



**GEORGIA
CANCER CENTER**
AUGUSTA UNIVERSITY



E-Cigarettes: Reality Check

Cancer Information and Awareness

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What Are Electronic Cigarettes (E-Cigarettes)?

- Nicotine products that use a battery to heat a liquid mixture of chemicals, sweeteners, and flavors to make aerosol (vapor)
- Called “vapes” because the aerosol looks like a fine mist vapor
- Using e-cigarettes is called "vaping"
- **99%** of e-cigarettes have nicotine

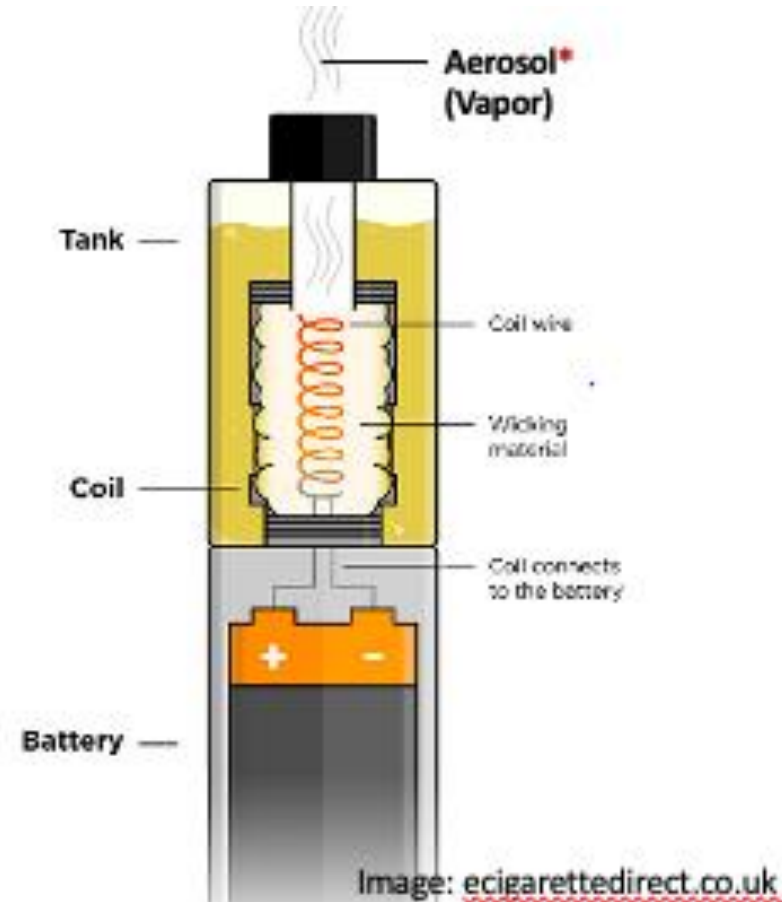
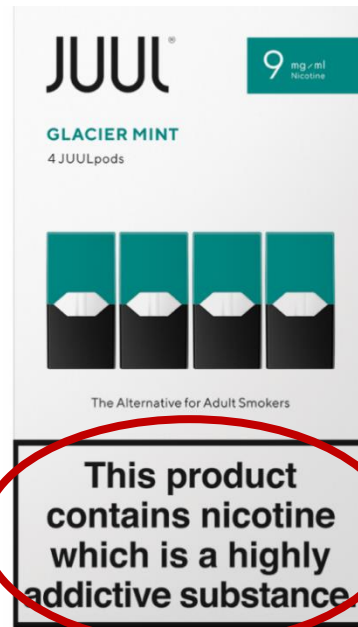


Image: ecigarettedirect.co.uk

Reusable E-Cigarettes

JUULs are the **most common reusable** e-cigarette

- High levels of nicotine —> highly addictive
- In 2020, the FDA* banned reusable, refillable e-cigarettes like JUUL from being flavored, now JUULs come only in menthol and tobacco flavors



*US Food and Drug Administration (FDA)

Disposable E-Cigarettes

- Made to avoid the 2020 FDA ban
- Disposable e-cigarettes are pre-filled and pre-charged and are designed for one-time use
- Are engineered to have many flavors including candy and fruit flavors



Disposable E-Cigarettes

- Becoming the most used e-cigarette among youth
 - High levels of nicotine —> highly addictive
 - Flavors
 - Cheaper than reusables
 - Marketed on social media to appeal to youth (*see image*)
- Puff Bars are the most common disposable e-cigarette
 - Teens report using Puff Bar over JUUL by 5 to 1

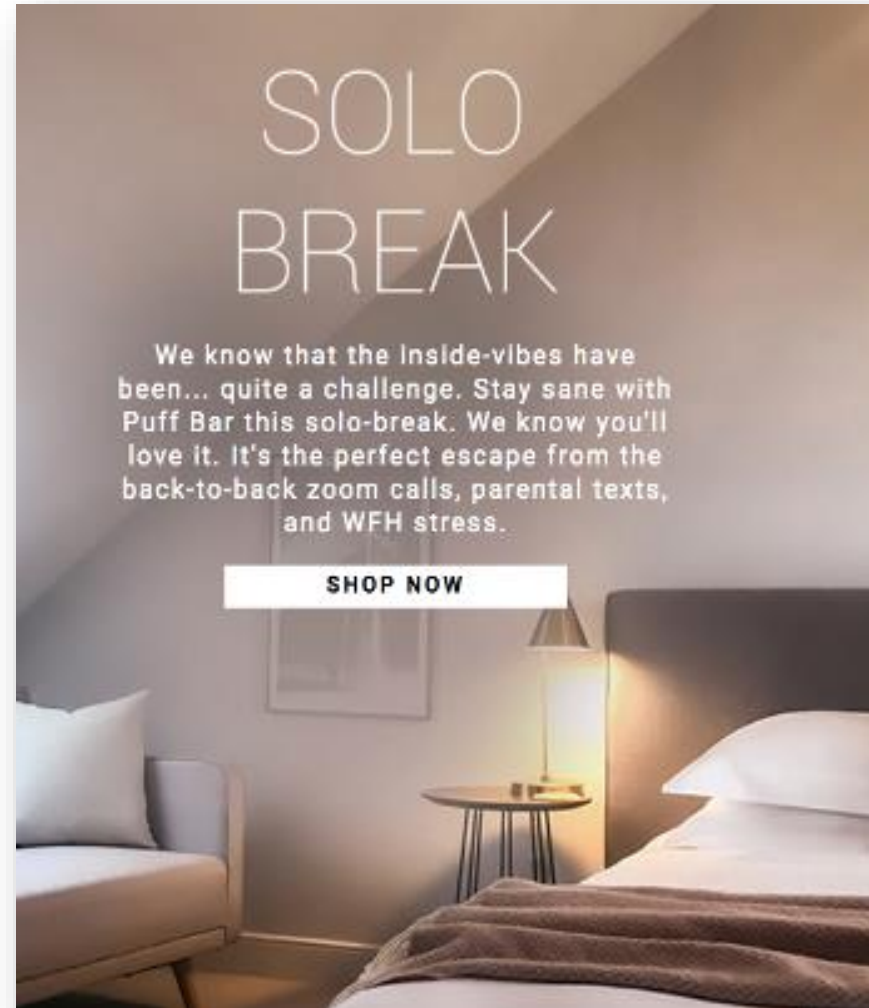


Image: Puff Bar Ad

Synthetic Nicotine E-Cigarettes

Created in a lab and not made from tobacco leaves

- Highly addictive

Created to avoid FDA regulation

- Synthetic nicotine is not from tobacco, so it is not currently regulated as a tobacco product

TIME HEALTH

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



What Do E-Cigarettes Look Like?

Designed to look like other tobacco products like **cigarettes, cigars, or pipes**

Disguised as everyday items like **USB flash drives, pens, or school supplies**

Larger devices look different and the liquids can be changed by the user

Disposable E-cigarette



*Synthetic nicotine e-cigarettes look more like rechargeables

Rechargeable E-cigarette



Tanks & Mods



Image: CDC

What Do E-Cigarettes Look Like?

Easy to miss

- Newer e-cigarettes are made to look like everyday items
- Aerosol (vapor) does not always smell like tobacco
 - Can smell like mint, fruit, candy or other sweets...

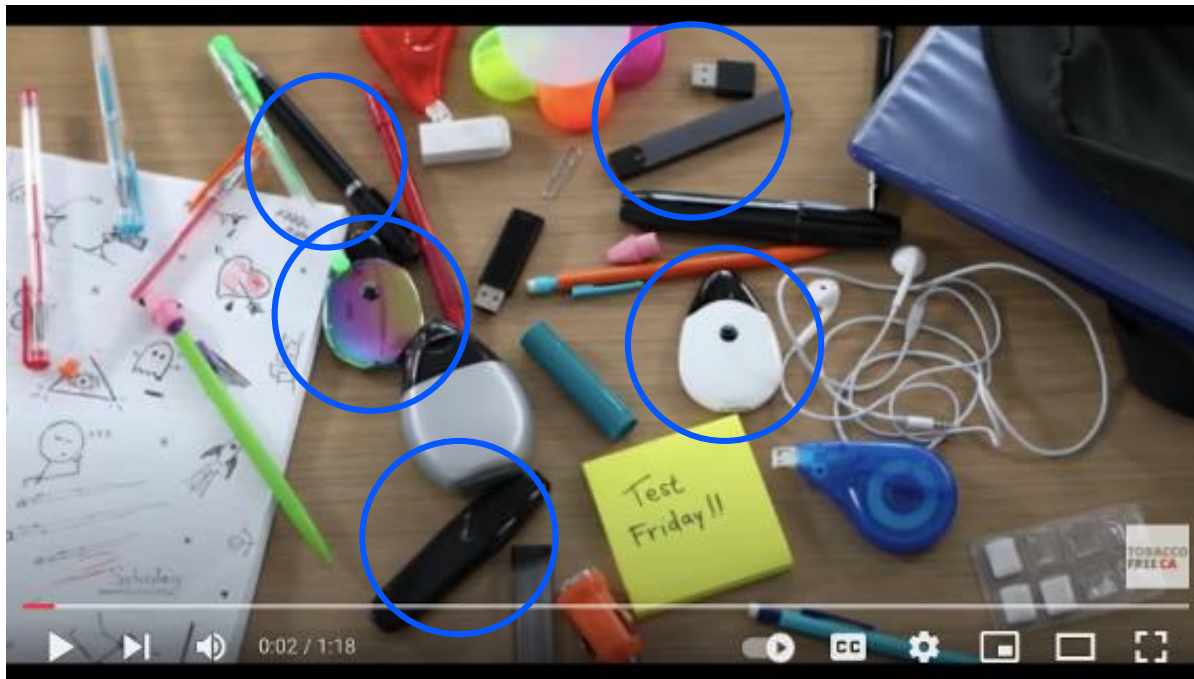


Image from video: Flavored Tobacco I Hiding in Plain Sight, Tobacco Free CA

Who Uses E-Cigarettes?

Adults

Most do not use tobacco.

Among those who do use:

- E-cigarettes are the **2nd most used** tobacco product, combustible cigarettes is the most used
- Highest use in adults, ages 18-24 years

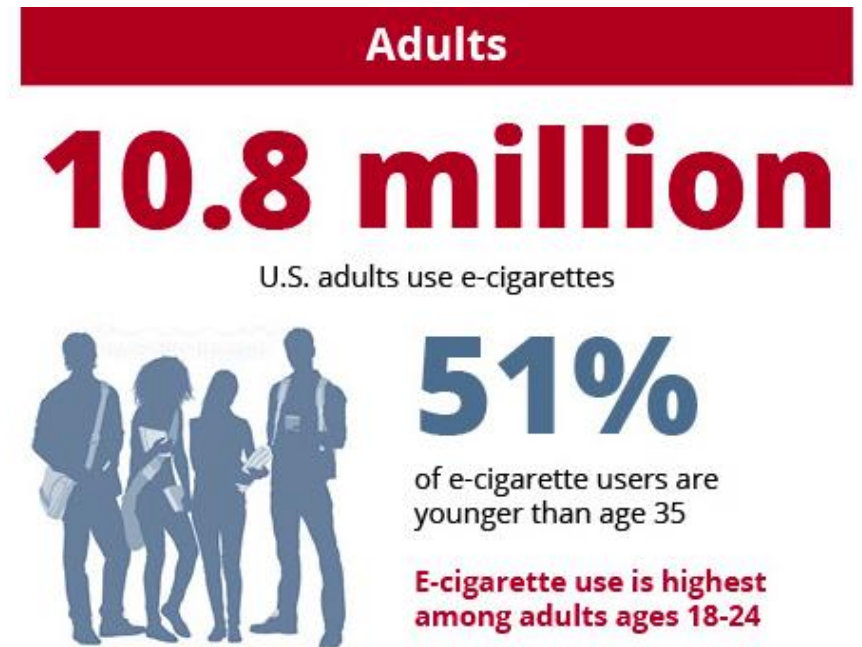


Image: The EX Program

Who Uses E-Cigarettes?

Young people

Most do not use tobacco nor e-cigarettes!

Among those that say they use tobacco products

- E-cigarettes are the most used
 - 1 in 5 high school students
 - 1 in 20 middle school students



The graph shows:
Different tobacco products used by young people.

- Cigars are the 2nd most often used tobacco product followed by cigarettes

Why Do Young People Use E-Cigarettes?

Youth and Young Adults (2016)

- **Curious**
- **Flavors**
- **Think it is low harm**

Middle & High School Students (2019)

- **Curious**
- **Friend or family use**
- **Flavors**



E-cigarettes Are Unsafe for Everyone

But they are
very unsafe for:

- young people
- pregnant women
- non-tobacco users

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 Young People

Nicotine in e-cigarettes is **toxic to and harms the developing brain.**

Nicotine = brain poison

- Creates **addiction**
- **Changes brain cell activity** in adolescents
- Causes **problems with attention, learning, and memory**
- **Worsens mood disorders and impulse control**
- Increases **risk for addiction to other drugs**



These are life-long, health effects.

E-Cigarettes and Pregnant Women

Nicotine in e-cigarettes is a health threat to:

- Pregnant women
- Unborn babies
 - Poor growth
 - Damages developing baby's brain and lungs
- Babies after birth
 - Nicotine can pass on into breast milk
 - Nicotine in breast milk can affect baby's heart rate and blood pressure



Nicotine in e-cigarettes can harm your baby's brain.

you quit  two quit

 FREE 24/7 SUPPORT:
1-800-QUIT-NOW

Dangers of E-Cigarettes

People who use e-cigarettes are **4 times** more likely to smoke **regular cigarettes**.

- $\frac{1}{2}$ of all people who smoke cigarettes long-term **die from smoking**
- Cigarettes cause **16 kinds of cancer** and many other diseases (heart disease, stroke, asthma) and health problems



Image: wildpixel

Dangers of E-Cigarettes

- Weaken immune system
- Damage blood vessels and arteries
 - Blood vessels become stiff and put more stress on the heart
- Irritate lungs and causes serious damage to lungs
- Greatly increase chances of getting **COVID (5-7 times** more likely among teens and young adults ages 13–24)

Scientists are **still studying** the damage e-cigarettes can cause.

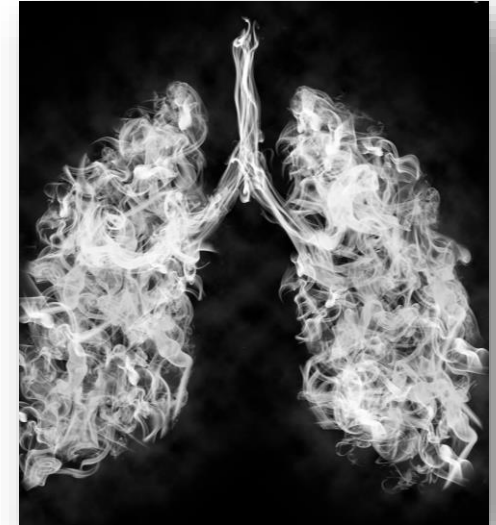


Image: kison pascal



Dangers of E-Cigarettes

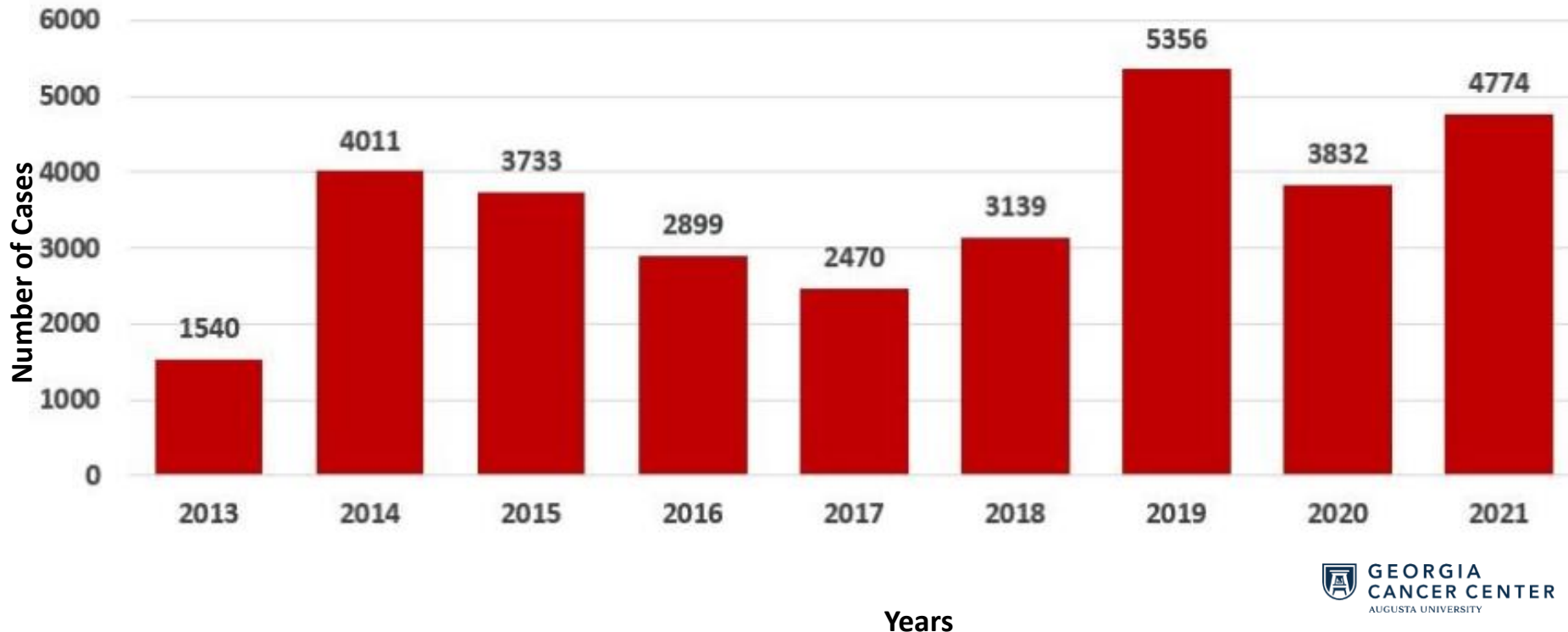


Cause injury when you

- Breathe in aerosol (vapor)
- Drink e-liquid
- Spill e-liquid on skin or in eyes

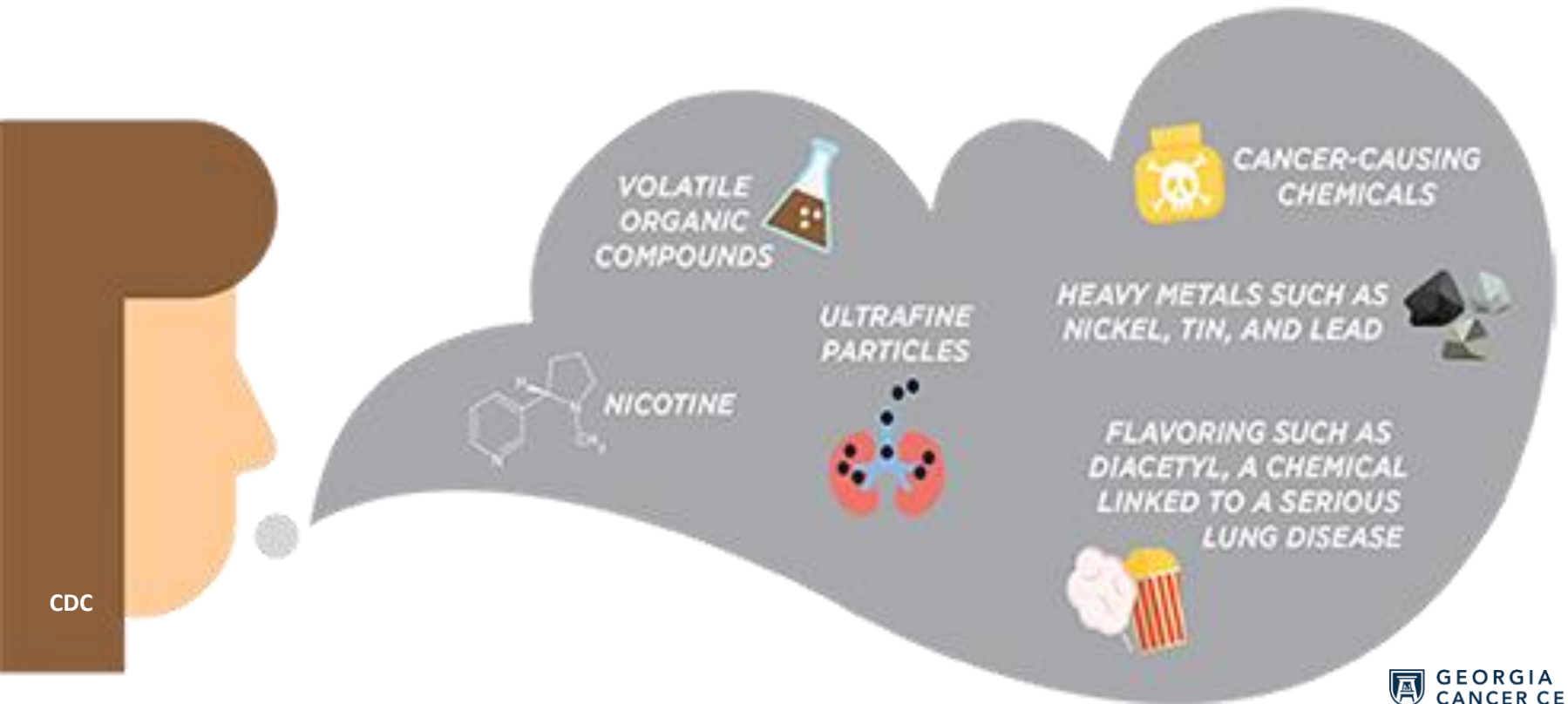
Electronic Cigarette and Liquid Nicotine Cases

All Ages



Dangers of E-Cigarettes

- Aerosol (vapor) has harmful and toxic chemicals and metals *as shown in the picture below*
- Secondhand aerosol (vapor) is harmful, just like secondhand smoke



Dangers of E-Cigarettes: Reality Check

Daniel Ament (16 years old)

- Active teen **athlete** (runner and sailor)
- Started vaping as a "social user" mostly on weekends
- **Vaped daily** for almost 1 year
 - Usually vaped nicotine in JUULs
 - Also vaped THC
- **Developed serious, life-threatening, permanent lung damage** from e-cigarettes
 - On life support for 29 days



Dangers of E-Cigarettes: Reality Check

Daniel Ament - 1st patient to get a **double lung** transplant for a vaping-related illness

(picture on left show his lungs have no air (black); on right his new lungs are filled with air)

- Daniel's doctor said: *"This lung was literally solid, as if it was made out of truck-tire rubber."*
- **Lung transplant saved Daniel's life**
- Double lung transplant patients survive a median of 7 years

- **Fight4Wellness.com** – Daniel started a company to help kids not use vapes or to quit vaping
 - Educates about dangers of vaping and substance abuse

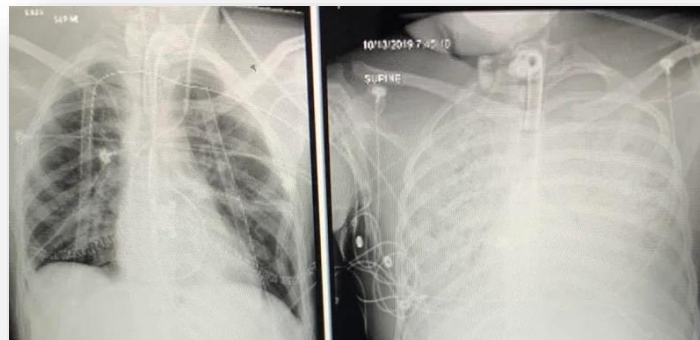


Image: Ament's lung x-rays, courtesy of the Ament family

Warning: Graphic Images on the Next Slide



Dangers of E-Cigarettes: Burns

Exploding e-cigarettes:

Can cause serious injuries – burns, broken bones, cuts, shattered teeth, and property damage due to fires

2,035 explosions & burn injuries 2015-2017 ER Depts.*



Male (36 years old)
2nd degree burns to
leg and burns to palm



Andrew (30 yrs. old)
9 teeth lost



Cordero (29 yrs. old)
broken neck, spinal
surgery, tooth loss



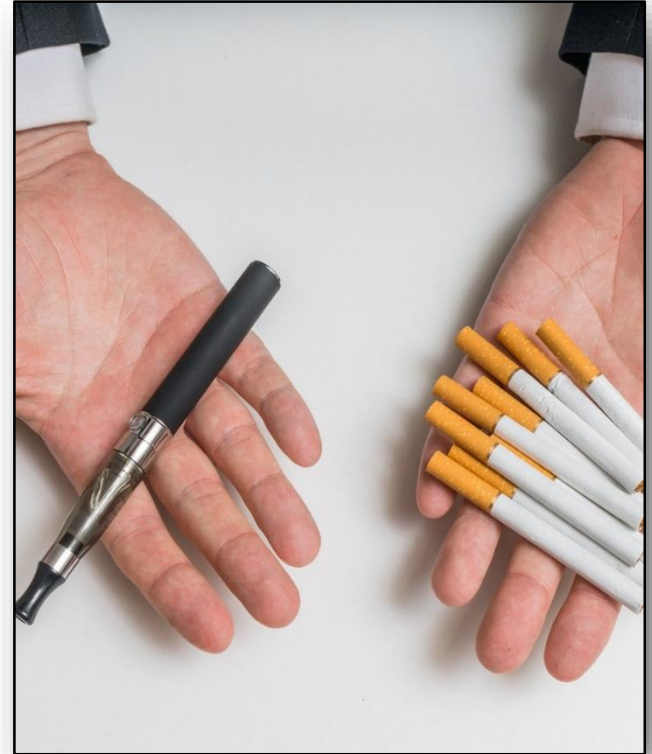
Tallmadge (38 yrs. old)
died of a “Projectile
wound to the head,”
burns on 80% of his
body

Are E-Cigarettes Safer than Cigarettes?

E-cigarettes are not safe.

E-cigarettes have fewer toxic chemicals than regular cigarettes,
BUT
cigarettes are very dangerous

- E-cigarettes pose their own unique harms and health risks
 - Have cancer-causing chemicals
- People who use e-cigarettes are **4 times more likely** to smoke cigarettes
- Cigarettes cause 16 kinds of cancer and many other health problems throughout the body



You Can Prevent E-Cigarette Use: Be a Role Model

- Don't use tobacco products - *be tobacco-free*
- Protect children from secondhand smoke and e-cigarette aerosol
- If you use tobacco, it is never too late to quit!

For free help:

- **Georgia Quitline: 1-877-270-STOP (7867)**
For ages 13 years and older
- www.smokefree.gov

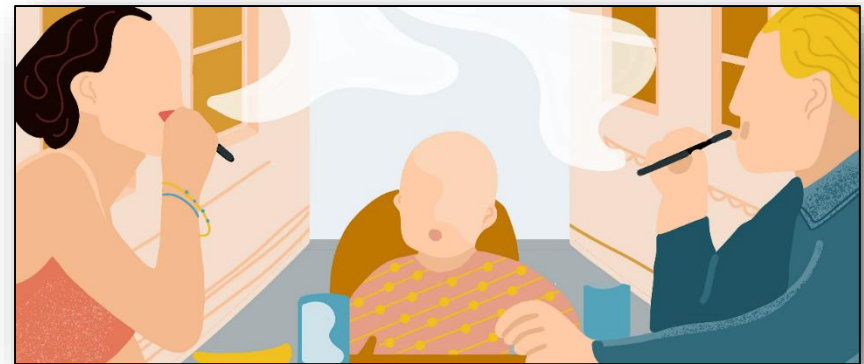


Image: Caitlin-Marie Miner Ong

You Can Prevent E-Cigarette Use: Talk with Your Child

- **About why e-cigarettes are harmful for them**

- Get the “Vaping Conversation Guide” from the American Lung Association
www.Lung.org
- U.S. Surgeon General’s Tip Sheet for Parents
<https://e-cigarettes.surgeongeneral.gov>



Image: Lung.org

- **About resources**

- Teen.smokefree.gov

It's never too early or too late – start the talk today!

You Can Prevent E-Cigarette Use: Involve Your Community

- Ask your child's **doctor** to talk with them about the dangers of e-cigarettes
- Talk with your child's **teachers and school leaders** about tobacco-free school rules and how tobacco prevention is taught
- Policy change – Talk to elected officials;
Take action to change policies that do not protect children from tobacco products and e-cigarettes



Image: Tartila

Quitting Vaping and Smoking Resources

**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 **8** 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



Augusta University 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 during the COVID-19 pandemic

Website: augusta.edu/cancer/tobacco

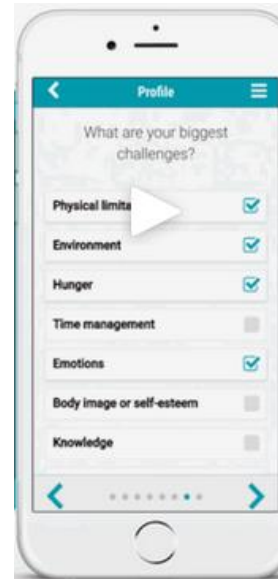
Email: stoptobacco@augusta.edu

Available to people 18 years & older

Quitting Vaping and Smoking Resources

DITCH JUUL

- Free, text message program
- **Access**
Text "QUIT" to 202.804.9884
Text "DITCHJUUL" to 88709
- [This is Quitting thisisquitting.com](http://thisisquitting.com)
- [BecomeAnEX®](http://BecomeAnEX.com)



- Evidence-based mobile app
- Cigarettes
- e-Cigarettes/Vapes & Youth
- Private, personalized
- **Access**

2morrowinc.com/aca-tobacco-smoking



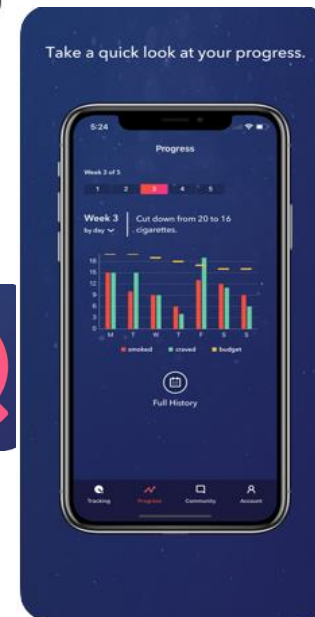
Georgia Tobacco Quit Line

1-877-270-STOP (7867)

Free. Confidential. Ages 13 yrs. and older.

Quitting Vaping and Smoking Apps

- **FREE**
- Track smoking, cravings, moods
- Monitor progress
- Identify smoking triggers
- Challenges
- Nicotine withdrawal
- Tailored tips to quit
- Develop strategies
- Motivations & Achievements
- Community support and coaching
- Inspiration



**LIVESTRONG
MyQuit Coach**

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

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