

E-cigarettes and Youth: An Alarming Trend



What we'll
cover today

What are they?

Who is using them?

What is being done about it?

What you can do about it.

Presentation Rules

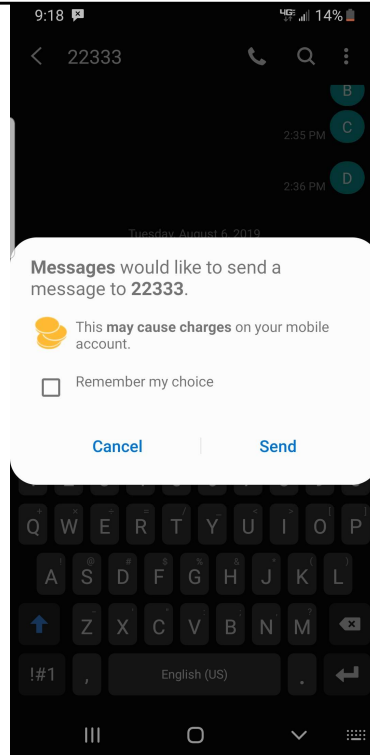
- Judgement-free zone
- Quizzes throughout
- Questions at the end
- Keep phones at the ready!

Live Polling

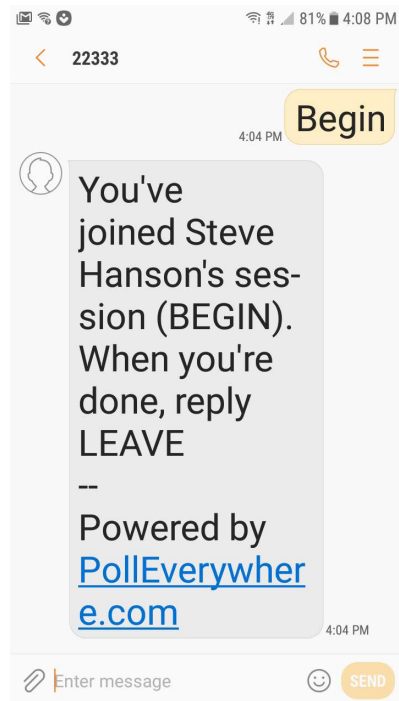


Text Begin to 22333

Text the word
Begin
to
22333



Text the word
Begin
to
22333



**Please text your first and last name
to be eligible to win a prize!**

oll Everywhere

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Poll Title: Please text your first and last name to be eligible to win a prize!
https://www.pollEverywhere.com/free_text_polls/qbpvpWttBh79toq

“We just don’t know enough
about vaping yet.”

~~“We just don’t know enough
about vaping yet.”~~

Yes we do!!!!

Terminology

- Electronic
- Nicotine
- Delivery
- Systems



Image: retrieved 08/07/2018 from https://geiselmed.dartmouth.edu/news/wp-content/uploads/sites/2/2018/03/e-cig-shutterstock_140876200.jpg

AKA:

- E-cigs
- E-pens
- E-hookahs
- Vape sticks
- Vape pens
- Mods
- Mod pods
- Juul
("Juuling")



Image: retrieved 08/07/2018 from https://geiselmed.dartmouth.edu/news/wp-content/uploads/sites/2/2018/03/e-cig-shutterstock_140876200.jpg

E-cigarettes vs vaping:

What's the difference?

Some people mistakenly think only e-cigarettes contain nicotine, so they don't think vaping is a problem since there's no nicotine. **WRONG!** These are different names for the same thing.

The Nuts and Bolts of an E-cigarette

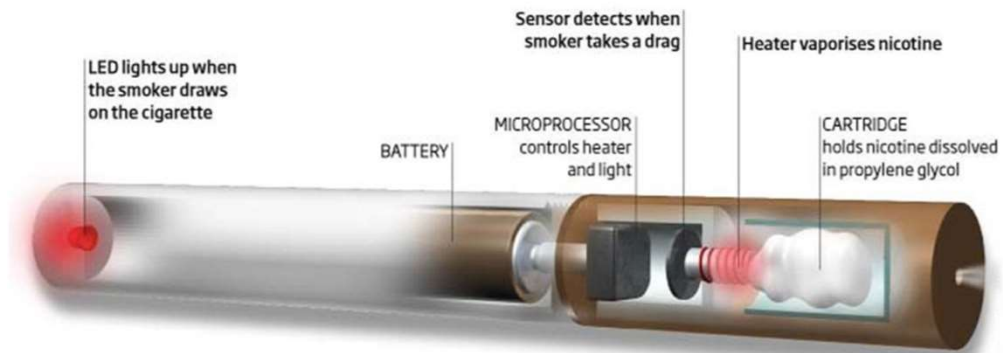


Image: <http://www.madvapes.com/media/e-cig-parts.jpg>

Open system



Image: <https://s-media-cache-ak0.pinimg.com/736x/a4/b0/e3/a4b0e3bc554bd47cc46beae64a709f8e.jpg>

E-liquid comes in bottles, greater potential for harmful nicotine exposure (ingestion and skin absorption concerns)

Closed system



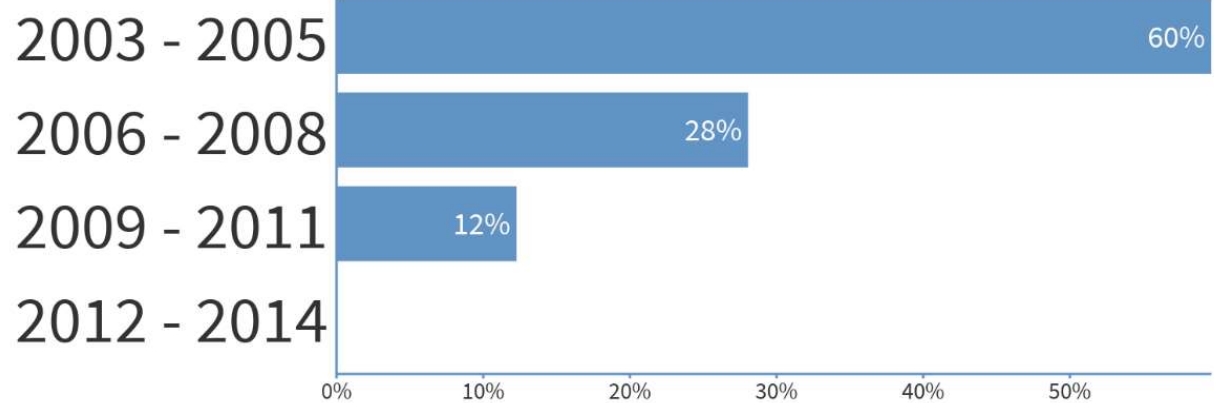
Left: <https://www.njoy.com/>

Right: <http://www.blucigs.com/>

E-liquid comes in cartridges, intended for the consumer to never come into direct contact with the liquid

E-cigarettes hit the U.S. market between

...

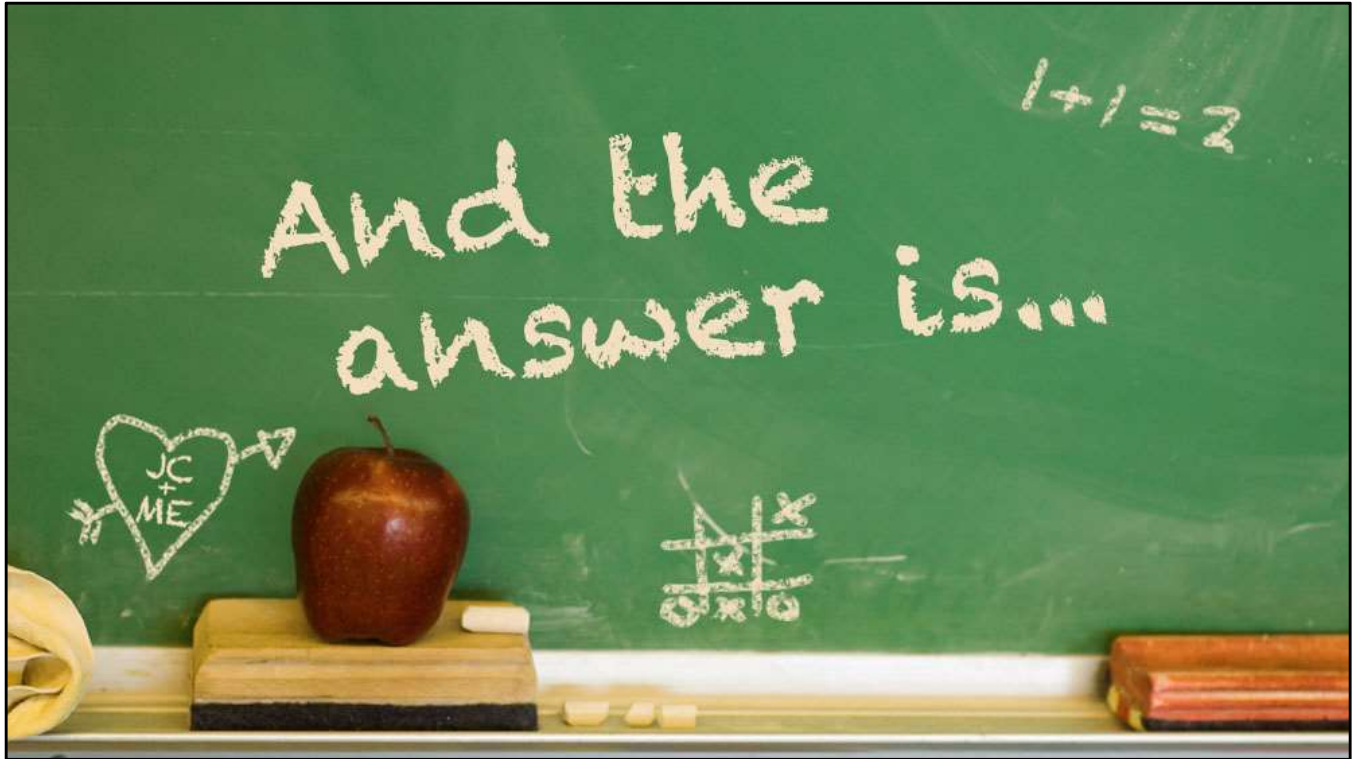


oll Everywhere

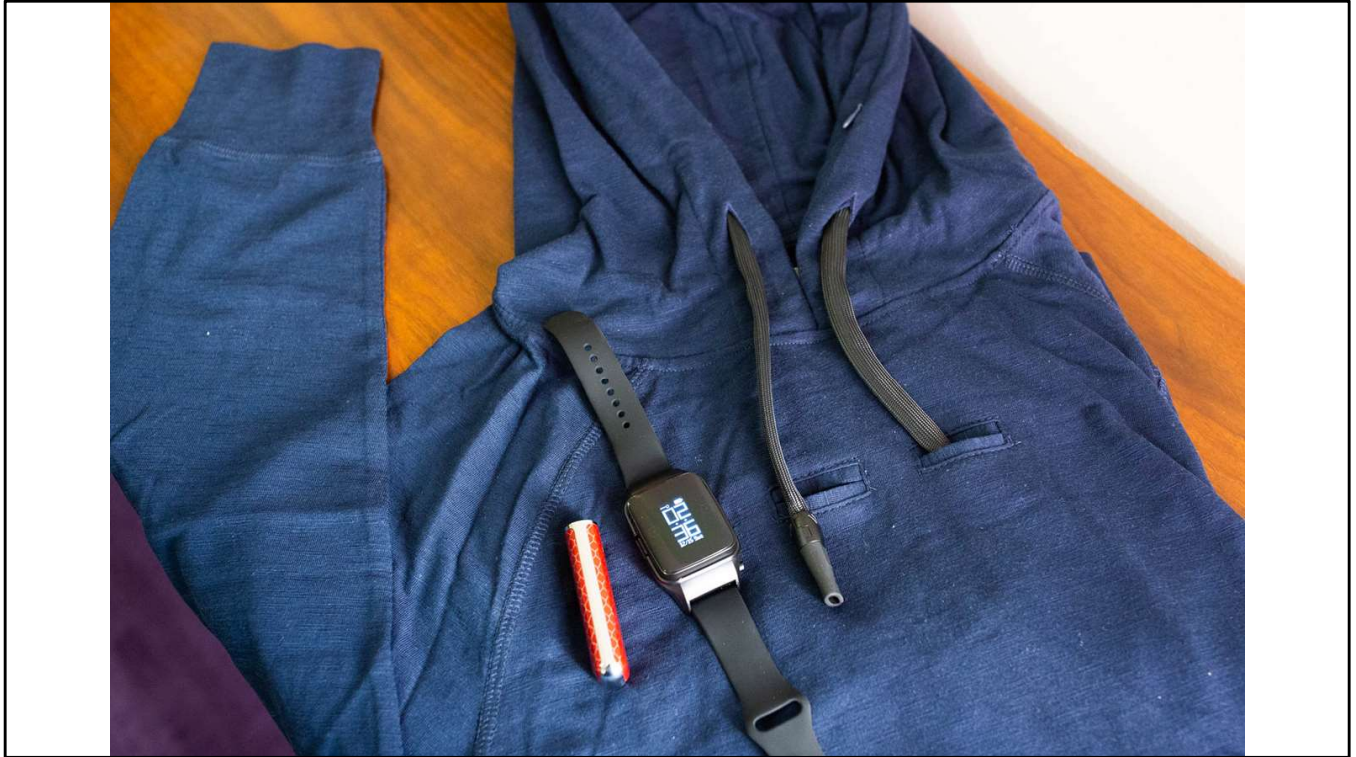
Start the presentation to see live content. Still no live content? Install the app or get help at [PolleEv.com/app](https://www.polleverywhere.com/app)

Poll Title: E-cigarettes hit the U.S. market between . . .

https://www.polleverywhere.com/multiple_choice_polls/1hPGZdVBY5ArtBb



B. 2006 - 2008



Source: <https://californiahealthline.org/news/camouflaged-vaping-devices-are-hoodwinking-parents-and-schools/>



Source: <https://californiahealthline.org/news/camouflaged-vaping-devices-are-hoodwinking-parents-and-schools/>



Source: <https://californiahealthline.org/news/camouflaged-vaping-devices-are-hoodwinking-parents-and-schools/>

E-juice
E-liquid



Left: <https://www.youtube.com/watch?v=KvQ6K8ariWs>

Right: <https://electriccigarettereviewer.com/wp-content/uploads/2014/08/prefilled-cartridge-e1421632538332.jpg>

The industry wants us to call in juice to make it sound healthy

E-Cigarette Liquid Ingredients

Distilled Water

Propylene Glycol

Vegetable Glycerin

Nicotine Concentrate

Artificial Flavoring



Source: <https://quitsmokingcommunity.org/e-liquid/>

“Vape” Shops



Fun Environment



There are more than 7,700 flavors currently on the market (2017)
www.tobaccofreekids.org/microsites/flavortrap/full-report.pdf



The BIG Question:

Which is
safer?



Traditional cigarettes have thousands of chemicals. Alligators have lots of teeth.

Which is
safer?



Does removing teeth from an alligator make it safe?

Are e-cigarettes safer than traditional cigarettes?

- To make the claim they are safer than cigarettes, the FDA must review the product and deem it safer. No product has been deemed safer to date.

Conclusive Evidence



E-cigarette use increases airborne concentrations of particulate matter and nicotine in indoor environments.



Most e-cigarette products contain and emit nicotine and numerous potentially toxic substances.



E-cigarette devices can explode and cause burns and projectile injuries.



Exposure to e-liquids (from drinking, eye contact, or dermal contact) can result in seizures, anoxic brain injury, vomiting, and lactic acidosis.



Drinking or injecting e-liquids can be fatal.

Public Health Consequences of E-Cigarettes, National Academies of Sciences, Engineering, and Medicine

<http://nationalacademies.org/hmd/Reports/2018/public-health-consequences-of-e-cigarettes.aspx>

Substantial Evidence



Aerosols damage cells and tissue.



They are addictive



They increase the heart rate



They increase the risk of smoking among youth and young adults

Public Health Consequences of E-Cigarettes, National Academies of Sciences, Engineering, and Medicine:

<https://www.nap.edu/resource/24952/012318ecigaretteConclusionsbyEvidence.pdf>

**E-cigarettes do not produce harmful
secondhand aerosol.**

True

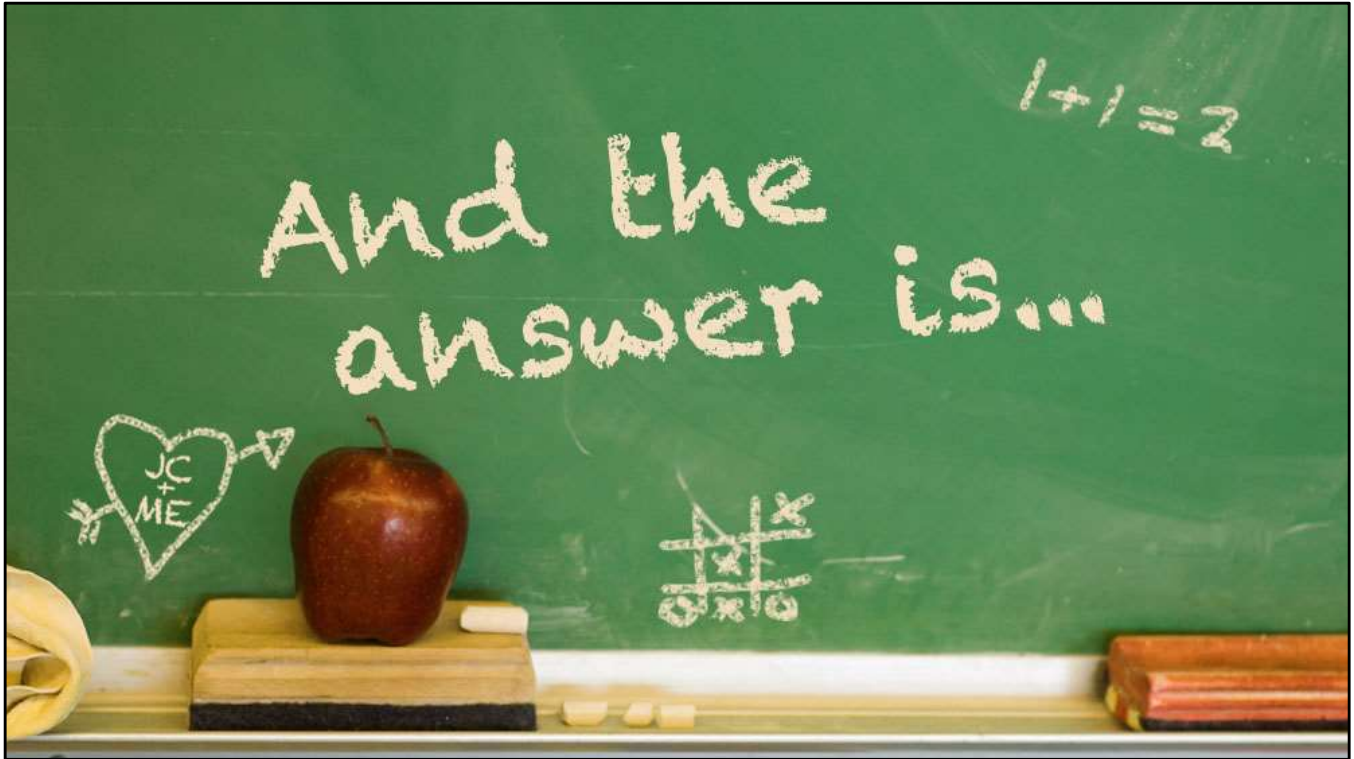
False

oll Everywhere

Start the presentation to see live content. Still no live content? Install the app or get help at [PollEv.com/app](https://www.polleverywhere.com/app)

Poll Title: E-cigarettes do not produce harmful secondhand aerosol.

https://www.polleverywhere.com/multiple_choice_polls/IZUXRmyOy6aB4OE



B. False – they do



E-cigarette exploded in man's mouth

Jara Klausner

January 17, 2017 | 10:13am

NEW YORK POST

<http://nypost.com/2017/01/17/an-e-cigarette-exploded-inside-this-mans-mouth/>



Additional Concerns

E-cigarettes can be used as a delivery system for a large number of drugs besides nicotine – including THC (the active drug in marijuana), alcohol, and other drugs.

Left:

http://static.lakana.com/media.fox32chicago.com/photo/2015/10/15/liquor_1444954589078_360968_ver1.0.jpg

Right:

http://static.lakana.com/media.fox32chicago.com/photo/2015/10/15/liquor_1444954589078_360968_ver1.0.jpg

***The Mysterious Vaping Illness
That's 'Becoming an Epidemic'***

A surge of severe lung ailments has baffled doctors and public health experts.



<https://www.nytimes.com/2019/08/31/health/vaping-marijuana-ecigarettes-sickness.html>

National
EVALI
Cases



1,299 injuries



26 deaths

EVALI (e-cigarette, or vaping, product use associated lung injury)

https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

Utah
EVALI
Cases



76 injuries



1 death

Lung Disease Investigation: <https://health.utah.gov/lung-disease-investigation>

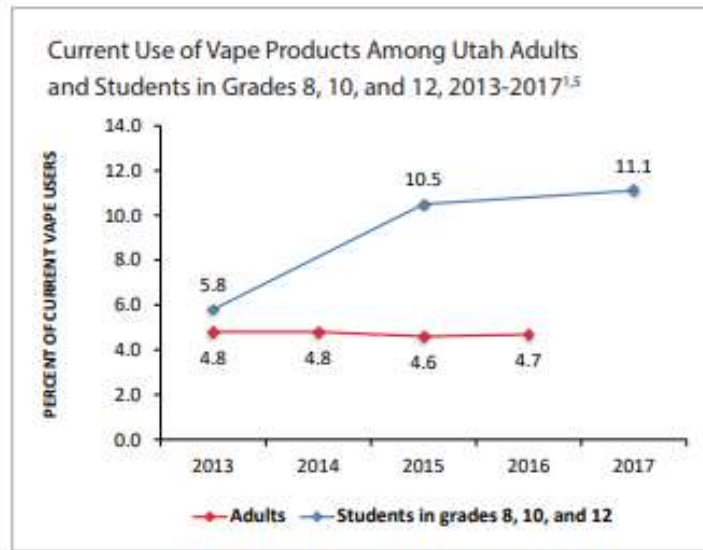
Who is Using
them?

Image: <http://ehp.niehs.nih.gov/wp-content/uploads/2014/09/ehp.122-A244.g0031.jpg>

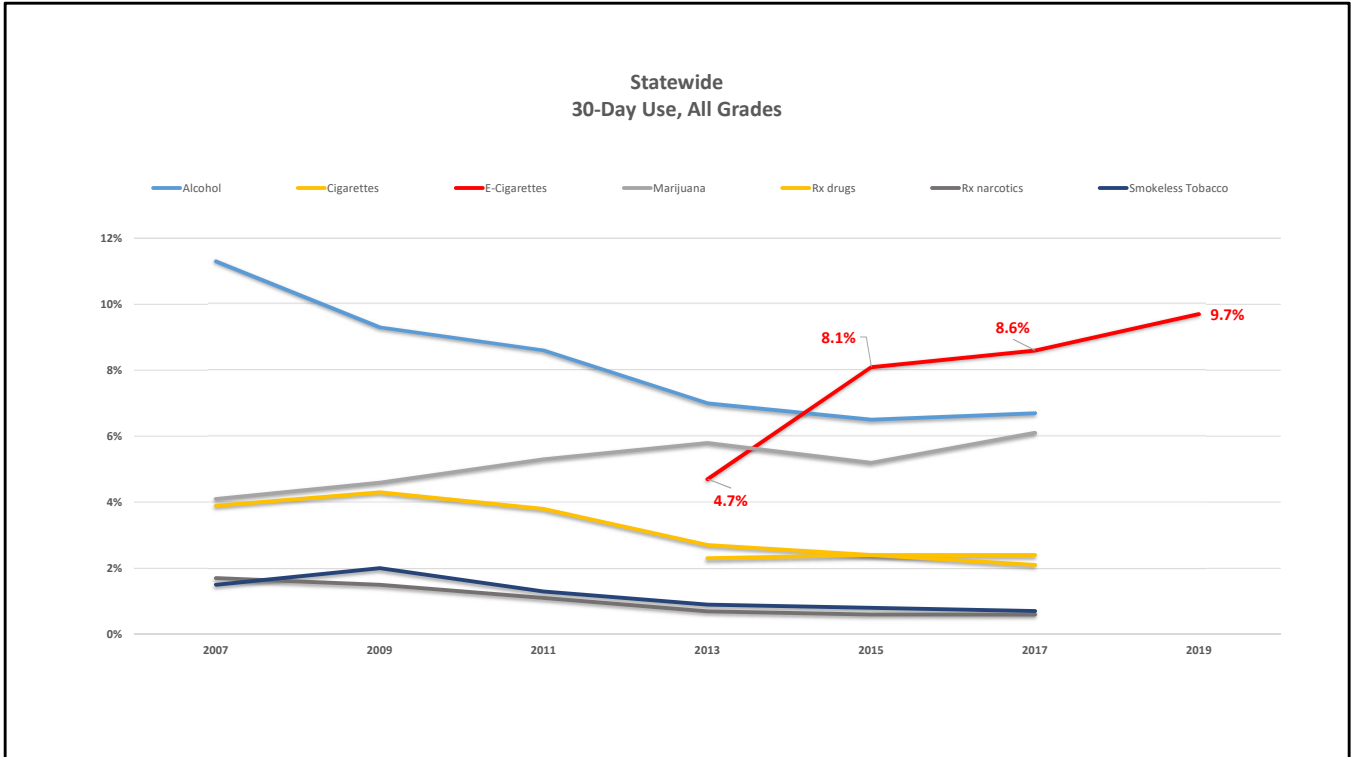
Who is Using
them?



Image: <http://ehp.niehs.nih.gov/wp-content/uploads/2014/09/ehp.122-A244.g0031.jpg>



<http://www.tobaccofreeutah.org/pdfs/TPCPFY%20Current%20report.pdf>



2019 Preliminary data from the Student Health and Risk Prevention (SHARP) Statewide Survey

1. Alcohol – had beer, wine, or hard liquor to drink during the past 30 days?
2. Cigarettes – smoked cigarettes during the past 30 days?
3. E-Cigarettes – use electronic cigarettes, e-cigarettes, vape pens, or e-hookahs during the past 30 days?
4. Marijuana – used marijuana (grass, pot) or hashish (hash, hash oil) during the past 30 days?
5. Rx drugs – used prescription drugs (stimulants, sedatives, tranquilizers, or narcotics) without a doctor telling you to take them, during the past 30 days?
6. Rx narcotics – used narcotic prescription drugs (such as OxyContin, methadone, morphine, codeine, Demerol, Vicodin, Percocet) without a doctor telling you to take them, during the past 30 days?
7. Smokeless Tobacco – use chewing tobacco, snuff, or dip during the past 30 days?

Why so popular?



The flavors



They are promoted as safe



They glamorize the use of drugs



They are cheap and easy to get



Marketed to children using fun devices and flavors



They are highly addictive

“So a question you may also be asking yourself, is do we know why youth tobacco product uses increasing. The answer to that is yes. As I noted before the advertising will bring a horse to water, the flavors will get them to drink, and the nicotine will keep them coming back for more. We know that exposure to tobacco product advertising and imaging through various media including retail stores, the Internet, television, and other sources can cause youth to start using tobacco products.”

Dr. **Brian King** from **CDC's** Office of Smoking on Health

<https://www.cdc.gov/media/releases/2019/t0211-tobacco-youth-rising.html>

Why so popular?

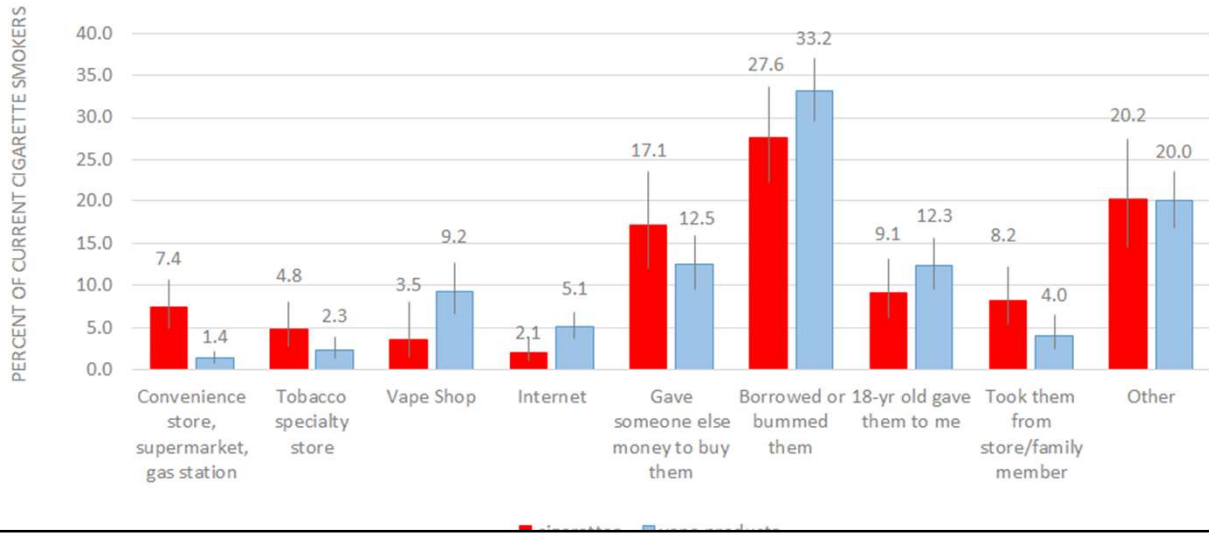
From youth:

- Cloud tricks
- Less stigma than smoking
- Bigger buzz
- The smell, or lack thereof
- Easier to hide use
- Help cope with stress
- “No one told us they were bad.”



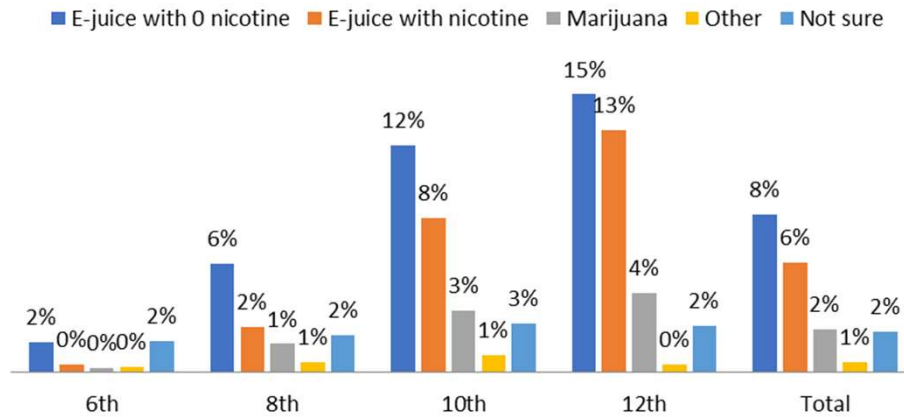
Image: <http://vaporizerforweed.org/wp-content/uploads/2017/04/vape-tricks.jpg>

Source of Cigarettes and Vape Products for Utah Students in Grades 8, 10, and 12 by Type of Source, 2017



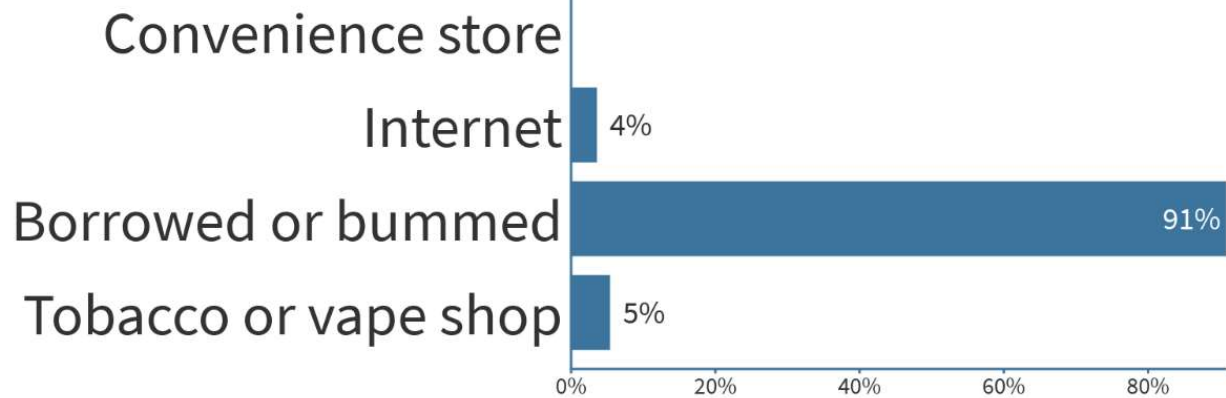
<http://www.tobaccofreeutah.org/pdfs/TPCFY%20Current%20report.pdf>

**If you have used a vaping product in the past year, what did you put in it?
(Mark all that apply.)**



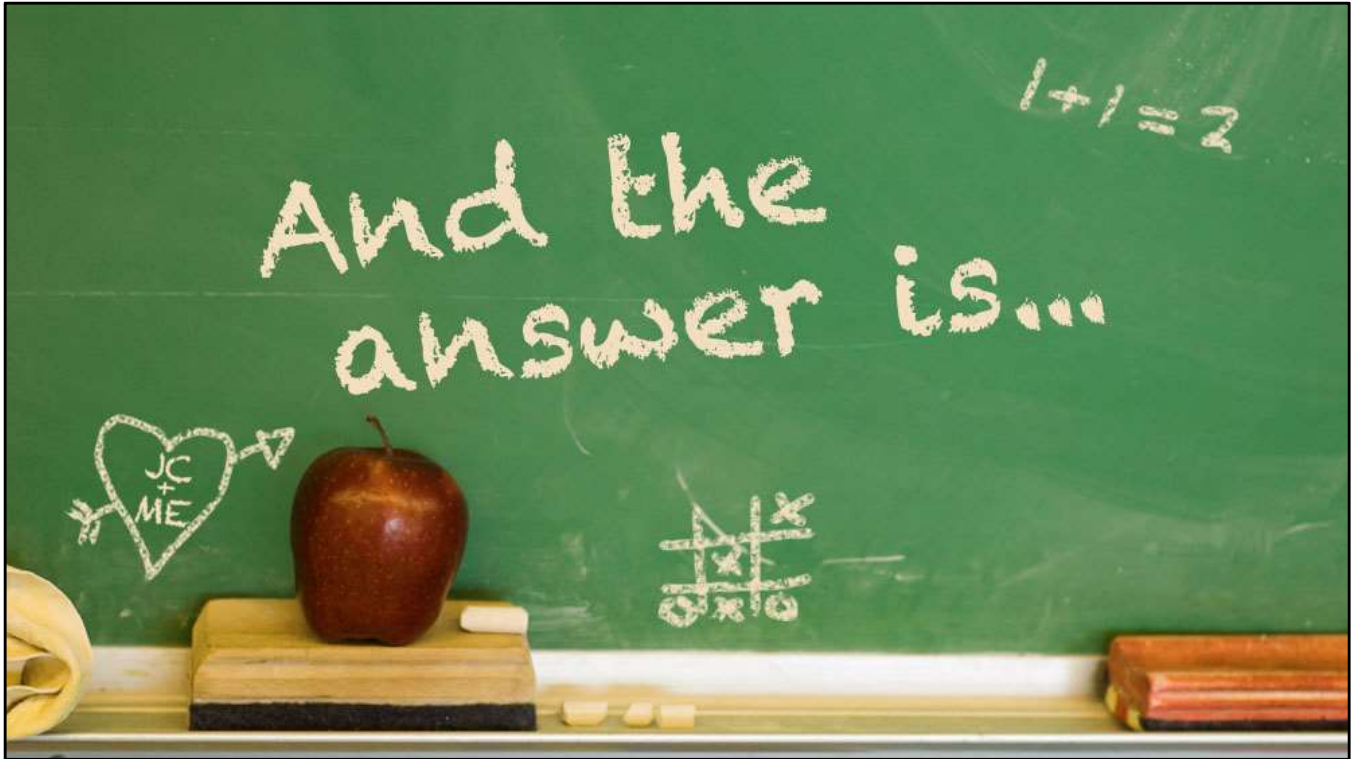
Data from 2017 Utah Student Health and Risk Prevention (SHARP) Survey
Compiled by Bach Harrison, LLC

This is the most common way youth obtain vape products.



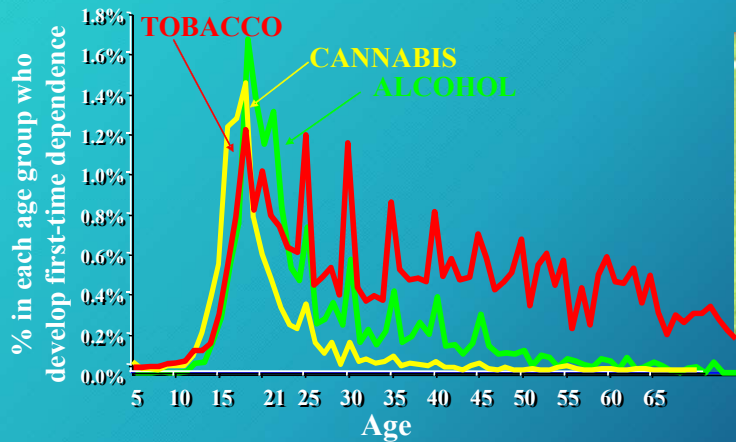
Poll Title: This is the most common way youth obtain vape products.

https://www.polleverywhere.com/multiple_choice_polls/M1tiQNaUH783fn8



C. Borrowed or bummed

Addiction Is A Developmental Disease that starts in adolescence and childhood



Age at tobacco, alcohol, and cannabis dependence per DSM IV

National Epidemiologic Survey on Alcohol and Related Conditions, 2003.

NIDA

Addiction usually begins in adolescence, thus early prevention is critical.

This slide illustrates the age at which drug dependence is first diagnosed, which for tobacco, alcohol and marijuana, is typically in adolescence or early adulthood.

Much of the research supported by NIDA is aimed at preventing drug use from ever starting. This research ranges from highly complex molecular and imaging studies to devising effective messages that “speak” to young people.

What's being done about it?

Best Practices



E-Cigarette Use Among Youth and Young Adults
A Report of the Surgeon General

Action can be taken at the national, state, local, tribal and territorial levels to address e-cigarette use among youth and young adults. Actions could include incorporating e-cigarettes into **smoke-free policies, preventing access to e-cigarettes by youth, price and tax policies, retail licensure, regulation of e-cigarette marketing likely to attract youth, and educational initiatives targeting youth and young adults.**

https://e-cigarettes.surgeongeneral.gov/documents/2016_SGR_Fact_Sheet_508.pdf



1.800.QUIT.NOW

E-cigarettes are banned in the same places as cigarettes.

Utah Indoor Clean Air Act

Since 2012 in Utah, the use of e-cigs is prohibited in all the same indoor public places that traditional cigarettes are prohibited



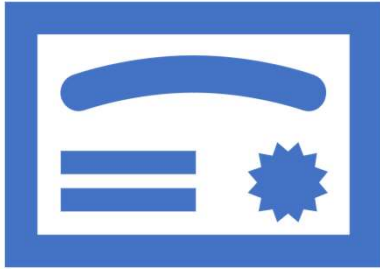
E-cigs are prohibited in all places traditional cigarettes are.



E-cigs are prohibited in all places traditional cigarettes are.



Must be 19 or older to purchase e-cigarettes (e-liquid and devices)



Specialty
License &
Permit Required

Smoke and Vape Shop Regulation

600 from:

- Another tobacco shop
- Agriculture property
- Residential property



Utah Municipal Code 10-8-41.6. Regulation of retail tobacco specialty business.

https://le.utah.gov/xcode/Title10/Chapter8/10-8-S41.6.html?v=C10-8-S41.6_2018050820180701

Utah Counties 17-50-333. Regulation of retail tobacco specialty business.

<https://le.utah.gov/xcode/Title17/Chapter50/17-50-S333.html>



Smoke and Vape Shop Regulation



1,000 feet from:

1. a kindergarten, elementary, middle, junior high, or high school
2. a licensed child-care facility or preschool
3. a trade or technical school
4. a church
5. a public library
6. a public playground
7. a public park
8. a youth center or other space used primarily for youth-oriented activities
9. a public recreational facility
10. a public arcade

Utah Municipal Code 10-8-41.6. Regulation of retail tobacco specialty business.

https://le.utah.gov/xcode/Title10/Chapter8/10-8-S41.6.html?v=C10-8-S41.6_2018050820180701

Utah Counties 17-50-333. Regulation of retail tobacco specialty business.

<https://le.utah.gov/xcode/Title17/Chapter50/17-50-S333.html>

Policy Initiatives



AGE 21



BAN FLAVORS



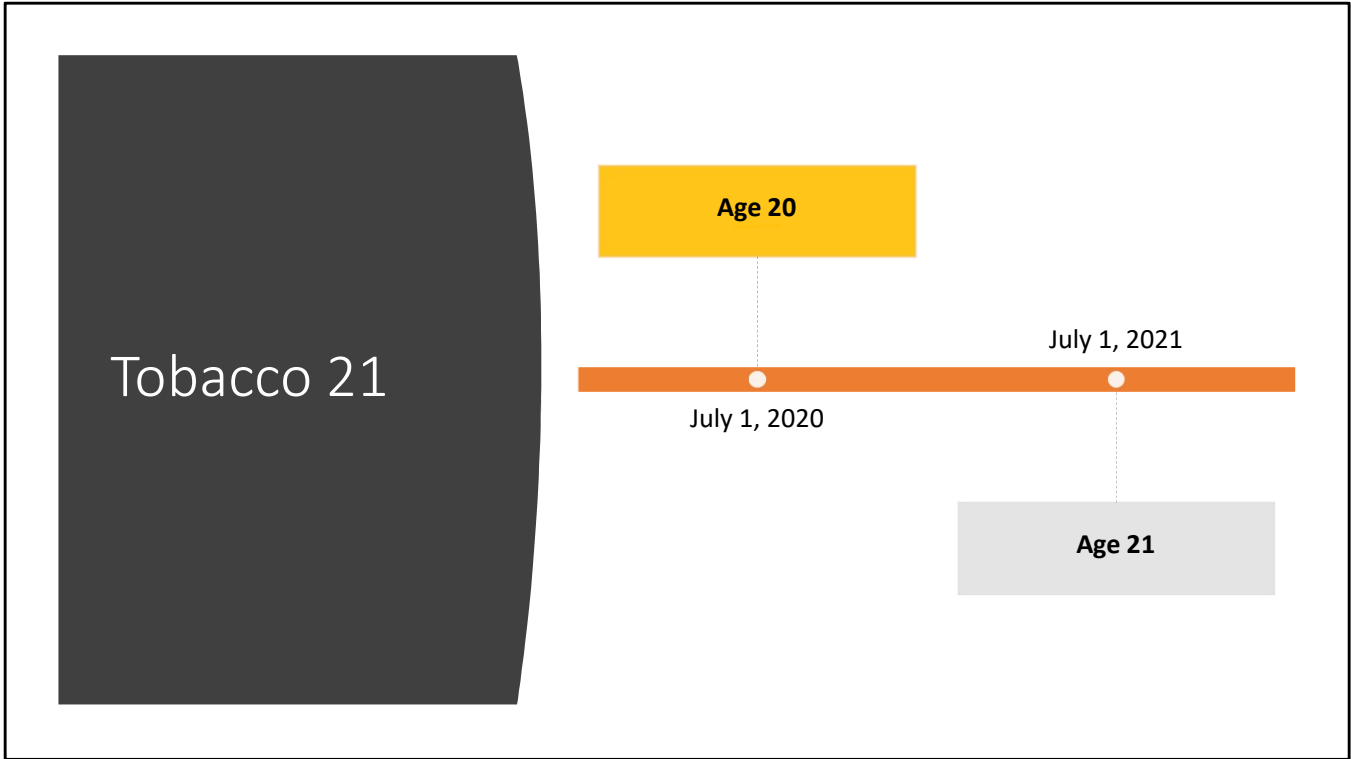
TAXATION



PTA!

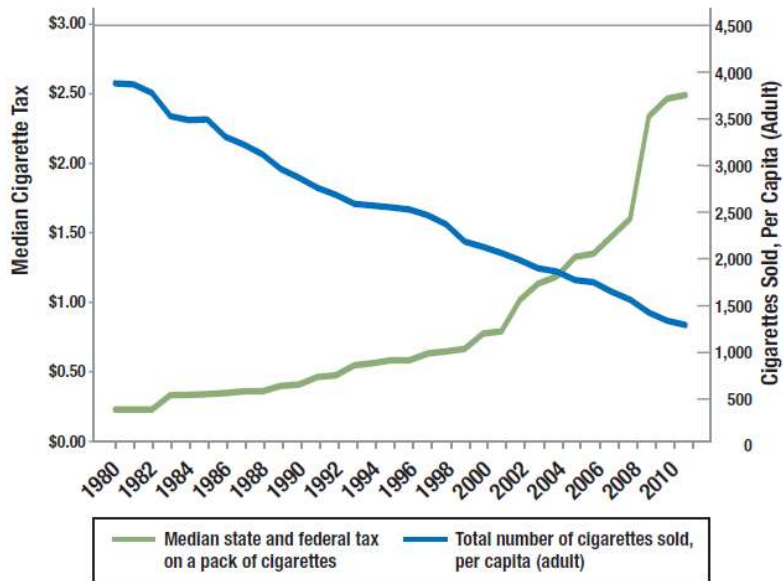
DeAnn Kettenring
Health Commissioner, Utah State PTA

DeAnn was the one who really spear-heading efforts in Lehi. She reached out directly to the local PTA as well as the principals from each school in Lehi to make sure they were on board with the T21 ordinance.



2019's H.B. 324 Tobacco Age Amendments
<https://le.utah.gov/~2019/bills/static/HB0324.html>

Cigarette Taxes and Cigarette Consumption in the U.S.



EC's are about 86% cheaper than combustible cigarettes without an excise tax.

Sources: American Lung; CDC; Orzechowski and Walker; https://www.aei.org/wp-content/uploads/2013/08/img-hassett-chart-piece-july-2013_15364933528.png



Restrict flavors

Emergency Rule

- R384-418. Electronic-Cigarette Mandatory Warning Signage and Sale Restrictions.
 1. THC warning sign placed at all retail tobacco locations
 2. No flavored e-cigarette products at general tobacco retailers
 3. October 21, 2019



<http://utahtobaccolaws.org/emergency-rule-r384-418/>



VAPING UNREGULATED THC IS **DANGEROUS** TO YOUR HEALTH

A lung disease related to vaping unregulated THC has recently hospitalized dozens of Utahns and caused several deaths nationwide.

For more information, go to <https://health.utah.gov/lung-disease-investigation>

<http://utahtobaccolaws.org/emergency-rule-r384-418/>

What's Left to Do?



Educate parents and students



School interventions



Monitoring at schools

Call to Action



Work with your school district



Look for signs of vaping



Connect parents and youth to resources



Contact your local health department



Resources

Train the
Trainer
Opportunities





The next generation of tobacco products have changed. With fun flavors and sleek designs, today's products are made to look appealing. Don't be fooled—they're full of nicotine and can be just as addictive. Tobacco has changed, parents.

IT'S TIME FOR THE WAY YOU TALK ABOUT TOBACCO TO CHANGE TOO.



PRODUCTS

RISKS

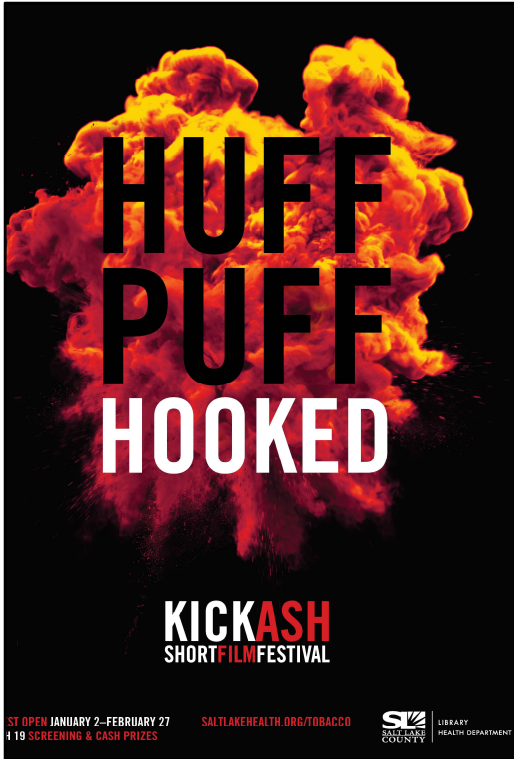
ISSUES

TAKE ACTION

RESOURCES

FAQ

<https://thetobaccotalk.org/>



-
- **Contest open:** January 2 to February 27, 2020
 - **Screening and cash prizes awarded:** March 19, 2020
 - **Contact:** Julia Glade - jglade@slco.org
 - **More information:** <https://slco.org/health/tobacco-prevention/prevention/>

LOCAL NEWS
Wasatch
School District
Installs Vape
Detectors At
Wasatch High



HEBER, Utah – Wasatch High School officials took steps to prevent vaping on campus by installing vape detectors in bathrooms and locker rooms at the school.

The vape detectors have been up since the beginning of the school year and the Wasatch School District was the first in Utah to install the detectors, according to district officials.

<https://ksltv.com/422244/wasatch-school-district-installs-vape-detectors-at-wasatch-high/?>

<https://amp.cnn.com/cnn/2019/09/12/health/vaping-detectors-school-trnd/index.html>



THE FACTS

on e-cigarette use among youth and young adults

- [A Message from the U.S. Surgeon General](#)
- [Good Mythical Morning's Amazingly Amazing Science \(starts 11 minutes in\)](#)
- [The U.S. Surgeon General visits Rhett & Link on Good Mythical MORE](#)



Source: <https://e-cigarettes.surgeongeneral.gov/>



BOTVIN
LIFESKILLS

Botvins Lifeskills Training Program Overview

BRIEF HISTORY:

2017 Legislative Session passed HB 442 (*better known as the Zion Curtain bill*). The legislation included a **requirement** for selection of a school-based, evidence-based youth alcohol education program to be included for students in jr. high and high school. The program selection **criteria** centered around meeting the core standards for Utah public schools and that the provider had **experience/training** in providing a program that was effective at reducing underage drinking, the dangers of DUI, **and that it must include risk and protective factors for youth.**

An Underage Drinking Prevention Program Advisory Council was established to oversee administration of the program and the **\$1,750,000.00** yearly beginning July 1, 2018. The following members make up the Advisory Council: (*note: Executive directors may appoint a designee.*)

Director of Alcoholic Beverage Control
Director of Board of Health
Division of Substance Abuse and Mental Health
Division of Child and Family Services
Division of Juvenile Justice Services
State Supt. Of Public Instruction
and 8. Two members of the State Board of Education

The Utah State Board of Education was charged with selecting a program that met the

above criteria. RFP's were sent to 1,100 providers nationwide. Only ONE program—**Botvin's Lifeskills Training (LST)**---met the criteria.

The Botvins Lifeskills Training Program has been rigorously studied and has passed 35 peer review studies regarding risk and protective factors, peer pressure, self-esteem, self-mastery, self-confidence, knowledge, coping and social anxiety. It scored high in consequences of substance abuse, reduction and prevention of a variety of high risk behaviors.

Fidelity: Teachers must teach the full scope of materials and sequence 1 time/week. Interactive teaching process.

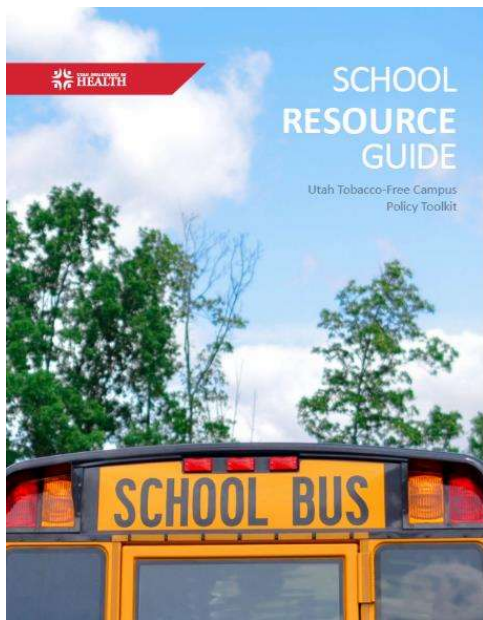




Image retrieved on 08/07/2018 from
<https://fm.cnbc.com/applications/cnbc.com/resources/img/editorial/2016/03/30/103507374-104044814.1910x1000.jpg>

Vaping is a safe way to help people quit smoking.

True

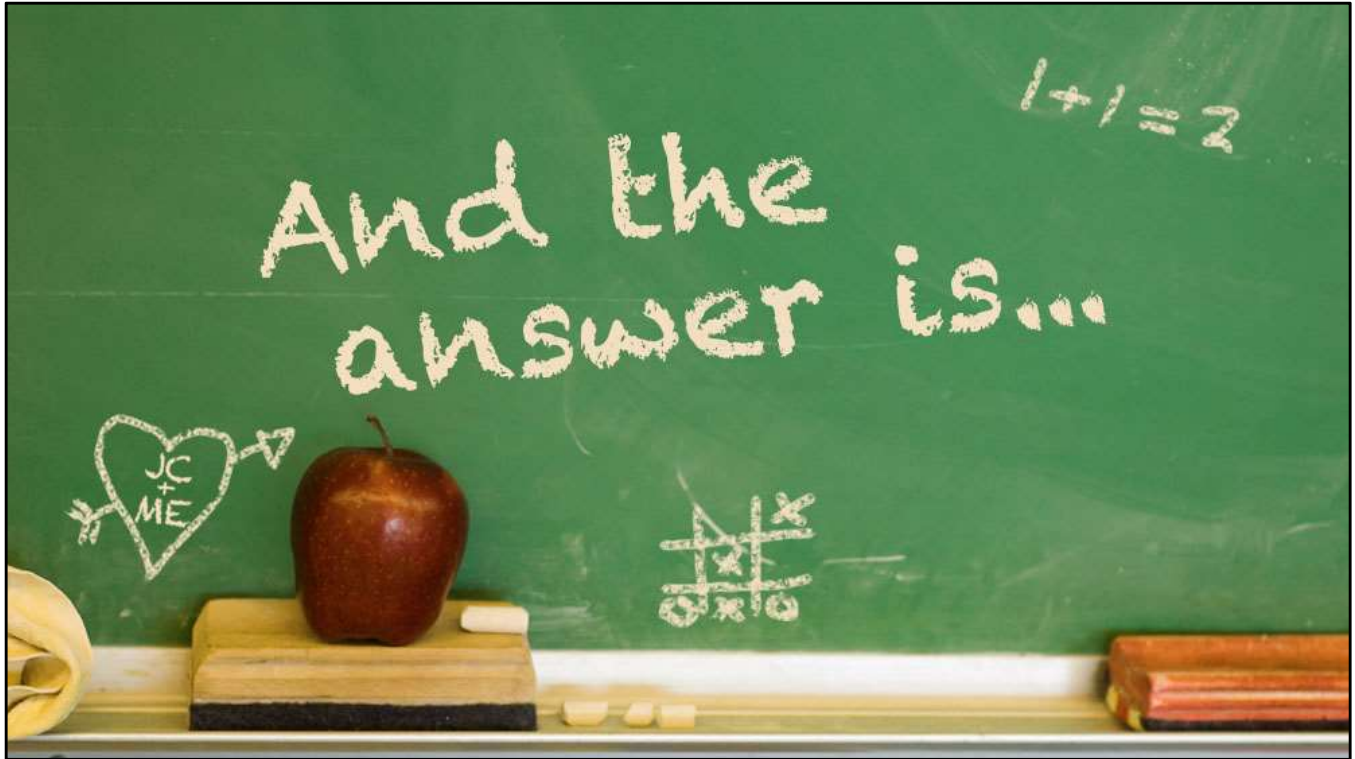
False

oll Everywhere

Start the presentation to see live content. Still no live content? Install the app or get help at [PolleEv.com/app](https://www.polleverywhere.com/app)

Poll Title: Vaping is a safe way to help people quit smoking.

https://www.polleverywhere.com/multiple_choice_polls/ceU2NXv1y9XNzNQ



B. False. They are not safe.

Electronic cigarettes are now regulated like regular cigarettes.

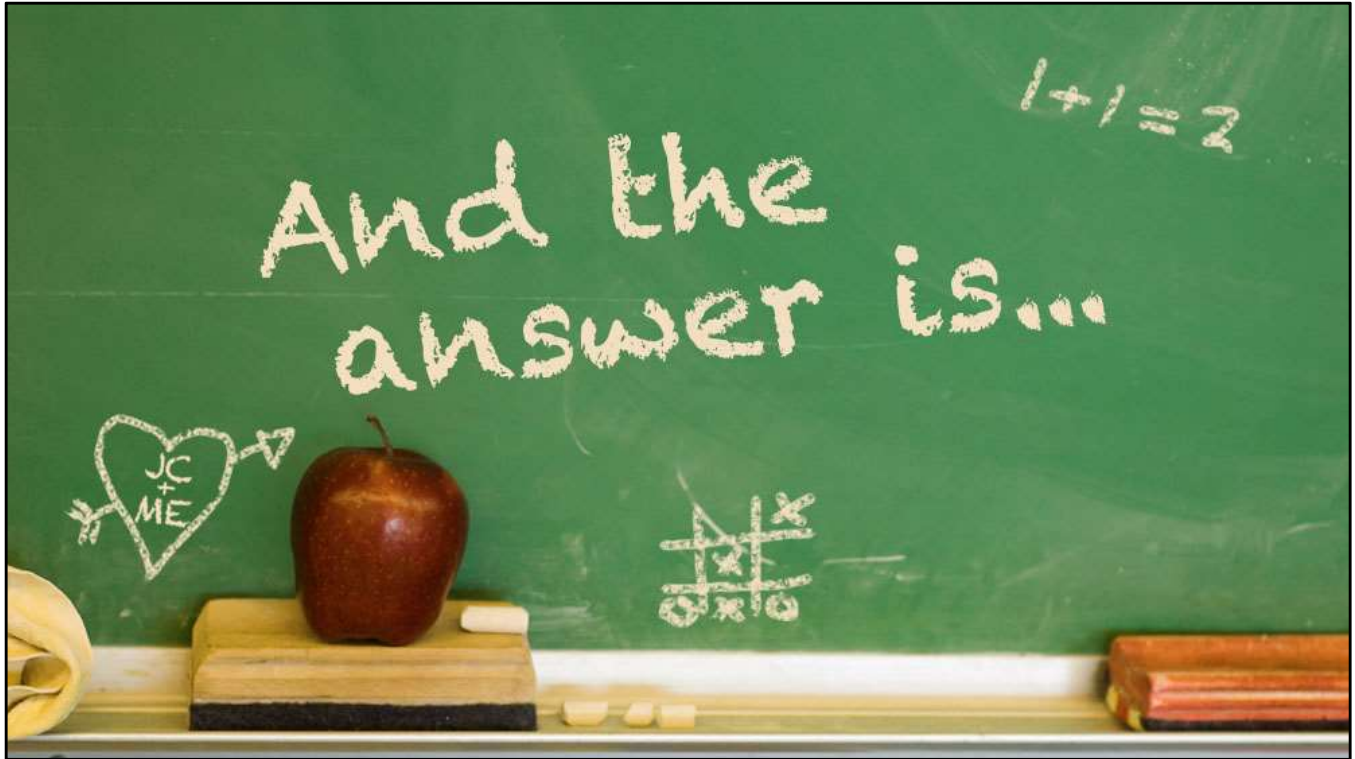
True

False

oll Everywhere

Start the presentation to see live content. Still no live content? Install the app or get help at [PollEv.com/app](https://www.poll Everywhere.com/app)

Poll Title: Electronic cigarettes are now regulated like regular cigarettes.
https://www.poll Everywhere.com/multiple_choice_polls/NkJwezregA5MKrC



B. False. We wish they were.

Utah banned vaping inside indoor public places in . . .

2010

2012

2016

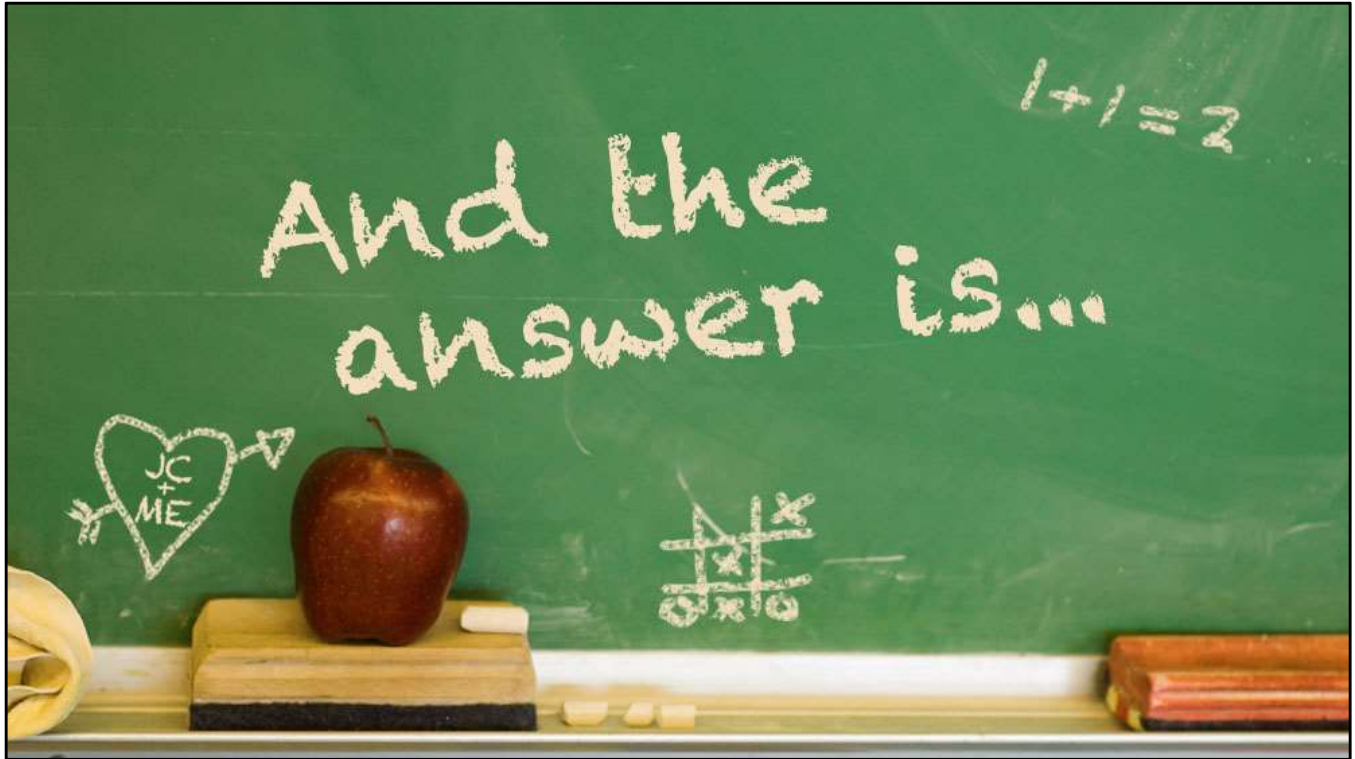
We're still waiting for a ban

oll Everywhere

Start the presentation to see live content. Still no live content? Install the app or get help at [PolleEv.com/app](https://www.polleverywhere.com/app)

Poll Title: Utah banned vaping inside indoor public places in . . .

https://www.polleverywhere.com/multiple_choice_polls/z06cVTqtNFI49TN



B. 2012

There is substantial evidence that . . .

Vaping exposes you to the
same level of chemicals as
cigarettes

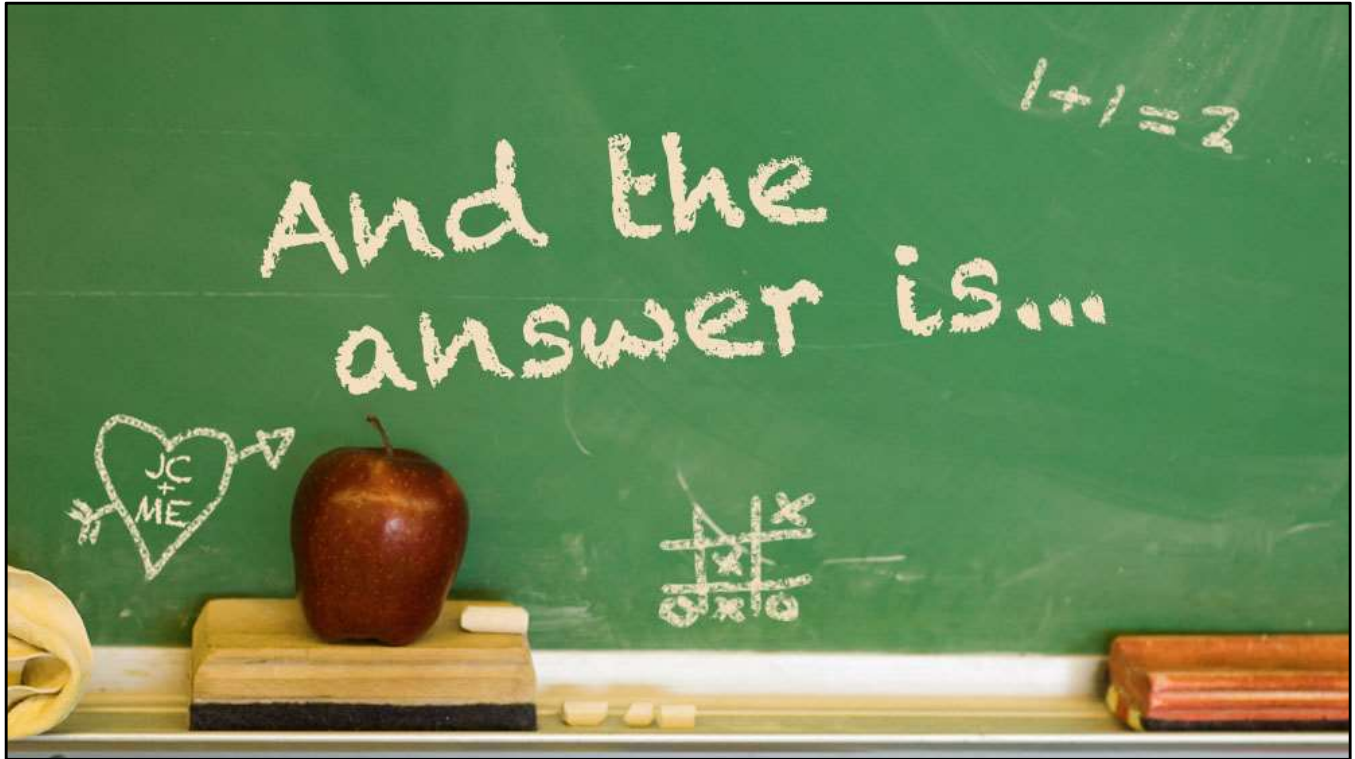
Vaping is a safe way to help
people quit smoking

Youth who vape are more likely
to smoke

Most e-cigarettes emit very few
toxic substances

Poll Title: There is substantial evidence that . . .

https://www.polleverywhere.com/multiple_choice_polls/VG0Fp4LjJ203jwB



C. Perhaps the most alarming thing about youth vaping is that it increases their risk of smoking.

Nicotine alters the development of this part of the brain, responsible for impulse control and judgment.

Cerebellum

Temporal lobes

Parietal lobes

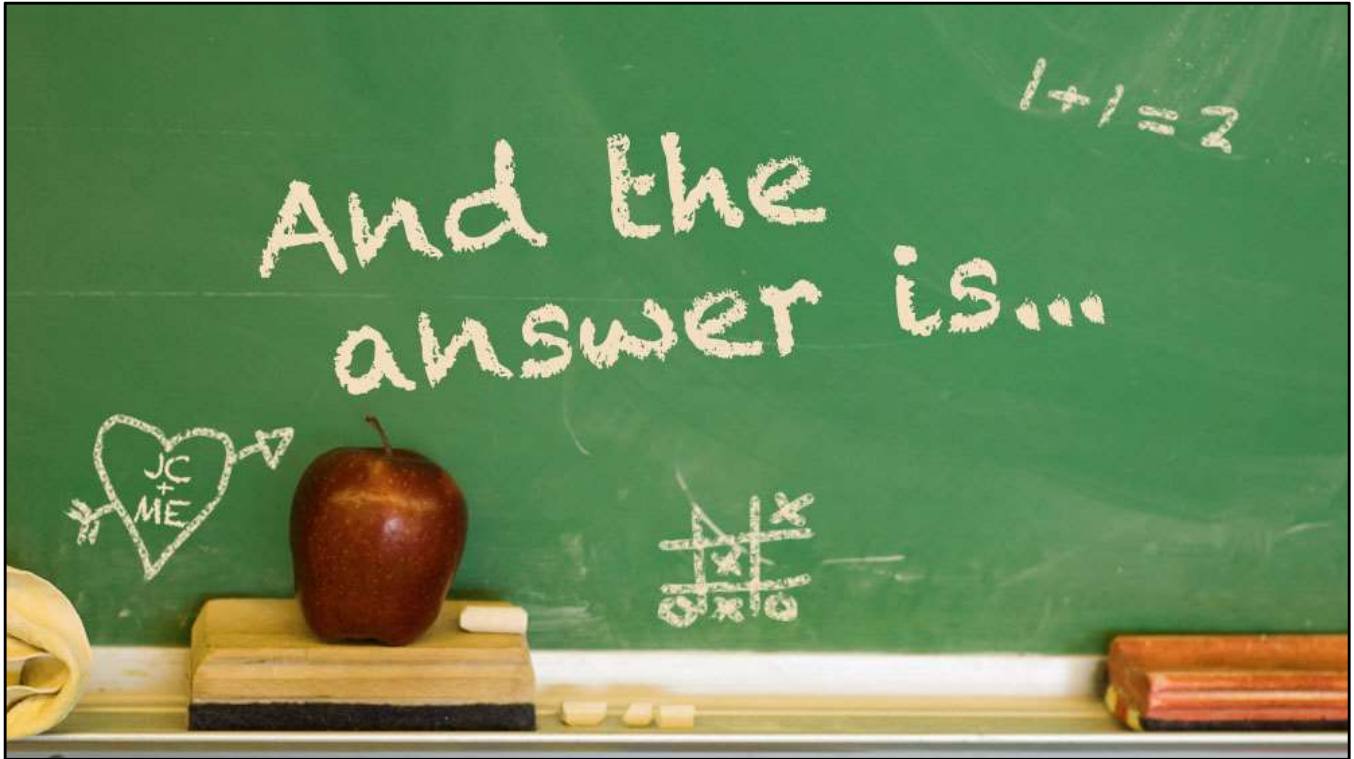
Frontal lobes

oll Everywhere

Start the presentation to see live content. Still no live content? Install the app or get help at [PollEv.com/app](https://www.pollEv.com/app)

Poll Title: Nicotine alters the development of this part of the brain, responsible for impulse control and judgment.

https://www.polleverywhere.com/multiple_choice_polls/9q2Pen2WN4HWxIS



D. Prefrontal cortex is in the frontal lobe area



QUESTIONS?

H.B. 274 Retail Tobacco Business Amendments

- creates requirements regarding the verification of age when selling an electronic cigarette product or seeking entry into certain restricted areas;
- prohibits an individual from using proof of age fraudulently or permitting the individual's proof of age to be used by another individual fraudulently to obtain an electronic cigarette product or gain entry into certain restricted areas;
- prohibits a manufacturer, wholesaler, or retailer from providing certain discounts or



<https://le.utah.gov/~2019/bills/static/HB0274.html>

H.B. 237 Personal Electronic Device Use in Public Schools

- requires a public school to develop a policy regarding the use of personal electronic devices on school premises;
- requires a public school to submit the device policy to the local education agency governing board at least every two years for review;
- requires each local education agency governing board to review and approve or suggest revisions to each school's device policy;
- requires a public school to provide the device policy to parents, students, and employees; and
- provides requirements related to device policy training.



<https://le.utah.gov/~2019/bills/static/HB0237.html>

H.B. 88 Electronic Cigarette and Other Nicotine Product Amendments

- imposes civil penalties for the sale of an alternative nicotine product or a nontherapeutic nicotine product;
- requires certain products that contain synthetic nicotine to have a statement on the exterior package that the product contains synthetic nicotine;
- imposes licensing requirements on a person that sells or distributes an alternative nicotine product or a nontherapeutic nicotine product;
- imposes an excise tax on the sale of an electronic cigarette substance, an alternative nicotine product, and a nontherapeutic nicotine device substance in the state;
- provides for the remittance of the tax collected;
- creates the Electronic Cigarette Substance and Other Nicotine Product Tax



<https://le.utah.gov/~2018/bills/static/HB0088.html>

H.B. 274 Retail Tobacco Business Amendments

- creates requirements regarding the verification of age when selling an electronic cigarette product or seeking entry into certain restricted areas;
- prohibits an individual from using proof of age fraudulently or permitting the individual's proof of age to be used by another individual fraudulently to obtain an electronic cigarette product or gain entry into certain restricted areas;
- prohibits a manufacturer, wholesaler, or retailer from providing certain discounts or



<https://le.utah.gov/~2019/bills/static/HB0274.html>

THANK YOU!

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