New Pieces of the Vaping Epidemic

Sycamore Community Schools 11/14/2019



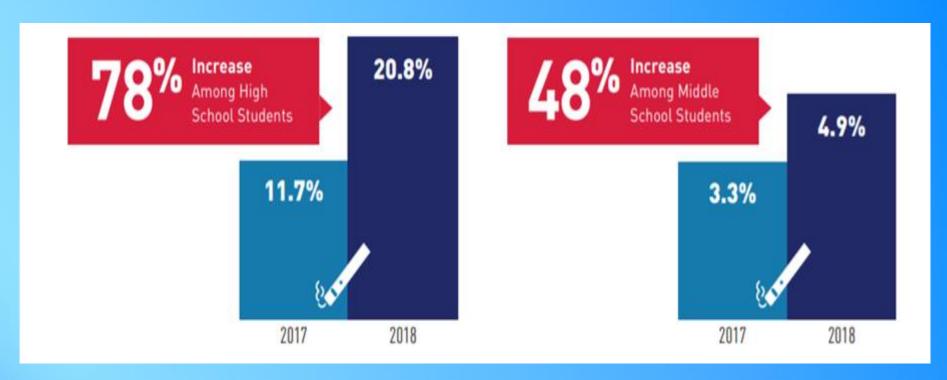


HOW BAD IS IT?





THE YOUTH VAPING EPIDEMIC



High School

Middle School



5,000 YOUTH A DAY

2018 National Youth Tobacco Survey data show an alarming surge in youth vaping, with more than 3.6 million teens currently vaping.

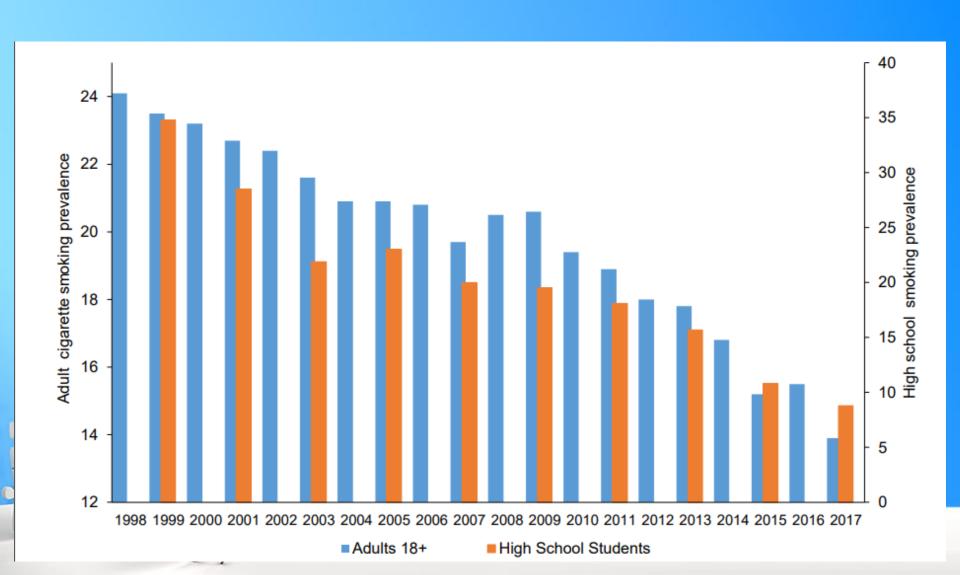






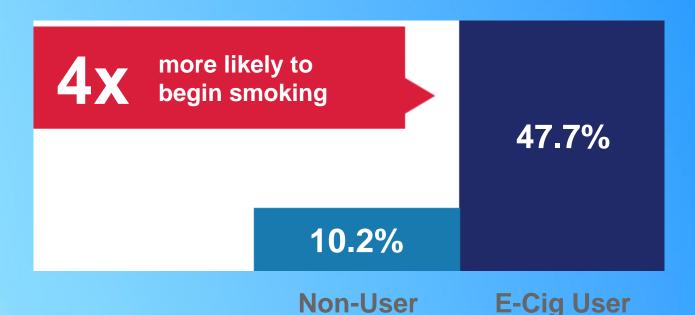
The Good News: Cigarette Smoking is Down

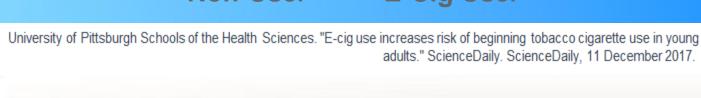




VAPING: ON-RAMP TO SMOKING?

Start smoking within 18 months of beginning e-cigarette use

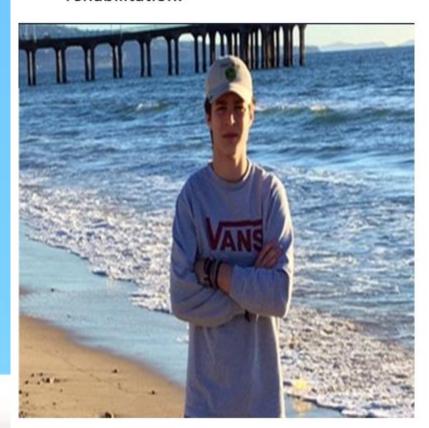




More Bad News

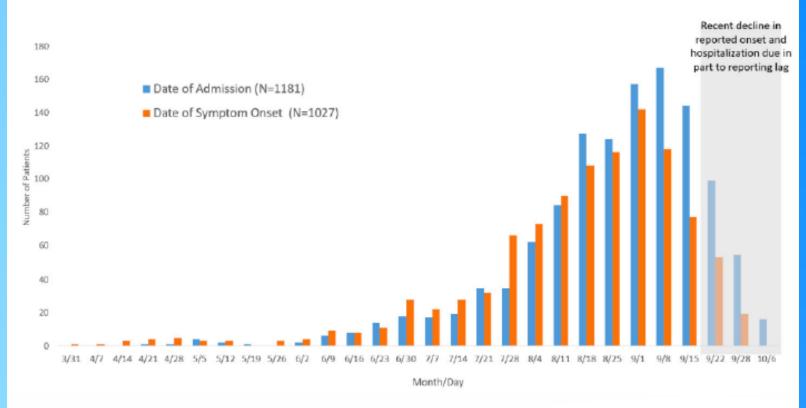
Luka Kinard

15 years old High Point N.C. Seizure sent him to 40 day addiction rehabilitation.





Dates of symptom onset and hospital admission for patients with lung injury associated with e-cigarette use, or vaping — United States, March 31–October 12, 2019



MMWR Morb Mortal Wkly Rep. 2019 Oct 4;68(39):860-864. doi: 10.15585/mmwr.mm6839e1. Characteristics of a Multistate Outbreak of Lung Injury Associated with E-cigarette Use, or Vaping - United States, 2019. Perrine CG et.al





More Really Bad News



More Really Bad News



Interim Recommendations

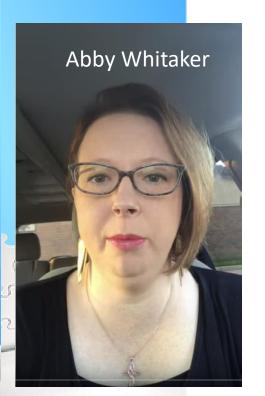
- CDC recommends refraining from use of e-cigarettes or vaping.
- Anyone who uses an e-cigarette or vapes, A. Don't buy off the street.
 B. Don't vape products with THC or modify products.
- See a healthcare provider right away if you have symptoms.





Symptoms of Lung Disease Patient Outbreak

 Patient in the investigations reported symptoms including:



cough, shortness of breath, or chest pain

nausea, vomiting, or diarrhea

fatigue, fever, or abdominal pain

https://www.youtube.com/watch?v=aJte-GjYy84&feature=youtu.be



So... What's in these Vapes that's making people so sick?

(We don't exactly know.)



A Cigarette by Any Other Name...

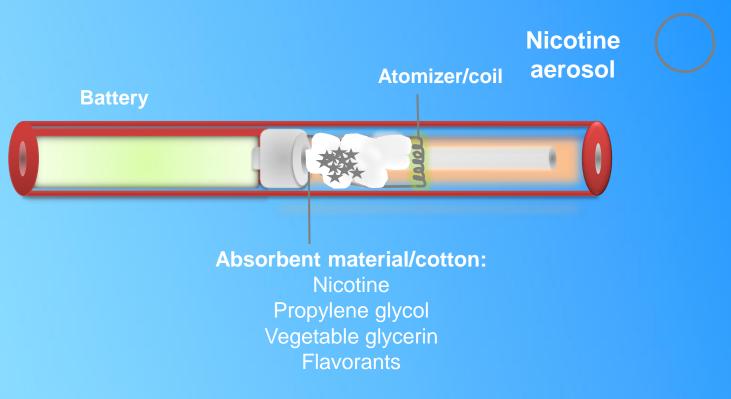
E-Cigarettes/Electronic Nicotine Delivery Devices are also called

- E-cigs
- E-hookahs
- Vapor pens
- Vapes
- Vape pens
- Vape pipes
- MODs
- APVs
- ENDs
- ENDDs





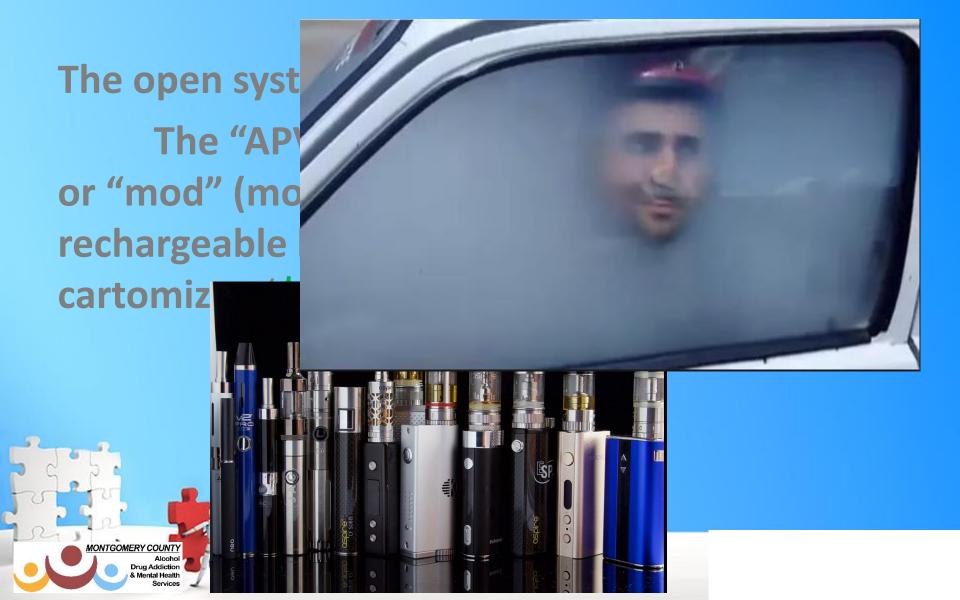
What Are E-Cigarettes?







The Rise of E-Cigarettes



The Rise of E-Cigarettes

The closed pod system:

Contain a rechargeable battery, pods are disposable. (\$\$).



MarkTen Elite (Altria)



myBlu (Imperial Tobacco)



Suorin Air



Vuse Alto (RJR)



Myle



Phix



Suorin Drop





KandyPens Feather



Daze MFG ZOOR

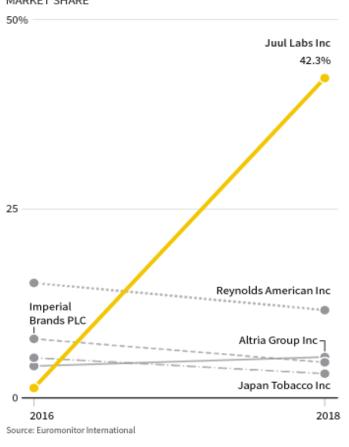


JUUL's Growth

Juul's explosive growth

In just two years, Juul captured 40% of the U.S. e-cigarette market.

MARKET SHARE





What's in that Pod?

- Nicotine
- Benzoic Acid
- Glycerol
- Propylene Glycol
- Natural Oils
- Extracts and Flavors
- ???





Over
30 Million
devices and
pods sold
every month



What's in that Pod?

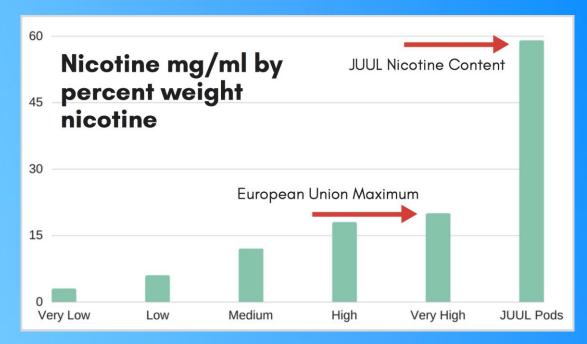
tobaccopreventiontoolkit.stanford.edu



- **Nicotine** Thymol Ally Hexanoate α -Pinene β -Pinene Limonene Caffeine 2- methoxyphenol 2,3,5- Trimethyl pyrazine
- Benzoic Acid 2,5- dimethyl pyrazine Isopulegol Ethyl Maltol
 Benzaldehyde 4-Terpineol Maltol Hydrocoumarin Vanillin
- **Glycerol** Phenethyl Alcohol P-Cymene Corylone Ethyl Vanillin p-Anisaldehyde Eucalyptol Piperitone Piperonal Linalool
- **Propylene Glycol** β -Damascone Benzaldehyde PG acetal Pulegone Ethyl anthranilate α -Terpineol δ Decalactone γ -Octalactone
- Natural Oils 3-Hexen-1-ol β-Myrcene δ-Dodecalactone
 Ethyl lactate γ-Decalactone Ethyl Acetate Ethyl butanoate
- **Extracts and Flavors** δ-Undecalatone Hexyl acetate
 Ethyl hexanoate Ethyl 2-methylbutanoate Acetylpyrazine
- ??? Menthol Triacetin Carvone Neomenthol Benzyl Alcohol p-Methone Hydroxyacetone Styralyl Acetate Menthyl Acetate Strawberry Glycidate_A Heliotropine PG acetal Benzyl DMC butyrate γ-Terpinene Methyl Anthranilate Ethyl Isovalerate

Nicotine content in JUUL



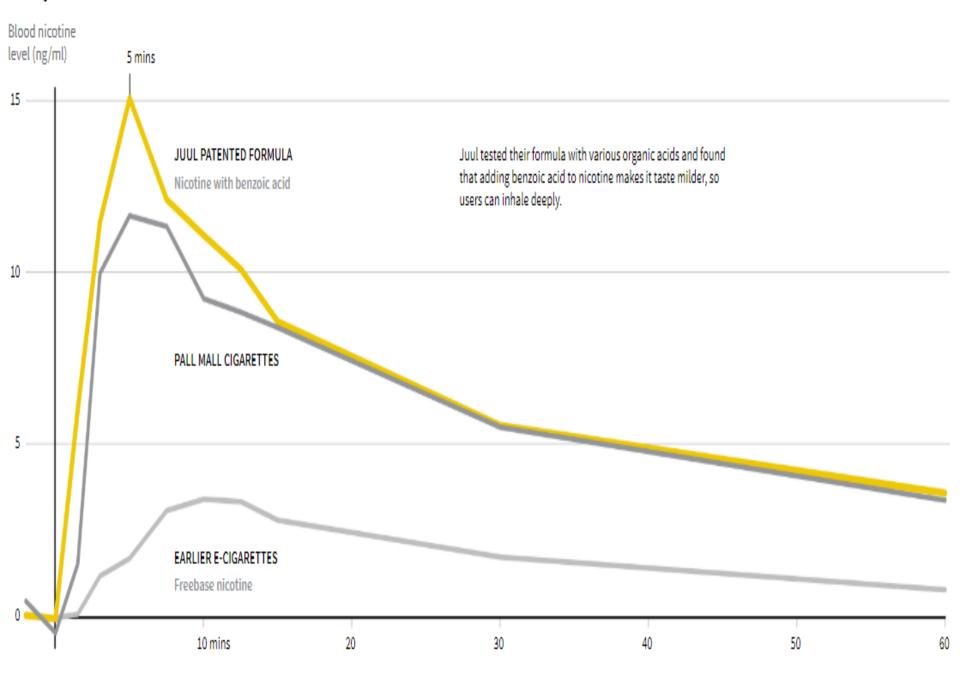








HOW QUICKLY DIFFERENT FORMS OF NICOTINE ENTER THE BLOODSTREAM







https://youtu.be/z0rKXw3WQFw

Ingestion vs. Inhalation

Propylene glycol has been approved by the government for use in food ...but has NOT been approved for inhaling!



Image Credit: http://sphweb.bumc.bu.edu/otlt/mph-modules/exposureassessment/expRoute.png

Flavorings attract youth















of students who

hookah have used

flavored hookah.

currently use















Source: Morbidity and Mortality Weekly Report (MMWR)



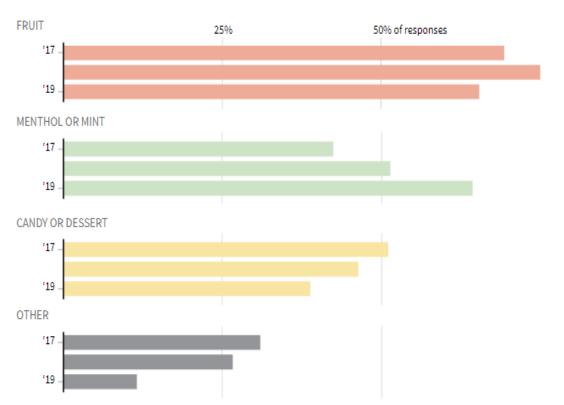
- 99% of E-Cigarettes sold in 2015 contained nicotine.
- **Federal law prohibits** flavored cigarettes, except menthol.
- Flavorings are allowed in other tobacco products.
- Nicotine e-juices come in a wide variety of flavors, many sweet.





MOST POPULAR E-CIGARETTE FLAVORS, 2017-19

Flavors used by high school students in the previous 30 days.



 $Note: In \ each \ year's \ survey, \ alcohol, \ chocolate \ or \ clove \ or \ spice \ flavors \ got \ less \ than \ 10\% \ of \ responses \ each.$

Sources: National Youth Tobacco Survey, U.S. Food and Drug Administration; Juul

JUUL POD FLAVORS

Juul stopped selling mango, fruit, cucumber and creme pods in the United States on Oct. 17.





"It's a well-known fact that teen-agers like sweet products. Honey might be considered."

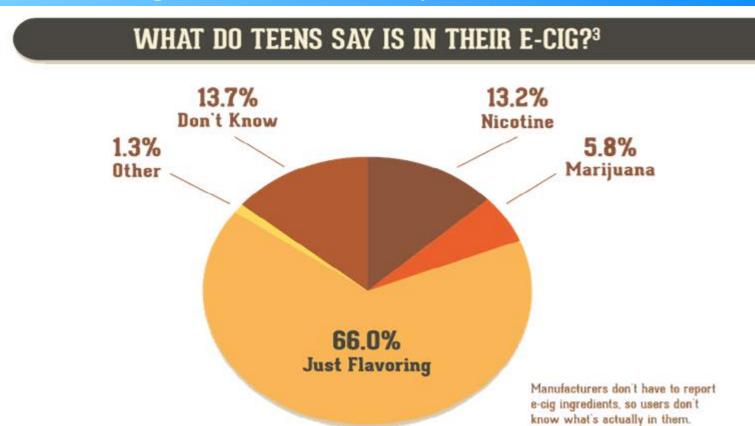
September 1972 memo to Brown & Williamson from Marketing Innovations, "Youth Cigarette -New Concepts."





WHY THE INCREASE?

Limited knowledge leads to low perceived risk



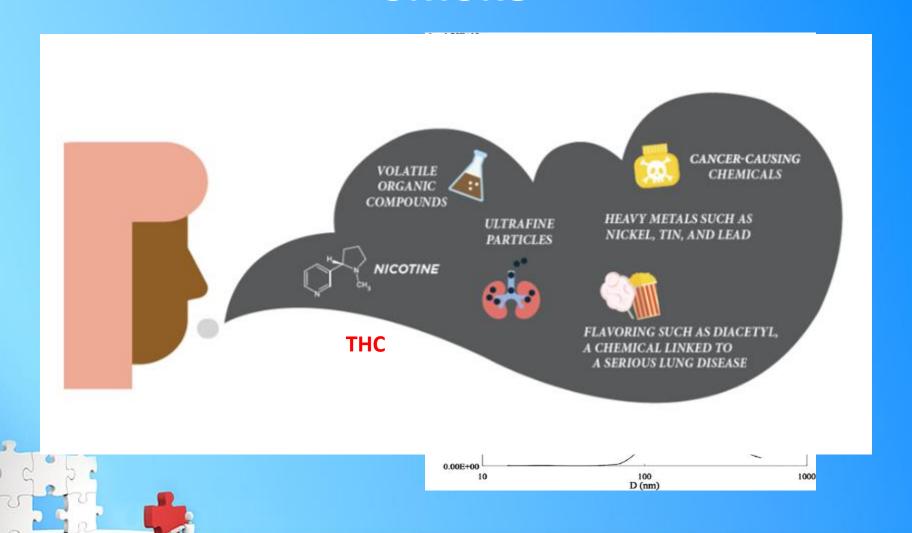






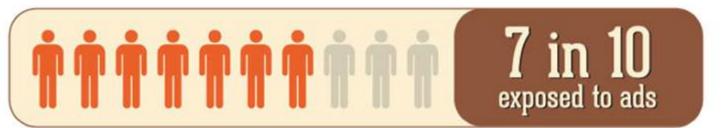


Ultrafine Particles Similar to Cigarette Smoke

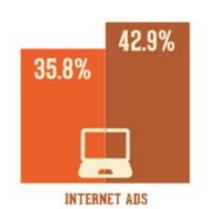


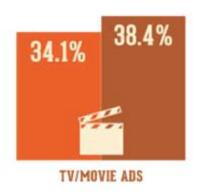


WHY THE INCREASE? Marketing











MIDDLE SCHOOL STUDENTS











Different Product, Same Tactics





Tobacco Industry



e-Cig Industry



MEMORANDUM OF AGREEMENT BETWEEN UNIFIED SCHOOL DISTRICT AND JULL LABS, INC.

I. Parties

The purpose of this Memorandum of Understanding (MOU) is to establish an understanding between [UUL Labs, Inc. ("JUUL") and the _______Unified School District ("_USD") and that JUUL is willing to provide grant funds to ______USD for the purpose of supporting the implementation of a pilot program to educate, prevent, and/or discourage students from using e-cigarettes and marijuana (the "JUUL Program").

The JUUL Program is designed to provide students with information about the harmful effects of e-cigarettes; engage students in learning about how to resist peer pressure; and allow students an introduction to mindfulness as a way to deal with stress, improve focus and reduce emotional reactivity in their lives.

II. Description of Services

JUUL agrees to provide a grant of \$XXXXX to the _____ USD to implement the JUUL Program one of two ways:

1. Saturday School Program

a. Provide 8 to 10 sessions of a Saturday School program in lieu of traditional discipline targeted toward students who have broken school rules about 1) possessing e-cigarettes on school grounds or at a school function off school grounds; 2) using e-cigarettes on schools grounds or at a school function; or 3) for other violations of school rules such as truancy, skipping classes or any other violation in which a school administrator determines that it would in





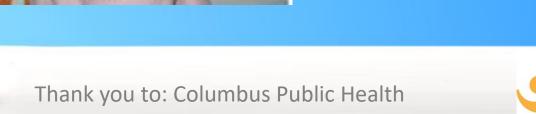


STILL A CANCER STICK

MONTGOMERY COUNTY

Drug Addiction







STILL A CANCER STICK





STILL A CANCER STICK



Initiation and Use



Advertising

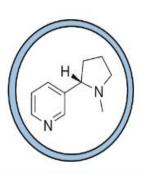


Flavors





Nicotine

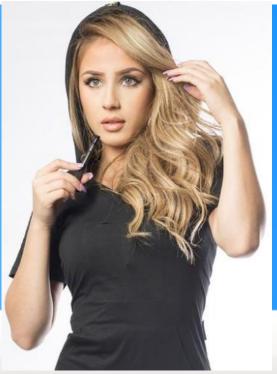












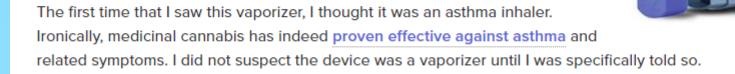
IS THIS A SHARPIE?







Puffit 2













DME / ARTICLES + TIPS / VIDEOS / E-LIQUID RECIPES / FLAVORBOOK / LIV

ENERGY DRINKS [NOTED: EP. 117]
SEPTEMBER 23, 2019 / ENYAWREKLAW / LEAVE A COMMENT





Energy Caffeine + Vitamin B12 Energy Inhaler Pen with Orange and Cassia Oils + L-Theanine - Citrus Flavored Daily Vitality Supplement

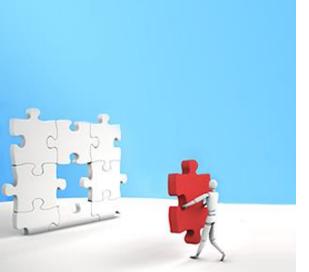


\$1599

✓prime Get it as soon as Tomorrow, Oct 26

FREE Shipping on orders over \$25 shipped by Amazon





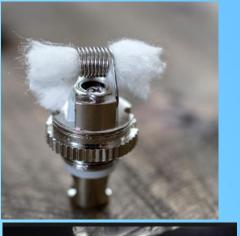
Other modalities of use

- Vaping THC with E- Liquid or Pods
- "Drippping" E-liquid is dropped directly on hot coils, which results in high concentrations of the compounds (such as THC), to be inhaled.
- "-"- Superheating substances such as 'budder, butane hash oil (BHO) and 710, which contain high THC and or CBD. The product, when 'dabbed' is inhaled by using a dab rig.







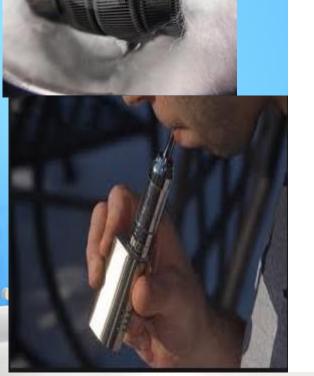


Dripping/Waxing/Dabbing

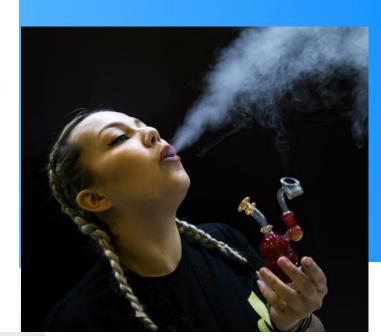






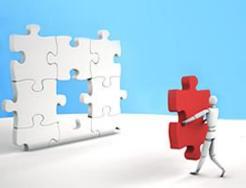






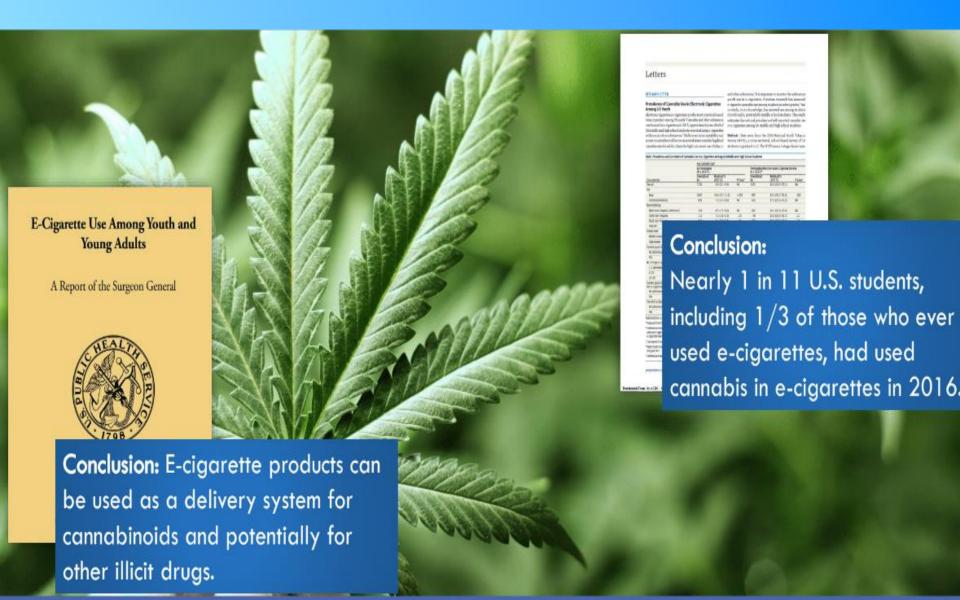
Tests show bootleg marijuana vapes tainted with hydrogen cyanide

NBC News commissioned laboratory tests of knock-off marijuana vapes that found a pesticide linked to hydrogen cyanide in 10 out 10 products.





Vaping and Cannabinoids



Recommendations for Schools



Reframe thinking of tobacco/vape violations from a discipline issue to a student of concern



Combine tobacco and alcohol/other drug policy and add vape devices









Schools:

- Be sure your school has a 100% Tobacco-Free Policy THAT includes e-cigarettes use: ODH Model Policy
- Develop and implement strong enforcement policies that include ALTERNATIVE TO SUSPENSION: INDEPTH, VapeEducate, Aspire, (My Life/My Quit)
- Develop prevention education opportunities for students & staff
 CATCH* Stanford | Tobacco Prevention Toolkit
- Provide help to quit for those who need it: My Life/My Quit , TRUTH'S – This is Quitting
 - Provide parental resources: PAVe, CATCH



Modules for tobacco and nicotine education

INDEPTH: An Alternative to Teen Nicotine Suspension



- Session 1 Getting the Facts: Breaks down the program for participants
- Session 2 Addiction: Explains the harmful effects of nicotine and tobacco products
- **Session 3** Alternatives: Helps teens understand their urges and identify healthy alternatives to replace tobaccouse.
- Session 4 Past, Present, Future: Talks about next steps and how to avoid future tobacco-related problems







VapeEducate



The Vape Educate Team VapeEducate.com (216) 285-0729

Log Out Profile Y Request Quote

Buy Licenses

Group Dashboard Y

← Back to Chapter

Unit Objectives

In this unit you will learn:

- The definition of vaping
- What are Electronic Nicotine Delivery Systems (ENDS)
- Why you should learn the facts about vaping
- The History of Electronic Cigarettes
- The different types of vaping devices
- How Electronic Cigarettes Work

Course Progress

Course Navigation

- Agreement
- O Chapter One What is Vaping
- O Chapter Two Vaping Health Risks
- O Chapter Three Marketing & Advertising of Vape Products
- O Chapter Four Vape Addiction
- O Chapter Five Society, Vape & You
- O Chapter Six Vaping & Marijuana, THC etc.

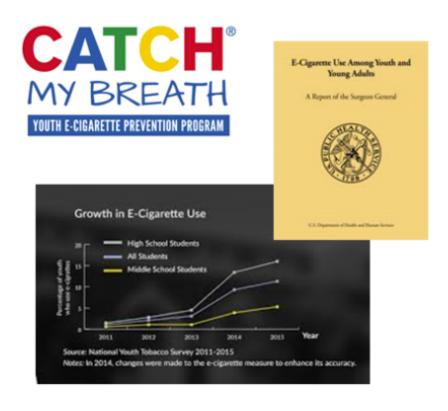
Return to VapeEducate (English)

Mark Complete

CATCH MY BREATH SUMMARY



- Best-practice-based youth E-cigarette prevention program targeting ages 11-18
- Created in response to a 900% spike in youth E-cigarette use between 2011-15, which made E-cigarettes the most-frequently used tobacco product among youth
- Authored in 2015-16 by Dr.
 Steven Kelder, UTHealth faculty member who was a Senior Scientific Editor of the Surgeon General's Report on youth E-Cigarette use







STANDARDS ALIGNMENT



- National Academic Standards
- Common Core Standards
- CASEL core competencies for social emotional learning
- State Health Education Standards







PROGRAM ORGANIZATION









Program Length

- 4 Lessons X 35-40 minutes each
- 1 Lesson / week (recommended)

Teacher Materials Include:

- Detailed teaching instructions
- **Scripts**
- PowerPoint Slides

































SERVICE LEARNING ** PROJECTS **



Opportunities for middle and high school students.

Project Benefits



Make a meaningful impact on preventing youth vaping.



Great resume-builder and college application enhancer!



Develop and fine-tune presentation, organizational, and persuasive skills.



Earn school credit (where possible), rewards, & state & national recognition.

College Scholarships

Three project participants will be selected nationally each year to receive scholarships. Contact devin@catch.org for details.

- 0
 - GOLD Scholarship \$2,500
- SILVER Scholarship \$1,500
- BRONZE Scholarship \$1,000

North Carolina high school volunteer, Luka, speaking during a CATCH My Breath lesson



Project Types

*Student toolkits are provided to guide all service learning projects.



Community Presentation



Fundraise for Vaping Prevention

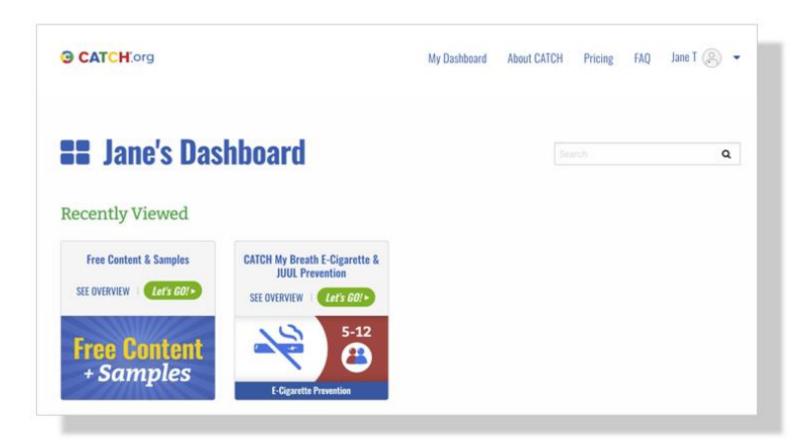


Bring CATCH My Breath to a Campus

ACCESS PROGRAM MATERIALS



3. Click the "Let's GO!" button



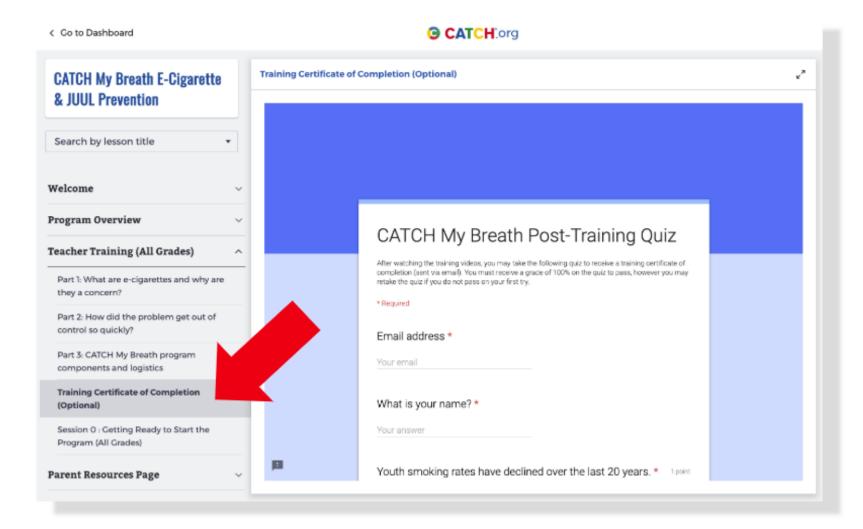






TRAINING CERTIFICATE OF **COMPLETION (OPTIONAL)**













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

Richard Daniel Ceballos III < rceb3@stanford.edu>

Goals of the Toolkit

- Understand basic information about tobacco products, including e-cigarettes /JUULs, hookah, cigars, and smokeless and the harm they cause.
- Gain awareness of strategies that manufacturers of tobacco products, including e-cigarettes, hookah, cigars, and smokeless, employ to increase use among adolescents through deceptive and creative marketing strategies.
- Gain skills to refuse experimentation and use of all tobacco products.



https://med.stanford.edu/tobaccopreventiontoolkit.htr

Richard Daniel Ceballos III < rceb3@stanford.edu>

Tobacco Prevention Toolkit

- The Toolkit has a set of modules plus additional information:
 - Module 1: Tobacco
 - Module 2: E-cigarettes and Vape Pens (JUULs included)
 - Module 3: Hookah
 - Module 4: Smokeless Tobacco
 - Module 5: Nicotine Addiction
 - Module 6: Positive Youth Development
 - School Policies
 - Information for Parents/Guardians
 - Resources



https://med.stanford.edu/tobaccopreventiontoolkit.htm

Richard Daniel Ceballos III < rceb3@stanford.edu>

Curriculum...

- Use all "65" activities/lessons
- Use 1 or 2
- Use suggested curriculums

https://med.stanford.edu/tobaccopreventiontoolkit.html Richard Daniel Ceballos III < rceb3@stanford.edu>



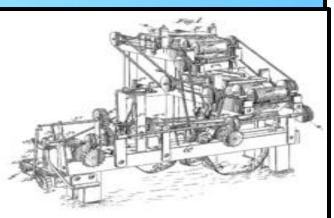
Crash Courses



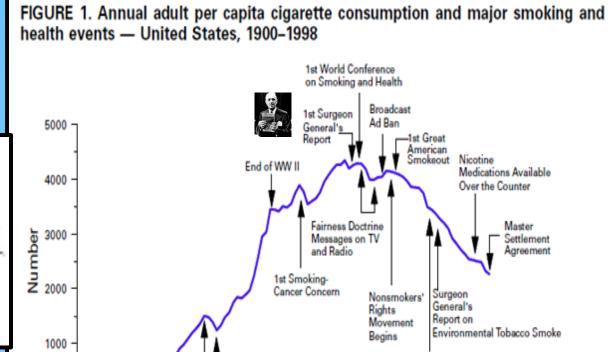


Lucile Packard Children's Hospital Stanford

The Rise of the Tobacco Industry







Sources: United States Department of Agriculture; 1986 Surgeon General's Report.

Year

Great Depression

1900

1910



Federal Cigarette

Tax Doubles



- Launched July 1, 2019 to addressing vaping and tobacco cessation
- Program for youth under age 18
- Coaches trained to address teen quit needs
- Five coaching sessions via live text messaging or by phone
- Dedicated toll-free number (1-855-891-9989) or online chat
- Teen-dedicated website at mylifemyquit.com
- On-going text messages for encouragement
- Certificate of program completion





MY LIFE MY QUIT



Text "Start My Quit" to 855-891-9989. Free, confidential help. Just for teens.









My Life, My Quit ™

A Youth Tobacco and Vaping Cessation Program

Nearly 5 million U.S. teens use tobacco and few widely available and accessible resources designed for teens exist to help them stop. As a tobacco quitline provider helping thousands of people quit tobacco every year, National Jewish Health has launched an enhanced tobacco and vaping cessation program for teens under age 18 who want to stop using tobacco products, especially electronic cigarettes like JUUL. The My Life, My Quit program combines best practices for youth tobacco cessation adapted to include vaping and new ways to reach a coach using live text messaging or online chat. The program includes educational materials designed for teens created with youth input and through discussion with subject matter experts and community stakeholders. The My Life, My Quit specially trained coaches listen and understand teens, provide personalized support, and build relationships that promote quitting tobacco. Coaches emphasize that the decision to stop is personal, and provide information to help cope with stress, navigate social situations, and support developing a tobacco-free identity.

The My Life, My Quit, program provides youth access to tailored resources for quitting, including:

- · Youth coaches who receive special training on the best ways to build relationships with youth
- . Five coaching sessions by phone, live texting or chat with a coach who will listen and help teens navigate social situations while finding healthy ways to cope with stress
- Text or call a dedicated toll-free number (1-855-891-9989) for real-time coaching
- · Additional text messages for support to quit vaping, smoking, or chewing tobacco
- Simplified program registration and enrollment process to get to coaching faster
- . Website (mylifemyquit.com) with online enrollment, chat with a live coach, information about vaping and tobacco, and activities to support quitting
- Promotional and educational materials designed for youth with messages from youth about guitting tobacco and vaping, and how to ask for support
- · A water-marked certificate of completion of the program

The program is supported and available in Colorado, Massachusetts, Michigan, Montana, Nevada, North Dakota, Ohio, Pennsylvania, and Utah. For media enquiries about the program, please contact William Allstetter at 303.398.1002 or AllstetterW@NJHealth.org.



LUNGS BURNING? IS IT YOUR VAPE?

Text "Start My Quit" to 855-891-9989. Free, confidential help. Just for teens.



MY LIFE MY QUIT.





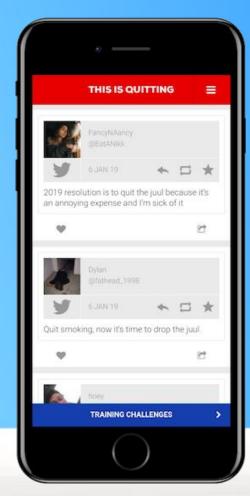


TRUTH: This is Quitting text: QUIT to (202)802-9884

http://www.thisisquitting.com











Resources for parents and adults

Are you a parent of a young person who vapes? Parents can text **QUIT** to **(202) 899-7550** to sign up to receive text messages designed specifically for parents of vapers.

If you are an adult looking for support to quit vaping or stop using any tobacco product, our free digital quit smoking platform BecomeAnEX offers comprehensive web and mobile tools. Parents of vapers can also sign up for BecomeAnEX, where they can indicate that they are a parent of a young person who vapes, and access a supportive online community and a full interactive website of information about how nicotine addiction works and different approaches to quit. Register now at BecomeAnEX.org.







https://teen.smokefree.gov/



Your First Day Without Vaping

The first day without your vape can be hard, but there are ways to make it easier. Get through your quit day with these five steps.



Deal With Vape Cravings

Dealing with cravings is one of the hardest parts of quitting vaping. Try these tips and strategies for managing cravings.



Understand Your Vaping Triggers

Triggers are the things that make you want to vape.
Knowing your triggers and having a plan to deal with them will help you quit.



Vaping Addiction and Nicotine Withdrawal

Nicotine is in most vapes, and it's very addictive. You may experience symptoms of nicotine withdrawal when you quit vaping. There are things you can do to cope.







Some people vape when they are feeling sad or depressed, but vaping is not an effective way to deal with these feelings. Find healthy ways to cope with your moods.



Anxiety, Stress, and Vaping

Stress and anxiety can trigger vape cravings, and make it harder to stay quit. Find healthy and effective ways to cope with these feelings.

Why parents **need support now**

75%





of parents received **no communication** from their child's school regarding e-cigarettes or JUUL

Source: Truth Initiative















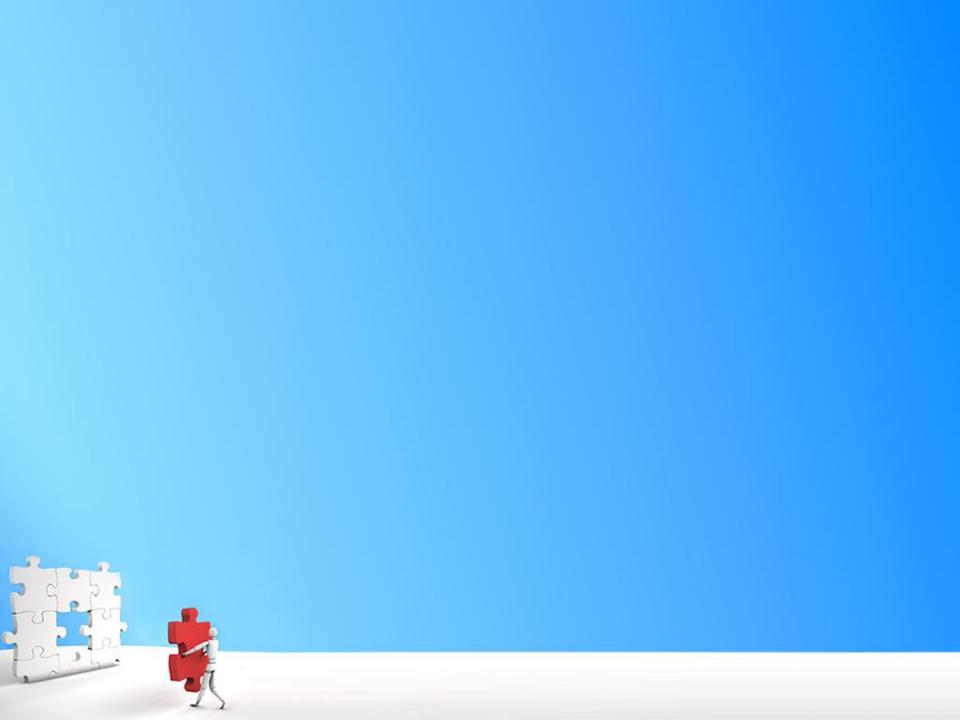




Juul Funded High Schools, Recruited Social Media Influencers To Reach Youth, House Panel Charges















FLAVORS-HOOK-KIDS

POISON LOOKS LIKE THIS

A visual guide for some modern vaping devices.







HOW TO TALK TO KIDS ABOUT VAPING

LISTEN

Whether or not your kids or students have tried vaping, they'll benefit from a good talk. And a good talk starts with listening. Let the kids tell you about their world. These starter questions are a simple way in:

Do you have friends who vape?
Are you curious about it?
Have you been offered?
Have you tried it?
If so, what made you say yes?
If not, what made you say no?

Before you tell kids what you think, find out from them what it's like to be a kid in a culture where underage vaping surrounds them. A conversation will work harder than a lecture.

MANY TALKS VS ONE BIG ONE

Have an ongoing dialog rather than a single talk. The temptation to vape is not a one-time occurrence, so the conversation shouldn't be either. Help kids understand that as they age through middle and high school, they'll face new challenges, and through it all, you'll be there to talk through smart, healthy life choices.

BLAME FLAVORS

How has vaping grown so fast? Blame flavors. In California, almost 90% of all high school students who vape report using flavors. And flavors have been found to lower teens' perception of harm. Help your kids understand there's nicotine, aerosol, and toxic chemicals in these fun sounding flavors. And the nicotine content on the package is not necessarily accurate. The flavored tobacco industry is still mostly unregulated, so there's no way to be sure their claims are true.



TEN FOR TEENS

Going to meetings? Writing to the school board? Reference these ten facts to ground your audience in the reality of teen vaping, and to make perfectly clear what's at stake. U.S. Surgeon General named vaping a youth epidemic.

E-cig usage by high school students rose 78% between 2017 and 2018. That's close to double the kids exposed to nicotine in a single year.

Nicotine is one of the most toxic of all poisons.

Nicotine rewires teens developing brains.

Nicotine can escalate anxiety, mood swings and learning difficulties. Teens are at a higher risk of addiction than adults.

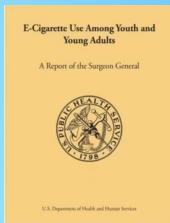
Nicotine in adolescence makes it easier to develop addiction to other drugs.

None of Juul's pods are without nicotine, but 5 out of 8 young Juulers were not aware of that.

A single Juul pod can contain the nicotine of a pack of cigarettes and may deliver nicotine to the brain 2.7 times faster than other e-cigs.

Changes to the brain from nicotine can be permanent.

WAIT! THERE'S MORE!



https://e-cigarettes.surgeongeneral.gov/documents/2016 sgr full report non-508.pdf



Prepublication

https://www.nap.edu/catalog/24952/public-health-consequences-ofe-cigarettes



Key Take Away Points

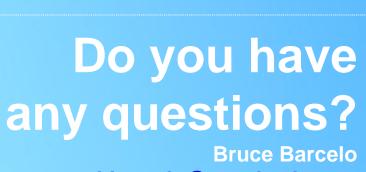


Summary

- E-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products (CDC)
- Rise in youth use is an epidemic that will have long-lasting implications
- Rise has been fueled by tobacco marketing and government inability to effectively regulate
- Cessation claims are unproven
- Secondhand aerosol is unsafe
- More research is needed to understand the long-term health effects







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