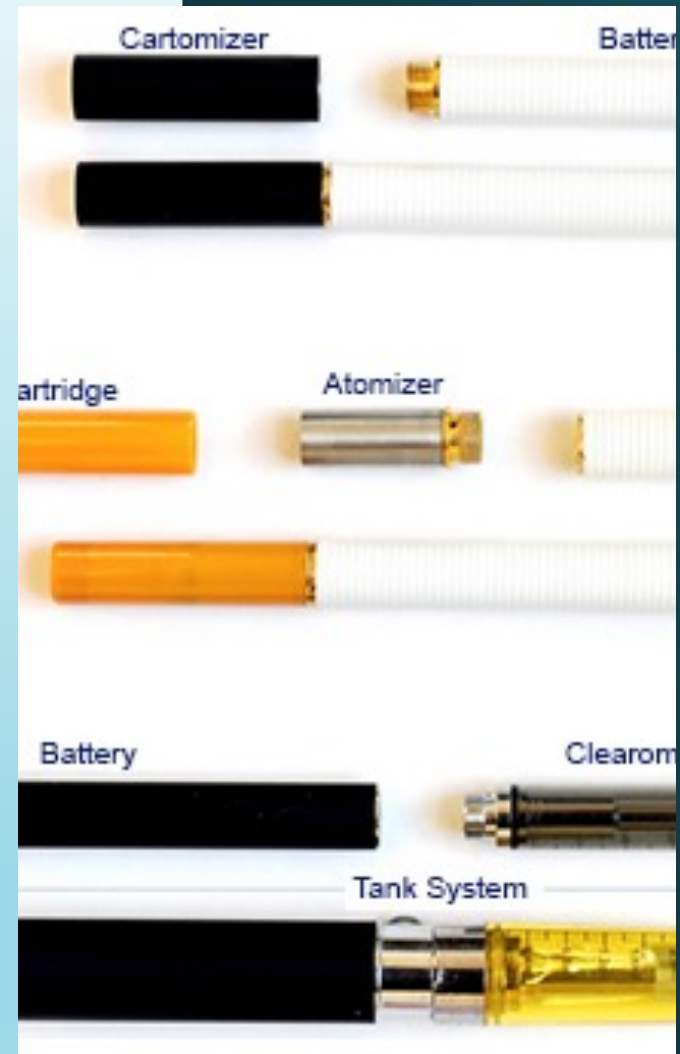


# E-Cigarettes, Vaping, and Products to Disguise: What Can We Do?

Alabama Department of Public Health  
Tobacco Prevention & Control Branch  
Revised May 2022

# What is Vaping?

- Vaping is the act of using:
  - Vape pens
  - E-cigs
  - Vapes
  - E-pipes and E-Cigars



# How Does Vaping Work?

E-Cigs produce aerosol by heating liquid that contains nicotine – the addictive drug in regular tobacco products

Users inhale this aerosol into their lungs

Bystanders can also breathe in Secondhand Aerosol when the user exhales

Using an e-cigarette is sometimes called 'vaping'

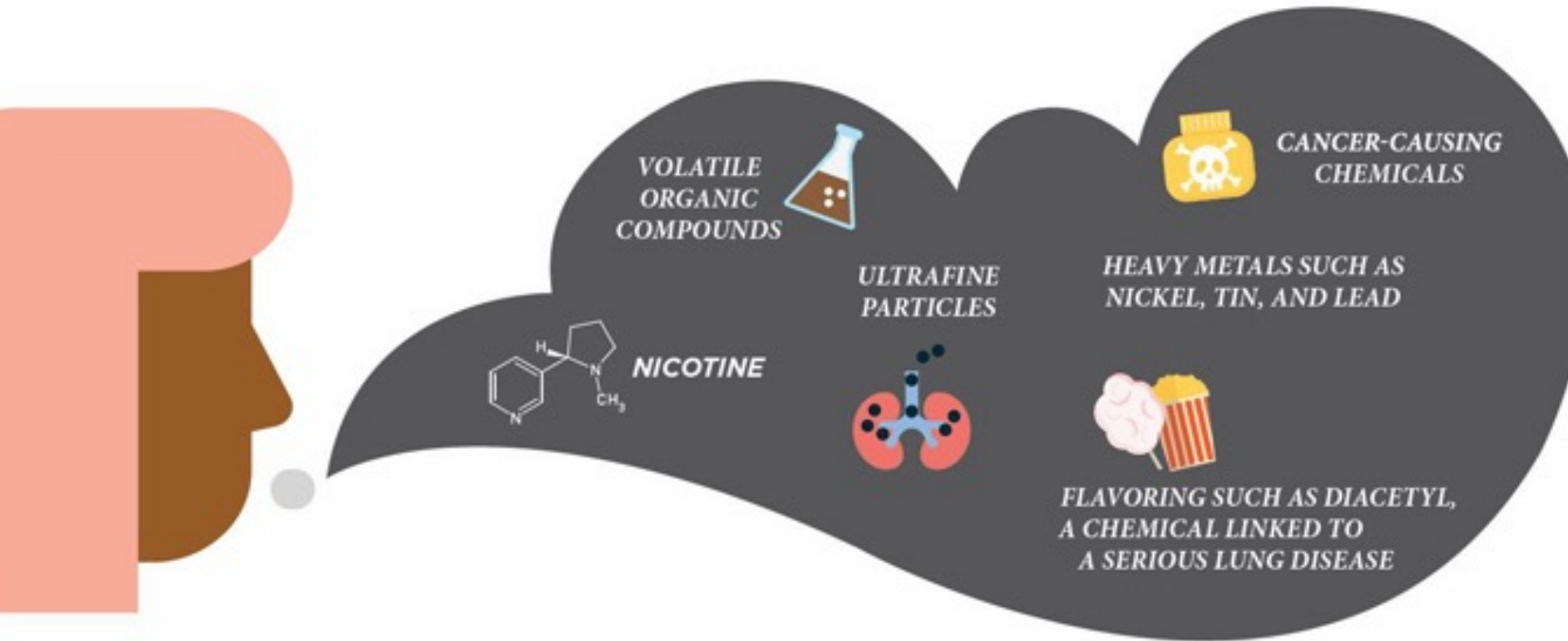
# What is in E-Cigarette Vapor?

E-Cigarette aerosol is not just harmless 'water vapor'

Chemicals are inhaled by the user and exhaled as Secondhand Aerosol/Secondhand Vape

Manufacturing of e-liquid is not regulated

- 'Zero Percent' solutions can still contain nicotine
- Unknown chemicals used during manufacturing



# E-cigarettes-Not a Safe Alternative to Smoking

E-cigs contain cancer-causing chemicals that can be inhaled by non-users

# E-cigarette Ingredients

Nicotine - highly addictive substance that negatively affects adolescent brain development

Propylene glycol - a common additive in food; also used to make things like anti-freeze, paint solvent, and artificial smoke in fog machines

Carcinogens- chemicals known to cause cancer, including acetaldehyde and formaldehyde

Acrolein – a herbicide primarily used to kill weeds, can cause irreversible lung damage

Diacetyl – a chemical linked to a lung disease called bronchiolitis obliterans aka "popcorn lungs"

Diethylene glycol – a toxic chemical used in antifreeze that is linked to lung disease

Heavy metals such as nickel, tin, lead

Cadmium – a toxic metal found in traditional cigarettes that causes breathing problems and disease

Benzene – a volatile organic compound(voc) found in car exhaust

Ultrafine particles that can be inhaled deep into the lungs

# Harmful affects of E-cig Use

- Body Organs
- Behavior
- Immune System
- Poisoning Risk





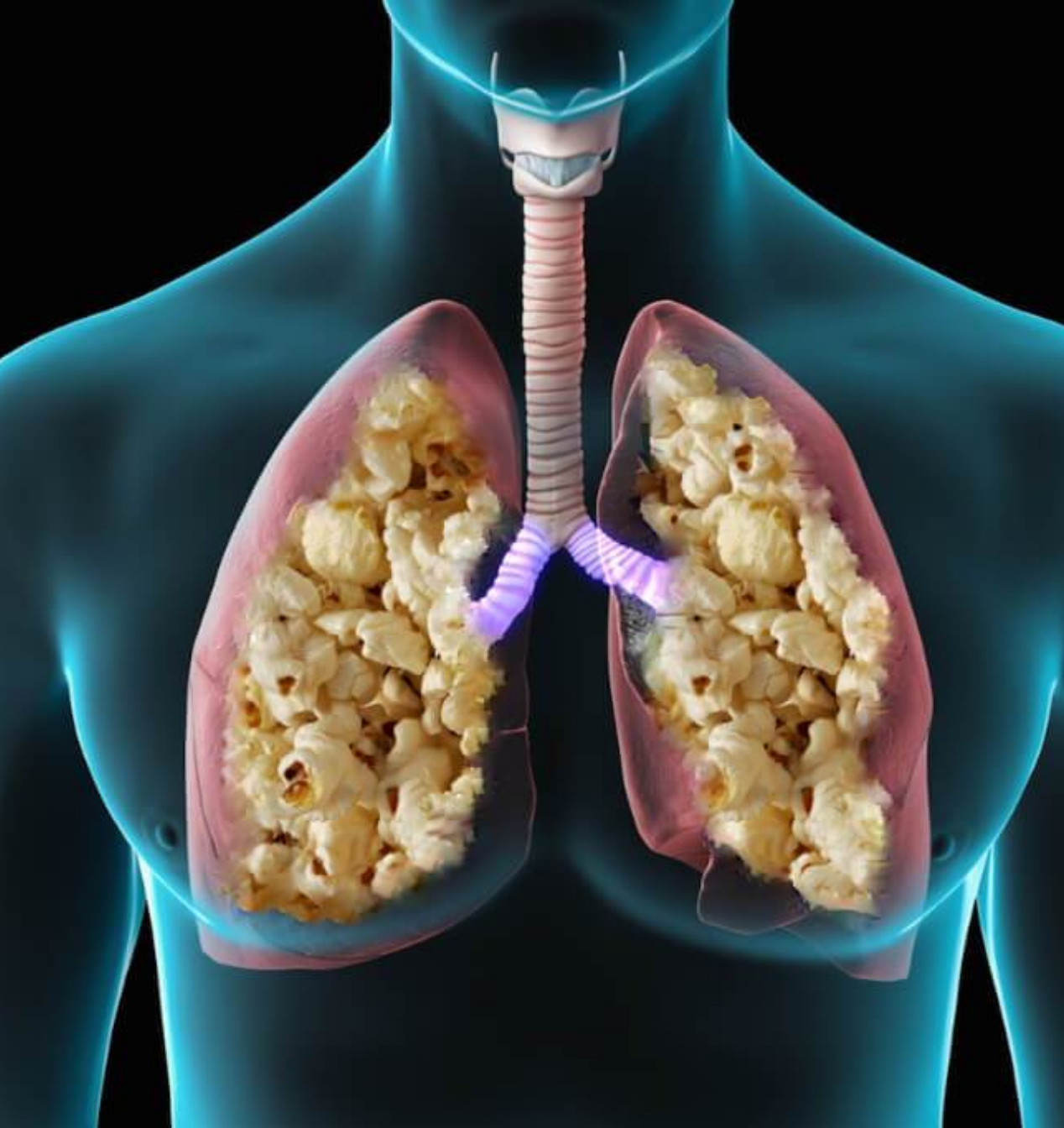
This Photo by Unknown Author is licensed under [CC BY-SA-NC](#)

Within the first  
year

- Wheezing
- Dry cough
- Scratchy throat'
- Voice changes
- Moodiness
- Chest pain

\*\*If the tobacco is flavored in the juice, there is 170% greater odds of developing these symptoms.





# Lung Affects

- Popcorn Lungs is a chronic lung disease that causes scarring of tiny air sacs in your lungs.
- Popcorn lungs can cause airway to thicken and narrow.
- Serious cases of popcorn lungs can cause symptoms similar to COPD(Chronic Obstructive Pulmonary Disease) such as wheezing, coughing and shortness of breath

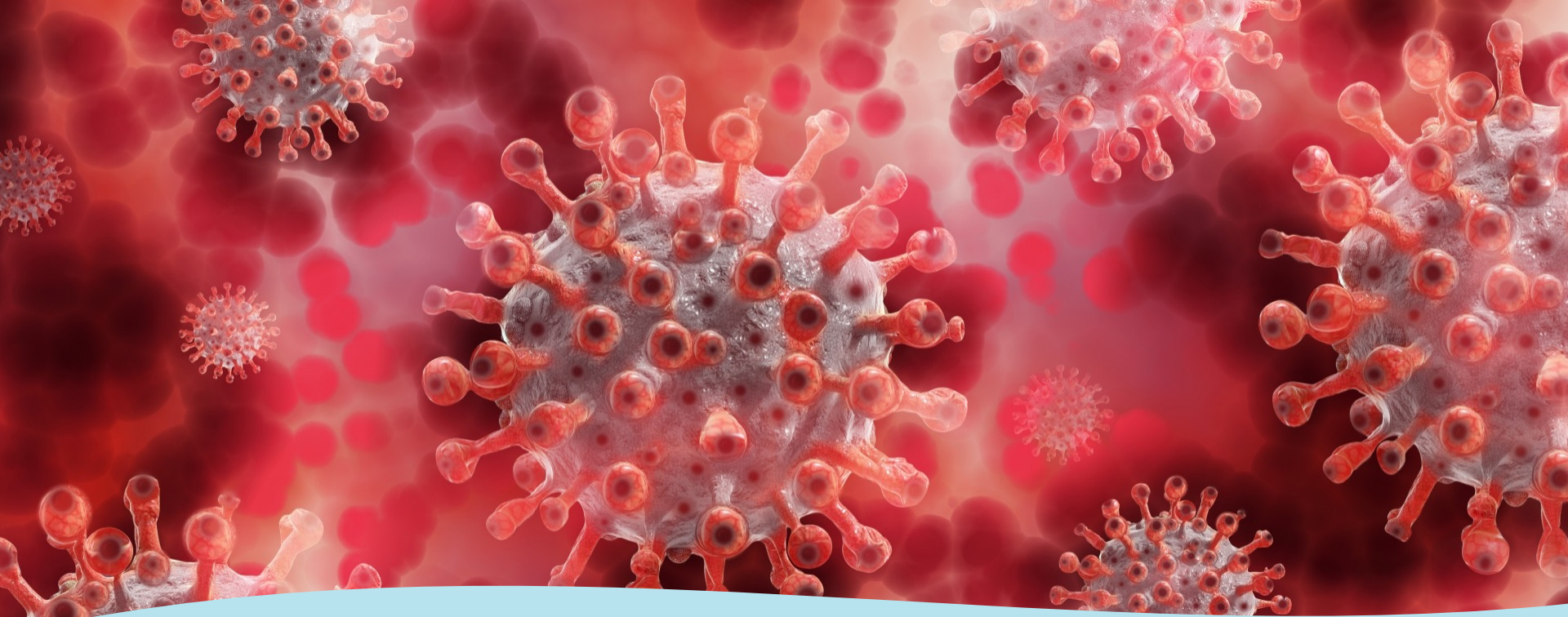
Vaping can increase the  
risk for lung cancer.

## Lung Affects



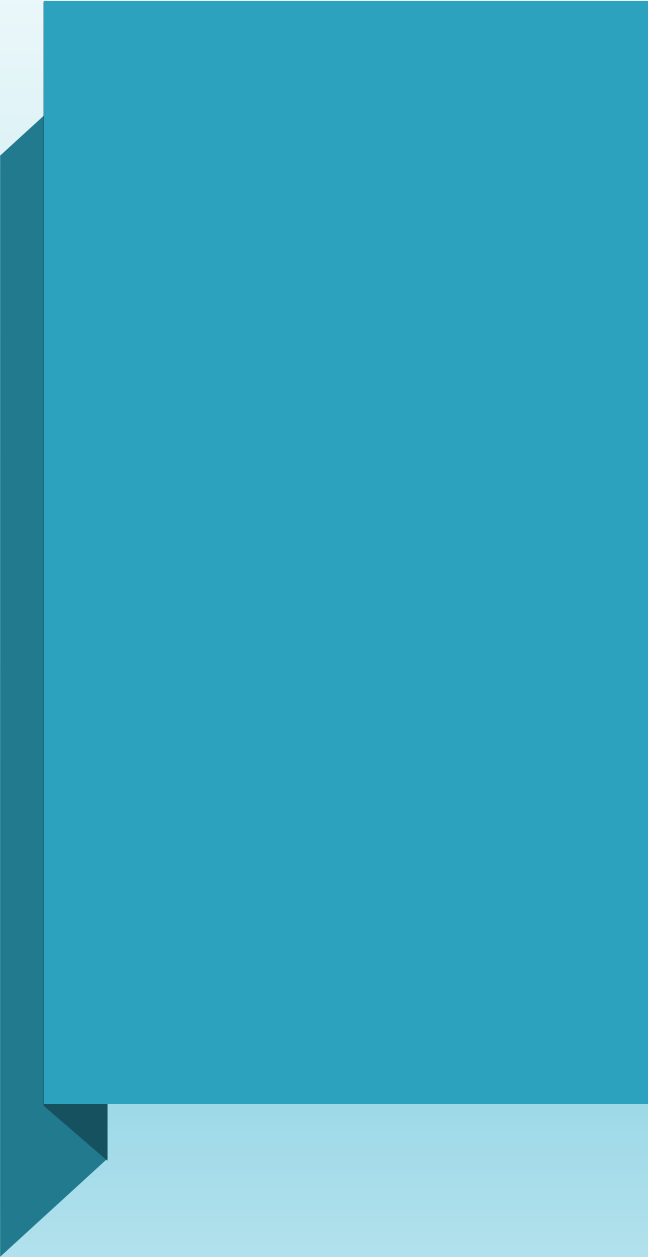
# Smoking and Vaping Make COVID 19 Infections Worse

- COVID 19 is a viral infection that targets the lung.
- People who smoke or vape have an increased risk of getting COVID-19 and having a more serious illness from the infections.
- Smoking nearly doubles the risk of severe illness from COVID 19.



# Smoking and Vaping Make COVID 19 Infections Worse

- Weakens the immune system
  - Smoking and vaping damages the white blood cells that help fight infections.
  - Smoking and vaping make your body produce more of a certain enzyme. The virus uses this enzyme to attach to the cells in your lung. With more of the enzyme available, it is easier for the virus to take hold.
- Damages the respiratory system
  - Cilia are small hair-like structures that help to keep germs and foreign particles out of the lungs. Smoking and vaping damage the cilia which makes it easier for the virus to enter the lungs.
  - Smoking and vaping cause inflammation and narrowing of the airways.
  - The toxic chemicals in the cigarettes and vapes damage the air sacs of the lungs.

- 
- Teens and young adults who have vaped may be up to **five times** more likely to test positive for COVID-19 than their non-vaping peers, according to *research published in the Journal of Adolescent Health*. Those who reported both e-cigarette and cigarette use in the past 30 days were nearly seven times more likely to test positive and were also almost five times more likely to experience COVID-19-related symptoms compared to those who had never vaped or smoked.

# Smoking and Vaping Make COVID 19 Infections Worse

## Harms the circulatory system

- Smoking damages blood vessels and the heart.
- Vaping damages blood vessels.
- Any damage already done by smoking or vaping could worsen with COVID 19.

## May delay discovery of a COVID-19 Infection

- Example: Someone who smokes or vapes maybe use to coughing and not realize that their coughing could be early symptoms of COVID 19 infection.

# Protecting yourself and others

- If you smoke or vape, you can protect yourself and others from COVID 19
  - Wash your hands often.
  - Avoid crowded places and practice physical distancing. Keep at least six feet away from others.
  - Never share cigarettes or vaping devices with other people.
  - Do not smoke or vape near others.
  - Don't ignore a new cough.

“As with cigarette smoking, vaping can also compromise the respiratory system. This means that people who smoke or vape are more susceptible to lung infections. According to Dr. Humberto Choi, a pulmonologist and smoking cessation specialist at the Cleveland Clinic, recent studies have shown that aldehydes and other components found in vaping liquids can impair the immune function of cells found in the airway and lungs.”

(Teens, Vaping and Coronavirus (COVID-19): Is There a Connection?, Mar. 20, 2020)



# Heart Affects

Vaping reduces the release of nitric oxide by the blood vessels that may result in heart disease.

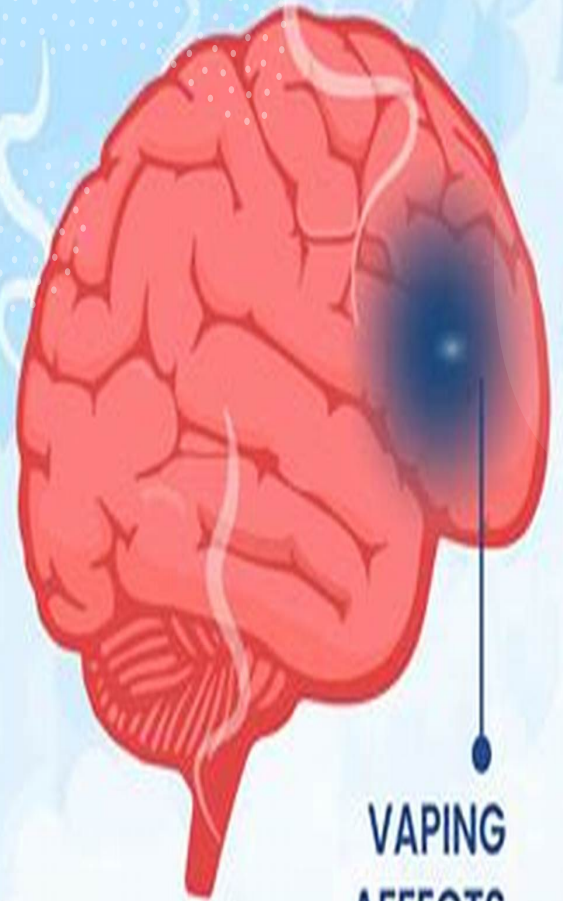


# Brain Affects

## Brain Damage

Prefrontal cortex  
responsible for:

- Critical Thinking
- Decision Making
- Personality
- Moderating social behavior

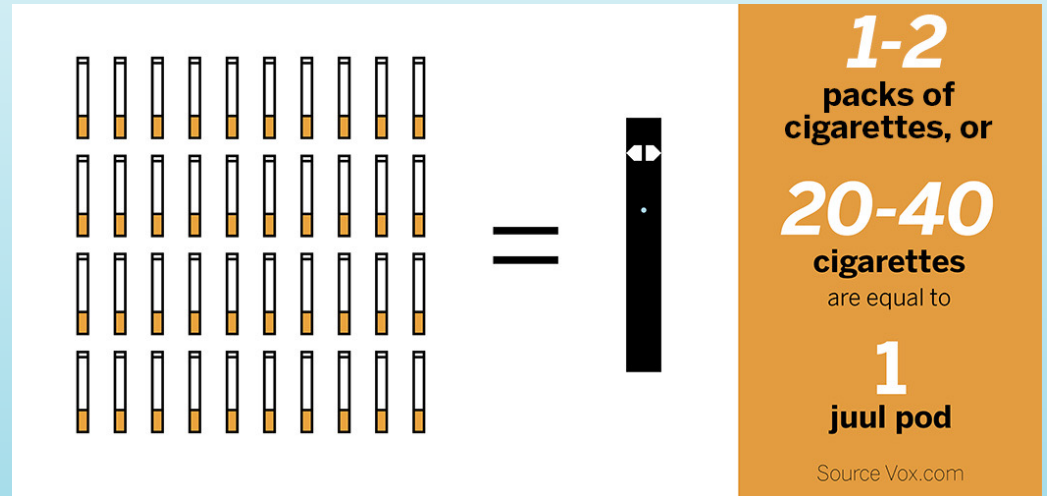


VAPING  
AFFECTS  
PREFRONTAL  
CORTEX

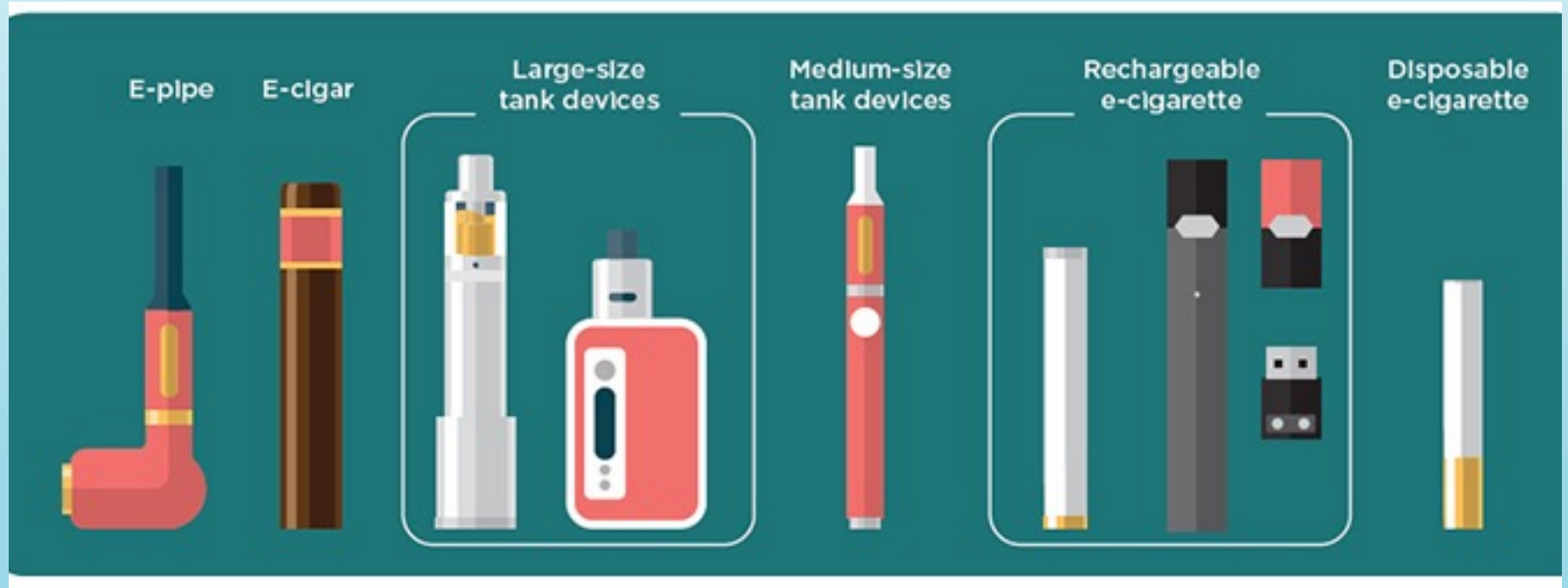
# Are E-Cigs Addictive?

## Yes!

- 1 pod of e-liquid has the same nicotine as 1 pack of cigarettes
- Nicotine is a drug that your body will crave
  - Nicotine has a stronger effect on the developing brains of young people



# ENDS Devices E-Cig = E.N.D.S. Electronic Nicotine Delivery System Generations of the E-cig

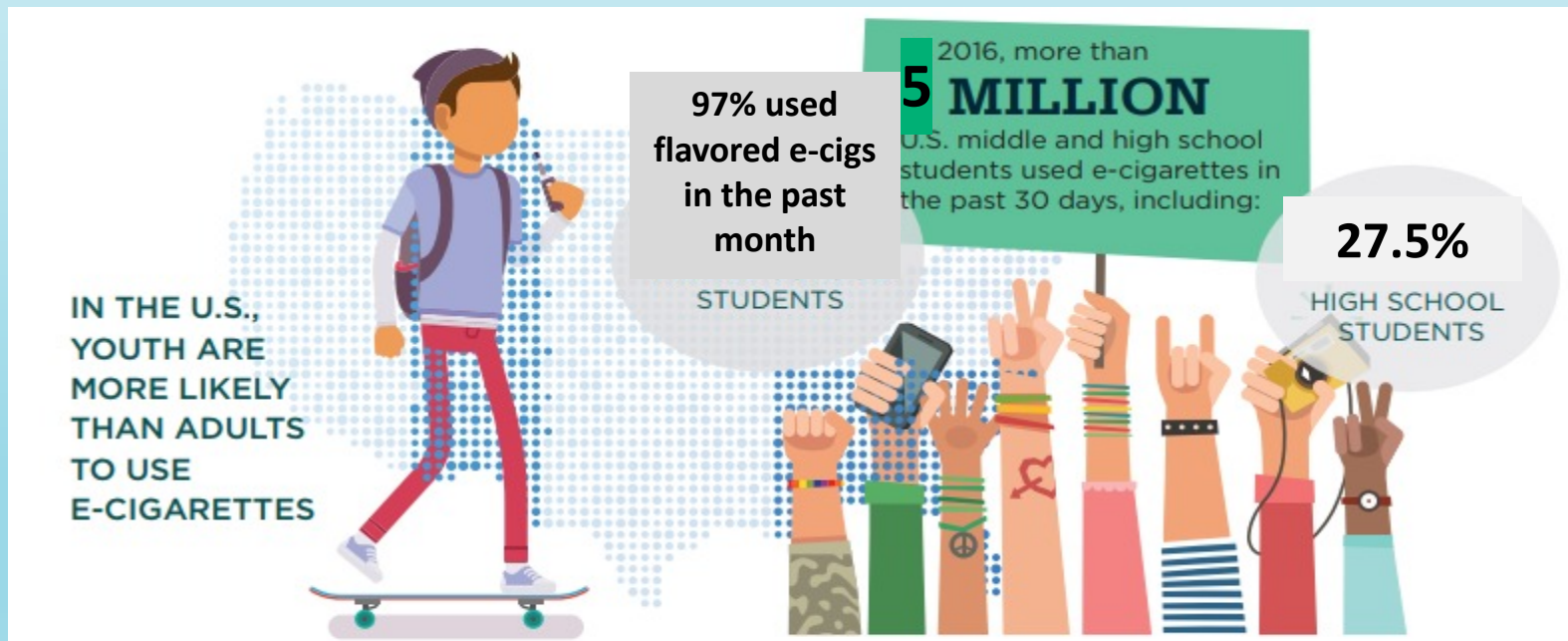


## In the News - JUUL

- Juul (pronounced jewel) makes up 76% of market share.
- Can easily be concealed and looks like a flash drive
  - It can even charge in a USB port
  - Referred to as 'juuling'

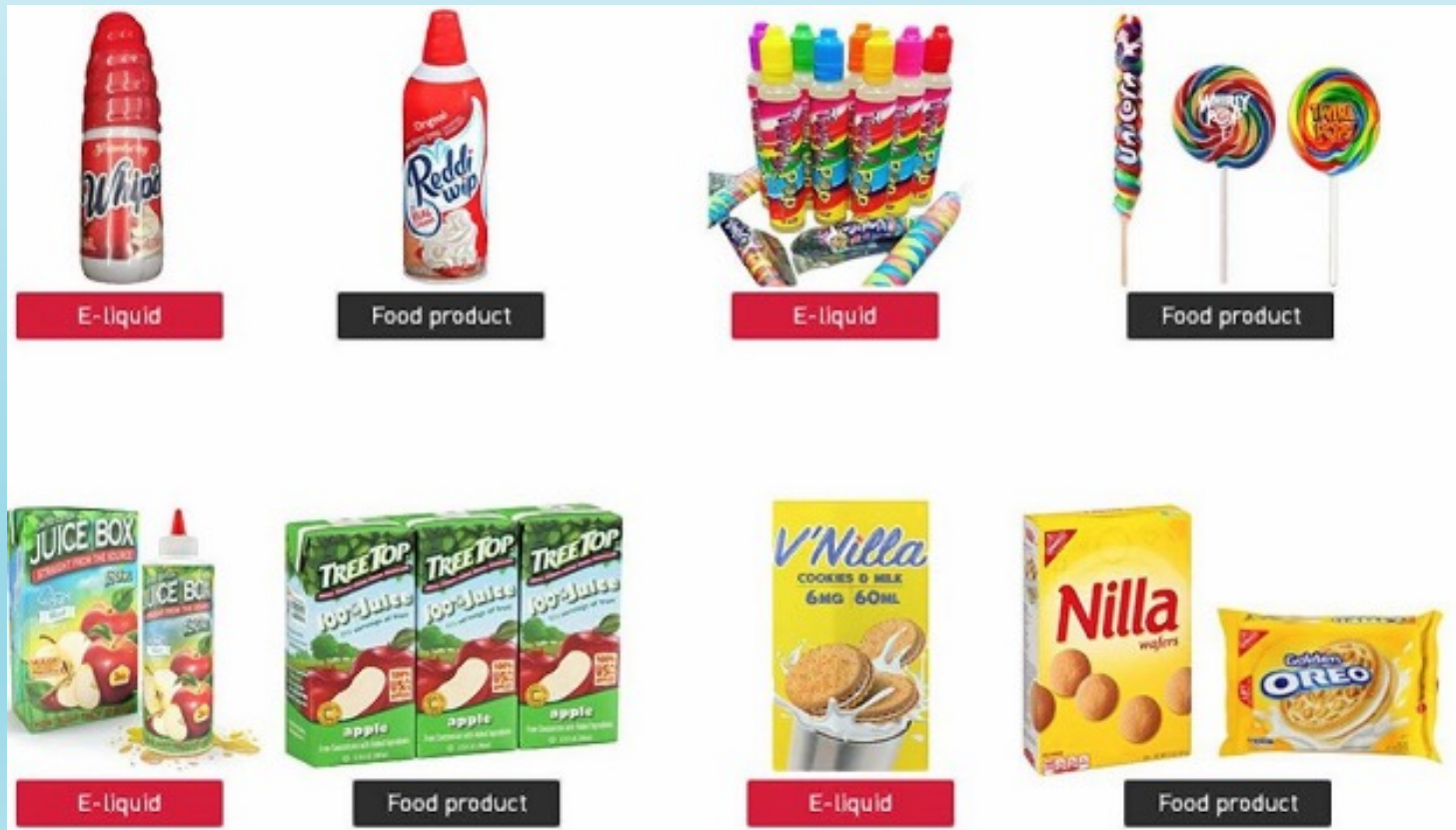


**1 in 4** high school students are vaping,  
and the number of teens who vape more than  
doubled in 2 years.



Young ppl using e-cigs  
are 4x more likely to  
start smoking

# Advertising Looks Like Kid-Friendly Products



Who are  
they really  
advertising  
too?





# JUUL Suspends Selling Flavors

## *Juul Suspends Selling Most E-Cigarette Flavors in Stores*



More than three million middle and high school students reported using e-cigarettes in 2017, according to preliminary government data, with about one-third saying the flavors were a big factor in their choice. Joshua Bright for The New York Times



More than 7,700 flavors of e-cigarettes exist, including fruit and sweet flavors that appeal to children and youth.



It is not safe to use e-cigarettes near children: There are cancer-causing chemicals in the exhaled e-cigarette vapor.



Minors can easily purchase e-cigarettes online, or - in some states - at convenience stores.

## E-cigarettes: A Threat to Health

The American Academy of Pediatrics believes e-cigarettes and other electronic nicotine delivery systems are a significant danger to the health of children and nonsmokers. For more information, visit [bitly.com/AAPPpolicy](http://bitly.com/AAPPpolicy).



Less than half a teaspoon of a nicotine-containing e-cigarette solution can be fatal to the average toddler.



Ads for e-cigarettes are targeting adolescents and appear on TV, radio, and online.



Most e-cigarettes contain nicotine. Nicotine is a highly addictive, harmful drug.

# Other Considerations

- E-Cigarettes can be used to deliver marijuana and other drugs
- Nicotine e-liquids can be absorbed through the skin, and swallowing this liquid can be more dangerous



Same great taste? Adults don't need to hide legal products.

---



# What Laws Protect Youth From E- cigs?

## Ala. Code § 28-11-2(1) (2018)

- It is unlawful for any minor to purchase, use, possess, or transport tobacco, tobacco product, or alternative nicotine product within this state
- E-cigs are defined as an alternative nicotine product

## FDA

- Restricts the way tobacco manufacturers, retailers, and distributors can advertise and regulated tobacco products, especially marketing efforts designed to appeal to youth

# *It's not about punishment: It's about changing addictive behavior*

## School Policy:

- The policy applies to ALL tobacco products
- The policy prohibits use of ALL tobacco products by students, staff and ALL visitors while on school property and at ALL school sponsored events
- The policy prohibits tobacco industry promotional activities, including industry-supported prevention and cessation programs (check funding/sponsorships/grants)
- The policy reflects a supportive approach to discipline for students
- The policy ensures students interested in quitting will be referred to a cessation program.

To promote an environment free of commercial tobacco in primary and secondary schools, the Public Health Law Center has prepared a comprehensive model policy that school districts and schools may adopt.

**The policy:**

- Provides a definition of commercial tobacco products to include current and future tobacco products;
- Prohibits the following items on campus (inside and outside buildings) and at off-campus, school-sponsored events: Tobacco products and tobacco-related devices, including electronic cigarettes, imitation tobacco products (such as candy cigarettes), and lighters;
- Prohibits accepting any donations or curriculum from any tobacco-related industry;
- Prohibits any promotion of tobacco products, including electronic cigarette products; and
- Includes effective and holistic enforcement options for student violations beyond suspension and expulsion.

**\*\*\*Include cessation/protect school and students**





**READY TO QUIT?**  
**LET US HELP.**

**1.800.QUITNOW**  
**QUITNOWALABAMA.COM**

The Alabama Tobacco Quitline



# Quitting Resources For Teens

- **Smokefree TXT** is a mobile text messaging program that provides 24/7 tips, advice and encouragement to help you quit smoking. To sign up for SmokefreeTXT, simply text QUIT to IQUIT (47848). This program is free.
- **QuitSTART App** This QuitSTART is a free app made for teens who want to quit smoking. This app takes the information you provide about your smoking history and gives you tailored tips, inspiration and challenges to help you become smoke-free and live a healthier life.
- For more information, visit **[teen.smokefree.gov](http://teen.smokefree.gov)**.

**Vaping: Know the Truth** is a new national youth vaping prevention curriculum created by Truth Initiative and Kaiser Permanente, in collaboration with the American Heart Association, to educate students about the dangers of e-cigarette use.

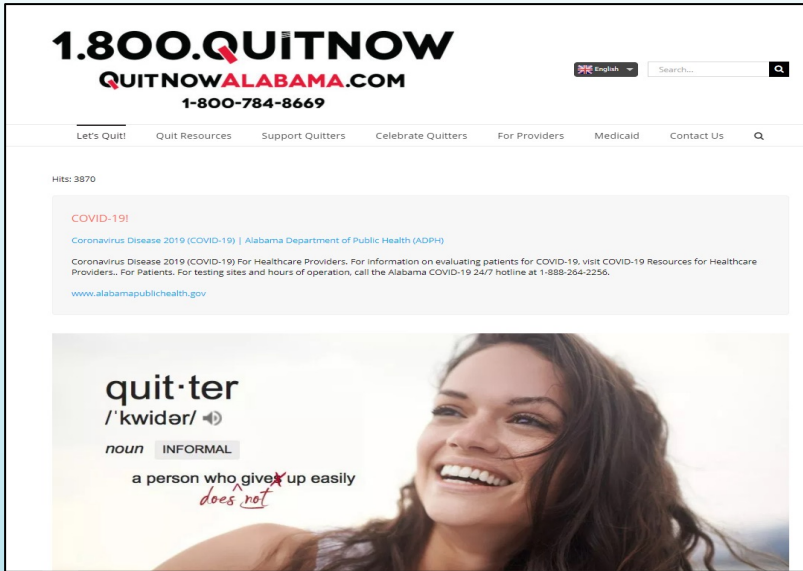
**NO COST Curriculum** [EverFi.com/k-12](https://everfi.com/k-12)

**Grade Level:**  
**8th - 12<sup>th</sup>**

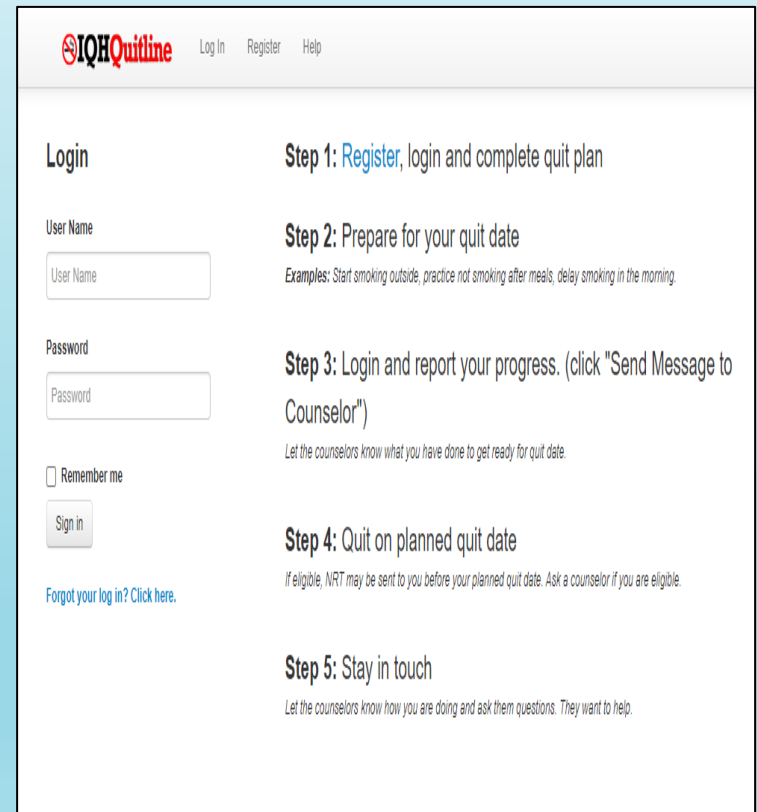
**Total Lessons: 4**  
**digital lessons; 5-10**  
**minutes each**

**Curriculum Fit:**  
**Health, Advisory,**  
**Life Skills, FACs**

**Standards**  
**Alignment:**  
**National Education**  
**Standards**



# Services



- Intake (enrollment)
- Coaching sessions
- Nicotine Replacement Therapy (NRT)
- Patches, 4 orders (more for Medicaid)
- Educational materials
- 7-month follow up survey
- Quit rate
- Satisfaction rate
- Response rate



***READY TO QUIT VAPING?***

text **VAPEFREEAL** to **88709**

*Join the 400,000 using This is Quitting.*



# Truth Initiative



## **THIS IS Quitting! How it works**

To enroll in This is Quitting, teens and young adults text **DITCHVAPE** to **88709**.

The first messages they receive will ask for their age and product usage so that they are able to receive relevant messages. Users receive one age-appropriate message per day tailored to their enrollment date or quit date, which can be set and reset via text message. Those who are not ready to quit receive at least four weeks of messages focused on building skills and confidence. Users with a quit date receive one week of messages prior to that date and at least eight weeks of messages after their quit date.

# Should I use E-Cigs to Quit Smoking?

- E-cigarettes are not approved by the FDA as a quit smoking aid
- The U.S. Preventive Services Task Force has concluded that evidence is insufficient to recommend e-cigarettes for smoking cessation
- **1-800-QUIT-NOW**

# Savings for Alabama Residents

Annual additional medical costs per smoker/vaper compared to a non-smoker/non-vaper: **\$6,929 (Costs \$543.00 per resident in taxes)**

Annual productivity loses per smoker/vaper:  
**\$4,864**

Total per smoker/vaper:  
**\$11,793**

How much is **saved** annually in medical costs and productivity loses by Quitline success?:  
**\$7,099,386 (Burden Report, 2019)**



# Other Dangers

- Vape pens and their batteries can explode and catch fire
- Multiple instances of people's pants pockets catching on fire, resulting in third degree burns

Surveillance video of a man t...  
ent his pants caught fire.

## VIDEO: E-cigarette explodes in man's pants

<https://abc7news.com/video-e-cigarette-explodes-in-mans-p...>



Aug 28, 2018

Stunning video shows the moment an e-ciga...  
while he was shopping for a ...

## E-cigarette industry under fire after one explodes

<https://abc7news.com/e-cigarette-industry-under-fire-after-one...>

Aug 28, 2018 - Stunning video shows the moment an e-cigarette explo...  
was shopping for a television.







**PIXOTINE™**

The Original **Nicotine** Toothpick™

Patent Pending

MADE IN THE USA

5.30 mg

JAVA  
**STONEWALL**



20 Dissolvable Tobacco Pieces

*Spit-Free*

Underage Sale Prohibited.

A Smokeless Tobacco Product



28 COURT  
CINNAMON TOOTHPICKS

**SMART TOOTHPICKS**

**NICOTINI**  
TOOTHPICKS

3mg

- NICOTINE INFUSED TOOTHPICK
- FRESHENS BREATH
- GREAT TASTE
- ANYTIME, ANYPLACE
- MUST BE 18 TO PURCHASE

CINNAMON

SMARTTOOTHPICKS.COM

**Vape  
Hoodie *aka*  
Vape Wear**





**Vape  
Backpack**





# Puff Pod



Vape  
Bracelet

Amulet  
Watch

Pop/Puff  
Bar











Mascara  
eyeliner  
Vape



Lipstick  
Vape



**BIG L**  
**CHEW**

**Bubble Gum**  
*Outta' Here Original™*

*One Lotta Gum In Every Pouch!*  
WT 2.12 OZ (60g)



- E-cigs are not subject to excise tax at the federal or state level in Alabama
- Could be taxed at state, county and municipal levels
- E-cigarette tax can be collected on a percentage:
  - To the manufacturer
  - To the wholesaler
  - Or to the retailer

Are E-Cigs Taxed?

# Summary

- If you currently smoke, quit. If you used to smoke, don't start again. If you've never smoked, don't start.
- E-cigs are marketed to children
- JUUL contains high levels of nicotine, the addictive substance used to hook smokers
- E-cigs are not a safe alternative to smoking
- E-cigs contain dangerous, cancer-causing chemicals
- E-cigs are largely unregulated and untaxed

# Quitting Resources For Teens

- ALA (American Lung Association ) Teen Cessation Programs
  - Not On Tobacco® The Not On Tobacco® group (N-O-T) is the American Lung Association's voluntary smoking cessation program for teens ages 14 – 19. Not is a 10-week program, participants learn to identify their reasons for smoking, healthy alternatives to tobacco use and people who will support them in their efforts to quit. Visit [Lung.org](http://Lung.org), call 1-800-LUNGUSA (1-800-586-4872) or email [NOT@Lung.org](mailto:NOT@Lung.org) to learn more.
  - Smokefree Teen is a web-based program designed and run by the National Cancer Institute to help you understand the decisions you make - especially the decision to quit smoking - and how those decisions fit into your life. Visit [teen.smokefree.gov](http://teen.smokefree.gov) to learn more or sign up for this free program.

# Contact Information

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FDA Inspector

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[Melanie.dickens@adph.state.al.us](mailto:Melanie.dickens@adph.state.al.us)



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