risk for many cancers including lung cancer



Secondhand Smoke (SHS)

- Causes lung cancer in non-smoking adults
 - Kills 7,300 people every year
- 20-30% increased lung cancer risk if you breathe SHS
- Very harmful to children



Image: Tobacco Free CA

Electronic Cigarettes (E-Cigarettes)

- Nicotine products that heat a liquid and make aerosol (vapor)
- Called “vapes” because the aerosol looks like vapor
- **99%** of all e-cigarettes have nicotine

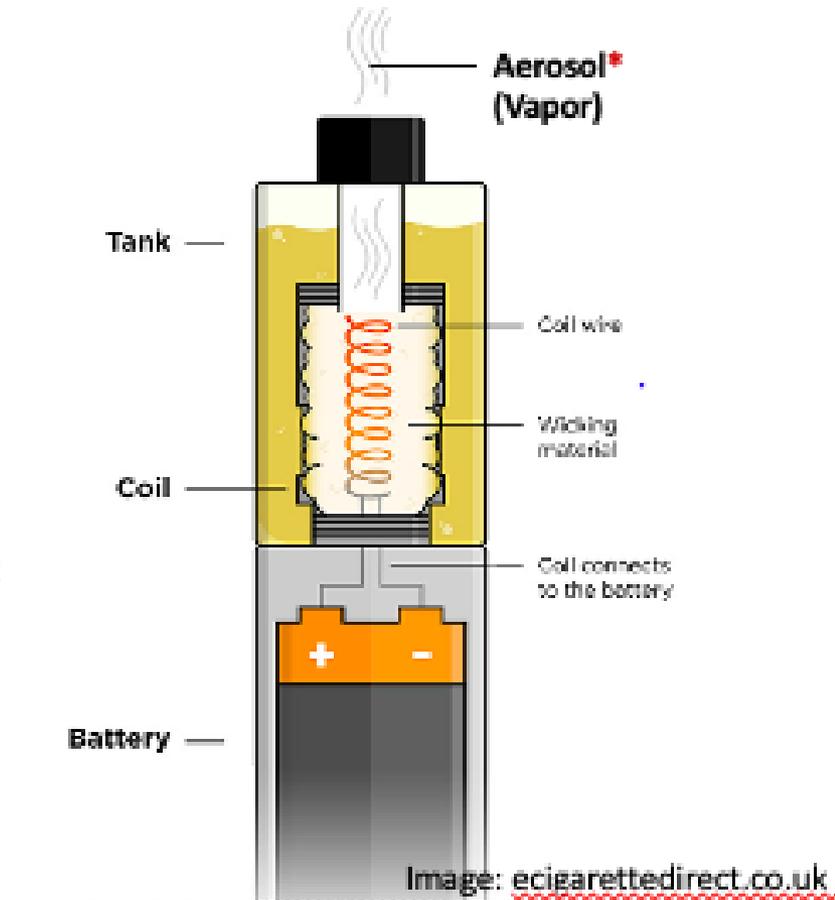


Image: ecigarettedirect.co.uk

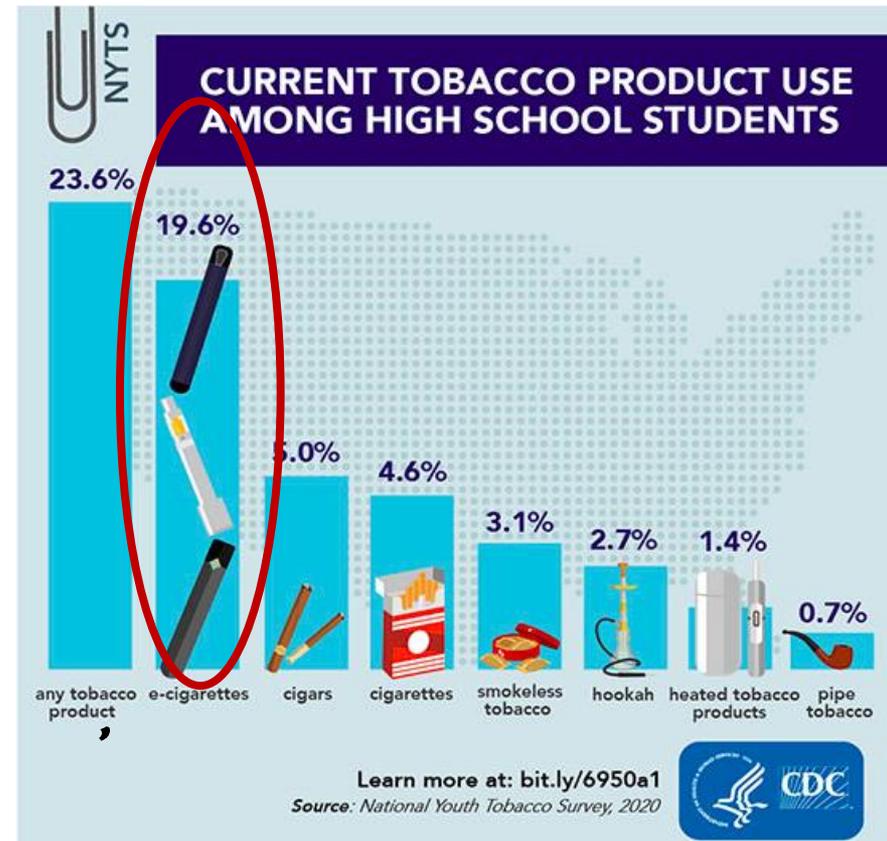
E-Cigarette Use Among Young People

Most youth do not use e-cigarettes (vapes) but

E-cigarettes are the most used nicotine product by youth

- **1 in 20** middle school students
- **1 in 5** high school students

Second most used nicotine product by adults



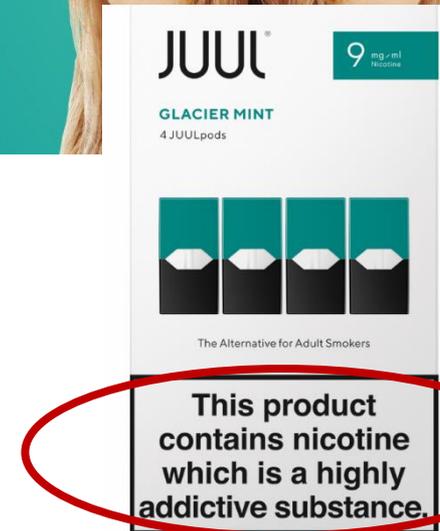
Reusable E-Cigarettes

JUULs, the most used brand of reusable e-cigarettes, always have **nicotine**

Because some e-cigarettes like JUUL have high levels of nicotine, they are very **addictive**

The FDA banned JUULs and other e-cigarettes that are reusable and refillable from being flavored in 2020

- Companies made disposable e-cigarettes to get around the ban



Disposable E-Cigarettes

- Made to avoid the 2020 FDA ban
- Disposable e-cigarettes are pre-filled and pre-charged for one time use, so they can be flavored



Disposable E-Cigarettes

- Becoming the most used e-cigarette among youth
 - High levels of nicotine—> highly addictive
 - Flavored
 - Cheaper than reusables
 - Advertised on social media
- Puff Bars are the most common disposable e-cigarette
 - Teens report using Puff Bar over JUUL by 5 to 1

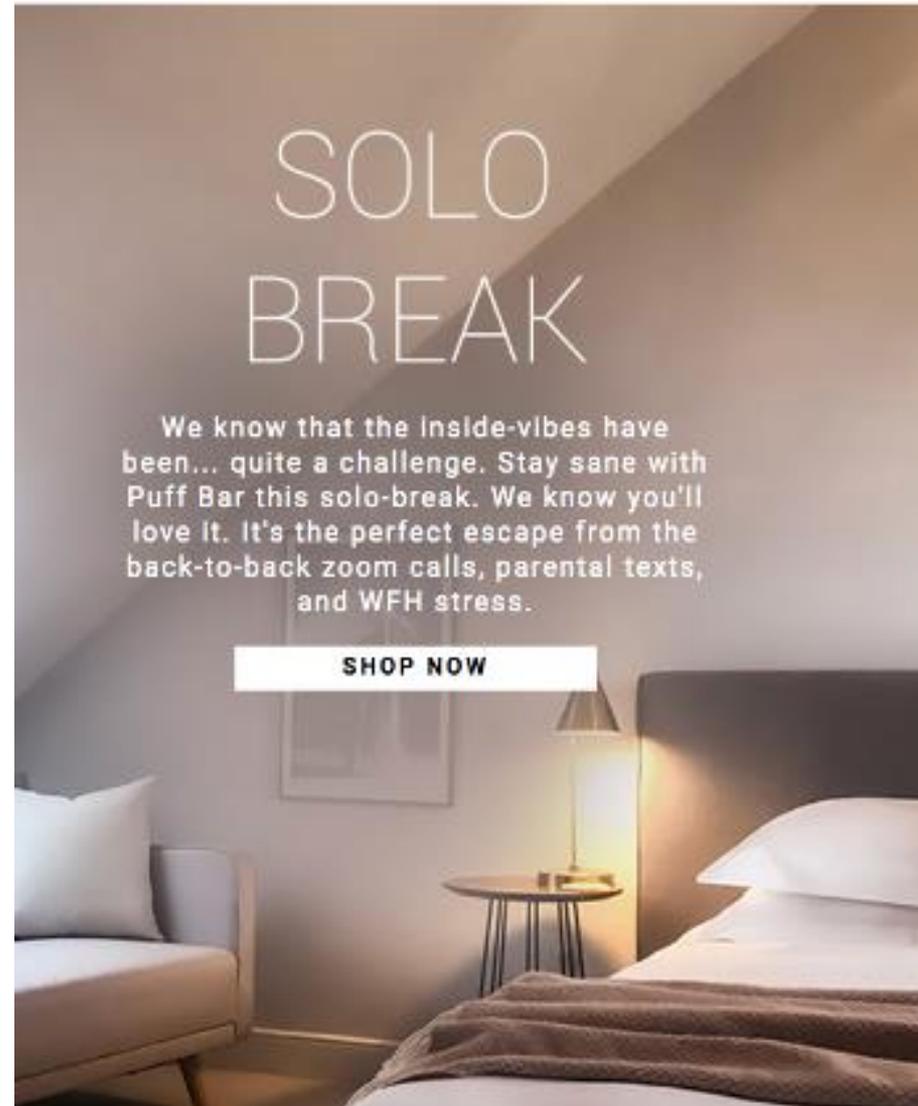


Image: Puff Bar Ad

Synthetic Nicotine E-Cigarettes

Created in a lab and is not from tobacco leaves

- Very addictive

Created to **avoid future FDA regulation**

- Synthetic nicotine is not from tobacco so cannot be regulated as a tobacco product

TIME HEALTH

Some Vaping Companies Are Turning to Synthetic Nicotine to Outsmart the FDA

Prior to
FDA
Removal
July 2020



Relaunch
Claiming
Exemption
From
FDA
Regulation
February 2021
"Tobacco-Free"
Nicotine



image: PAVE meeting

E-Cigarettes (Vapes) Are Dangerous

- Very **addictive**
- Have some of the **same chemicals as regular cigarettes**
- People who use e-cigarettes are **4x more likely to smoke regular cigarettes**
- All of the **harms** e-cigarettes can cause are still unknown
 - **More scientific studies are needed**



Vape Ain't Safe!

More than 7,700 flavors of vapes exist, including fruit and sweet flavors that appeal to children and youth

Most Vapes contain nicotine. Nicotine is a highly addictive, harmful drug.

Dont Let The Colors Fool You

Designed By LJ Downs Graphic Communications, Forrest Career: Technology Center

Presented By the St.Mary's County Health Department Funded By Maryland Cigarette Restitution Fund Program

E-Cigarettes and Quitting

- Not proven to help people quit cigarettes
 - People who smoke e-cigarettes are **4x** more likely to smoke regular cigarettes



Types of Smokeless Tobacco

Chewing Tobacco

- Also called chew, spitting tobacco, or spit
- May be flavored
- Sweeteners added
- Placed between the cheek and gum

Snuff

- Also called dip
- May be flavored
- Placed along the gumline
- Dry snuff can be snorted

Snus

- Pronounced "snoos"
- Type of moist snuff
- Placed between the cheek and gum

Loose Leaf



Plug



Twist



Moist snuff



Dry snuff



SNUS (Portioned)



SNUS (Portioned)



SNUS (Loose)

Images: FDA

Types of Smokeless Tobacco

Dissolvable tobacco

- Powder tobacco made into shapes
- Can have sweeteners or flavoring
- Chewed or held in the mouth until it dissolves
- Not the same as nicotine lozenges used to quit smoking

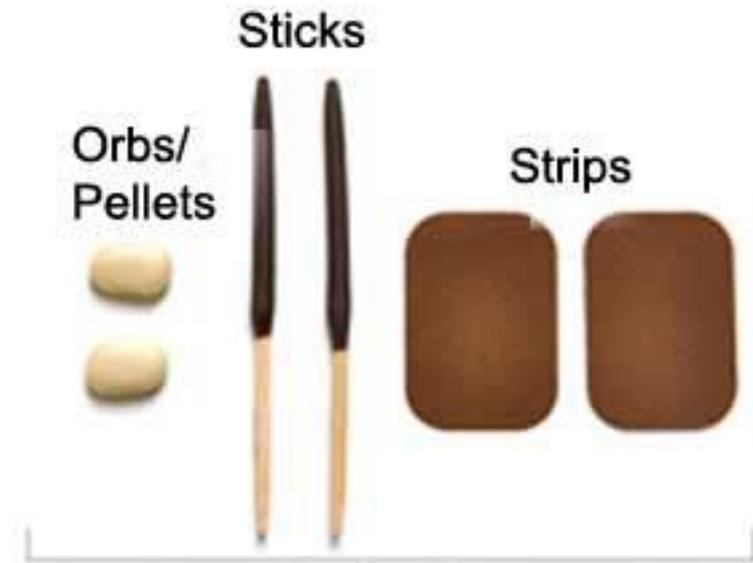


Image: FDA

Harms of Smokeless Tobacco

- Addictive
 - People who use smokeless tobacco get as much or more nicotine as people who smoke cigarettes
- Increase risk of leukoplakia
 - Small white patches in your mouth that can become cancer
- Have more than 30 chemicals linked to cancers of the:
 - Mouth
 - Throat
 - Pancreas
 - Stomach
 - Bladder



Regular use of cigarettes, cigars, **chewing tobacco** and other tobacco-containing items can heighten a person's risk of developing **colon cancer**.

Moffit Cancer Center moffit.org

Smokeless Tobacco and Quitting

- Not recommended as a way to help people quit cigarettes!
- Many of the same risks as cigarettes and others specific to smokeless tobacco

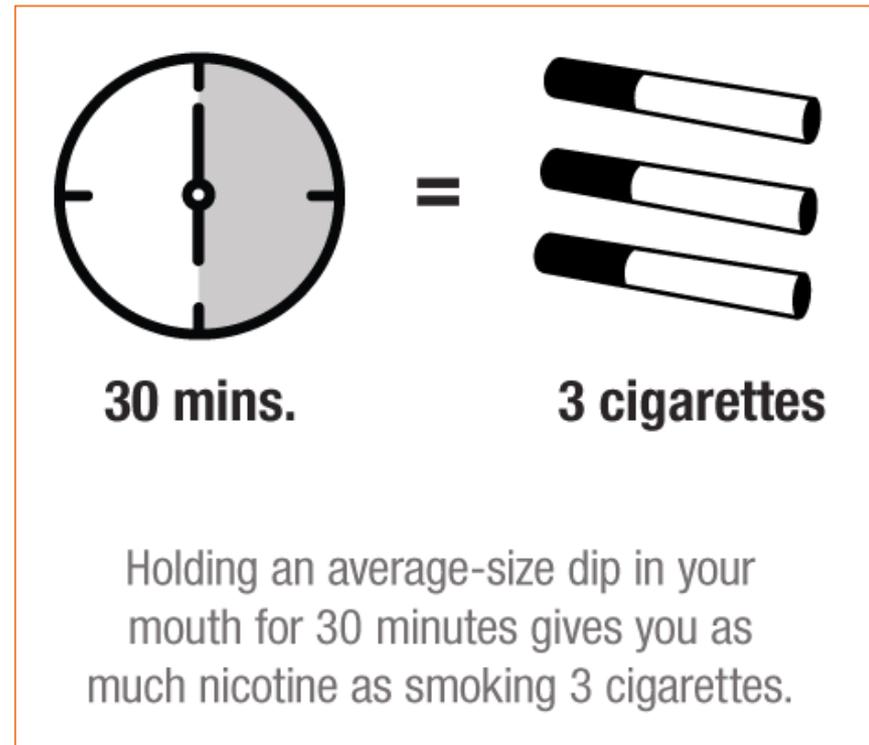


Image: Tobacco Stops With Me .

Tobacco Use is Dangerous

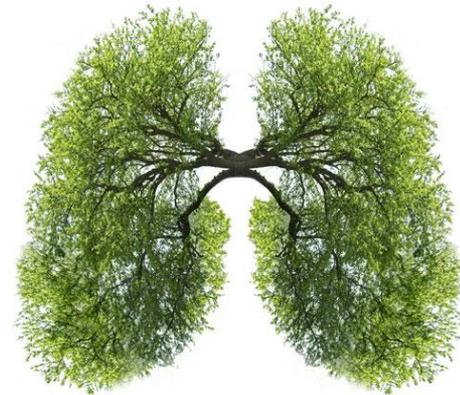
There are no harmless tobacco products!



You Can Lower Your Risk of Lung Cancer

- Be tobacco-free – choose not to use tobacco
- Protect yourself and your family from secondhand smoke
- If you use tobacco, it is never too late to quit
 - For free help:
 - Georgia Quitline: 1-877-270-STOP
 - [smokefree.gov](https://www.smokefree.gov)

BREATHE



E A S Y

Image: Georgia Tech

Resources to Help You Quit Tobacco

**TOBACCO CESSATION
SERVICES 706.721.0456**



Let us help you quit tobacco for life!

Services include a health exam and cessation classes.

- Clinics - open three afternoons a week.
- Classes - held once a week for 4 weeks.

Open to:

- 18 years of age or older
- General public
- Employees from area businesses, agencies, organizations or governments
- University and college students

Registration required. Call 706.721.0456

augusta.edu/cancer/tobaccofree



AU Cessation Program

1. Make an appointment

2. Clinic Visit and Health Assessment

3. Cessation Classes

- Registration required
- 8 classes, 1 hour per week
- Virtual classes available during the COVID-19 pandemic

Website: augusta.edu/cancer/tobacco

Email: stoptobacco@augusta.edu

Available to people 18 years & older

More Resources

- **National Cancer Institute** cancer.gov
- **American Society of Clinical Oncology (ASCO)** Cancer.net
- **American Cancer Society** cancer.org
- **American Lung Association** lung.org
- **Americans for Nonsmokers' Rights** no-smoke.org
- **American Academy of Pediatrics (AAP)** aap.org and healthychildren.org
- **Centers for Disease Control and Prevention (CDC)** cdc.gov
- **Cancer Research UK** cancerresearchuk.org
- **Food and Drug Administration** fda.gov
- **Campaign for Tobacco-Free Kids** tobaccofreekids.org;
<https://www.tobaccofreekids.org/assets/factsheets/0379.pdf>
- **Stanford School of Medicine** – Stanford Research Into the Impact of Advertising (SRITA) tobacco.stanford.edu/tobacco_main/index.php
- **The Truth Initiative** truthinitiative.org
- **Medline Plus** U.S. National Library of Medicine National Institutes of Health
- **Stanford Research into the Impact of Tobacco Advertising** tobacco.stanford.edu/tobacco_main/index.php
- **US Surgeon General “Know the Risks E-Cigarettes & Young People”** e-cigarettes.surgeongeneral.gov/knowtherisks.html



augusta.edu/cancer/community

Christine O'Meara 706-721-8353
comeara@augusta.edu

Maryclaire Regan 706-721-4539
mregan@augusta.edu