

Juuling, Dripping and More: What Families Need to Know About Vaping

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Who we are

- Partnership for Drug-Free Kids is a national nonprofit dedicated to supporting families struggling with their son or daughter's substance use
 - On the frontlines of this issue for more than 30 years.
 - Unparalleled services and resources on our website that customize a parent's journey in addressing their child's substance use.



Agenda

- History of vaping
- Vaping devices
- Hooking a new generation?
- FDA oversight
- Risk and protective factors
- Resources



The 5th invention



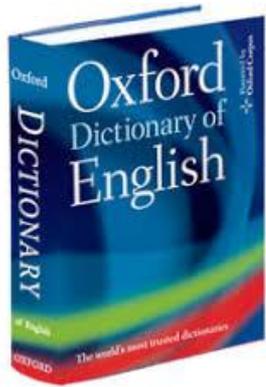
Hon Lik, Chemist at Liaoning Provincial Institute of Traditional Chinese Medicine.

- 1st e-cigarette patent filed in 1963
- Hon Lik files patent in 2003
- ‘Some in China have called it the fifth invention — after navigation, gunpowder, printing and paper, but that’s too much.’

(M. Ridley 2015 Interview, The Spectator)

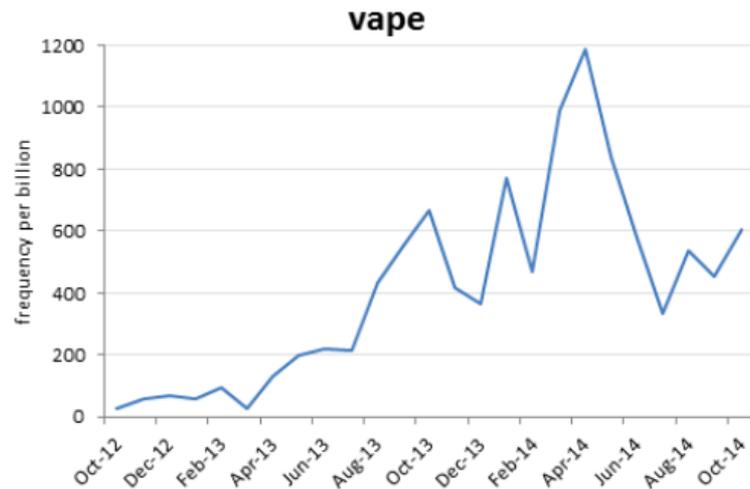
Oxford Dictionary 2014 word of the year

#1 Vape beating out:



- Bae
- Budtender
- Contactless
- Slacktivism

Chart showing the frequency of the use of vape over 2014



What is vaping?

- Vaping is the act of inhaling and exhaling the aerosol, often referred to as “vapor”, produced by an e-cigarette or similar device. Components are:
 - Cartridge or reservoir to hold a e-liquid/e-juice
 - Heating element (atomizer)
 - Power source (battery)
 - Mouthpiece to inhale

Vape Devices

1st Generation
“Cigalike”



2nd Generation
Vape Pen



3rd Generation
Vape Mods



How do e-cigarettes work?



Exactly what is being vaporized?

- Flavored liquids including chemicals like glycerin and polyethylene glycol



- Flavored liquids with varying levels of nicotine
- Leaf marijuana/ THC oil

Juuling: the stealth vape



- JUUL - \$49 plus \$15.99/pod
- Pod flavors: mango, mint, fruit medley, crème brulee and Virginia tobacco
- Contain 5% nicotine =
1 pack of cigarettes or 200 puffs

Another popular brand



Juno E-Vapor Battery RED
Limited Edition

\$22.99



Juno Menthol / Fruit / Dessert Kit

\$34.99



Twelve Vapor Signature Collection
- Juno 4 Pack Pods - LEO

\$16.99

Vaprwear

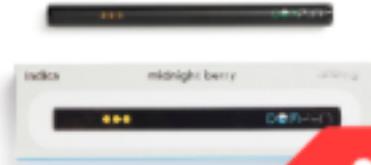


- 420 FULL-ZIP HOODIE, WHITE - \$34.99
- Integrated, Patented Drawstring Vapor Delivery System: The discreet and easy-access Drawstring vapor delivery system is integrated directly into your Vaprwear gear for easy vapor delivery anytime, anywhere.

Vaping marijuana and oils



Disposable marijuana vape pens and cartridges



DEAL

\$40
Midnight Berry
DomPen



PRICE DROP

\$16
Purple Kush
Bloom Farms

Delivered to your door by EAZE

Phillip Morris seeking FDA approval for IQOS



IQOS would be the first FDA-approved tobacco product that's allowed to be marketed to Americans as safer than cigarettes

Vaping slang terms

- Analog: refers to tobacco as the old physical or "analog" version
- Juul, Juuling, Pax, NJOY, Halo, 401, 402: refer to styles/brands
- Atty: atomizer to heat e-juice to point of vaporizing
- Cart: cartridge that holds the juice
- Carto: a cartridge and atomizer combined into a single unit
- Cloud chasing: e-cigarette/Mod users tweaking their hardware and e-juice selections to produce ever bigger and thicker clouds of vapor
- Draw: amount of force required to accommodate inhalation through the mouthpiece of an e-cig
- E-juice, e-liquid, smoke juice: the liquids that are vaporized when using an e-cig
- PV: personal vaporizer, often the mod style

Vaping slang terms continued

- O/Ohm: standard unit of electrical resistance. A lower number indicates lower resistance and therefore faster heating of a coil, as a result of higher wattage.
- PG: propylene glycol is used as a diluent (a filler and diluting agent). Used in the production of e-liquids associated with delivering the throat hit.
- TH: throat hit the sensation an e-cigarette vaper (and tobacco smoker) may experience when the vapor hits the back of their throat.
- VG: vegetable glycerin acts as a diluent, or filler, and is a common ingredient found in e-liquid. VG has a light, sweet taste, low toxicity, and is thicker than PG. Glycerin is used at higher ratios in juices when thicker, richer vapor production is desired or where a PG sensitivity of the user is present.

Reasons for vaping

Reasons for Use of Electronic Vaporizers

Grades 8, 10, and 12, 2015

(Entries are percentages.)

What have been the most important reasons for your using an electronic vaporizer such as an e-cigarette? (Mark all that apply.)

	<u>8th Grade</u>	<u>10th Grade</u>	<u>12th Grade</u>
	<u>2015</u>	<u>2015</u>	<u>2015</u>
To help me quit regular cigarettes	4.7	7.0	9.6
Because regular cigarette use is not permitted	6.3	6.7	5.2
To experiment-to see what it's like	54.8	51.4	53.6
To relax or relieve tension	22.0	22.2	20.7
To feel good or get high	9.8	8.3	7.2
Because it looks cool	14.3	13.5	13.5
To have a good time with my friends	22.5	23.9	20.5
Because of boredom-nothing else to do	24.7	24.1	22.0
Because it tastes good	31.5	39.4	38.4
Because I am "hooked"-I have to have it	1.2	1.3	0.8
<i>Weighted N =</i>	<i>603</i>	<i>846</i>	<i>1449</i>

Source. The Monitoring the Future study, the University of Michigan.

- Produces a fraction of the odor
- Portable and easily hidden – press a button and inhale
- Cartridges allow for customization of flavors, nicotine levels and cannabis compounds

Vaping tricks

- One of top 2 reasons teens say they enjoy using e-cigs
- Smoke rings 2.0
 - Dragon
 - Ghost Inhale
 - Waterfall
- Competitions



So, what is dripping?



- Apply nicotine liquid directly to heated coils of e-cig or vaporizer
- Produces thick clouds of nicotine vapor and a stronger “throat hit”

Vaping advertisement exposure



More than **18 million (7 in 10)** US middle and high school youth were exposed to e-cigarette ads in 2014.

More than **1 in 2** middle and high school youth were exposed to e-cigarette ads in retail stores.

Nearly **2 in 5** middle and high school youth saw e-cigarette ads online.



14.4 MILLION
youth are exposed at
retail stores



10.5 MILLION
youth are exposed
through the Internet



9.6 MILLION
youth are exposed
through TV/movies



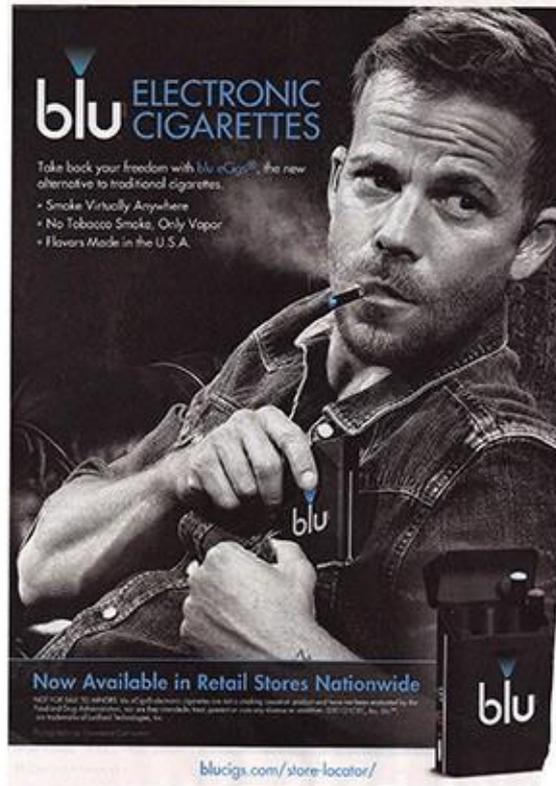
8 MILLION
youth are exposed through
magazines/newspapers

Source: CDC

Celebrity appeal



Sex sells



blu ELECTRONIC CIGARETTES

Take back your freedom with blu eCigs[®], the new alternative to traditional cigarettes.

- Smoke Virtually Anywhere
- No Tobacco Smoke, Only Vapor
- Flavors Made in the U.S.A.

Now Available in Retail Stores Nationwide

NOT FOR SALE TO MINORS. All blu electronic cigarette use for smoking, creating vapor and heat has been evaluated by the Food and Drug Administration. For all the products, their generation and any future or additional. ©2012 B&W, Inc. All rights reserved. All trademarks are the property of their respective owners.

blucigs.com/store-locator/



blu ELECTRONIC CIGARETTES

SLIM. CHARGED. READY TO GO.

AVAILABLE NATIONWIDE!
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©2012 B&W, Inc. All rights reserved. All blu electronic cigarette use for smoking, creating vapor and heat has been evaluated by the Food and Drug Administration. For all the products, their generation and any future or additional. ©2012 B&W, Inc. All rights reserved. All trademarks are the property of their respective owners.

How to be cool

You've come a long way, baby.



VIRGINIA SLIMS
Lights

Photo: Steve Lisberger



SMOKE IN STYLE
With blu Electronic Cigarettes

Freedom never goes out of fashion. Control when and where you want to smoke with blu electronic cigarettes. blu produces no smoke and no ash, only vapor, making it the ultimate accessory and the smarter alternative to regular cigarettes. Step out in style with blu.

SCAN FOR A CHANCE TO WIN A STARTER KIT



'Like' us on Facebook
facebook.com/blucigs



blu

blucigs.com

Available at these fine retailers:



18+ only. CALIFORNIA PROPOSITION 65 Warning: This product contains nicotine, a chemical known to the state of California to cause birth defects or other reproductive harm.

Safer alternative

X-Taste
WWW.X-TASTE.COM

X250 MOD REVOLUTIONIZED THE WAY WE SMOKE

HEALTH AND BEAUTY

BIG CLOUD AND PERFECT TASTE

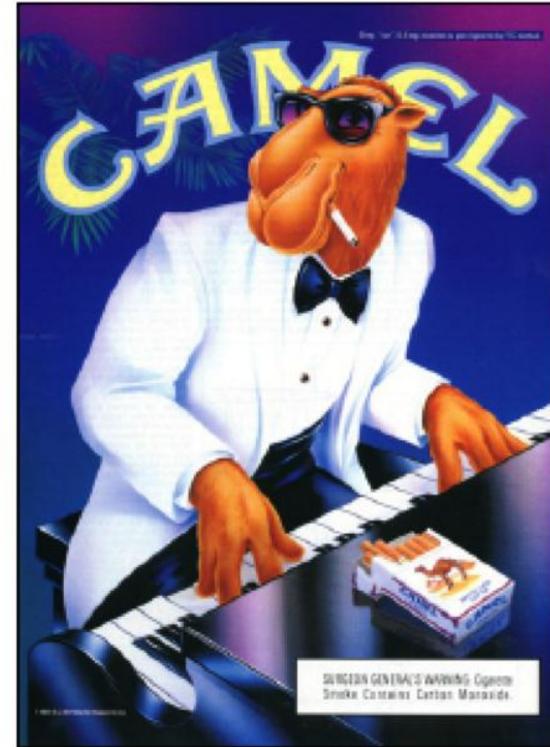
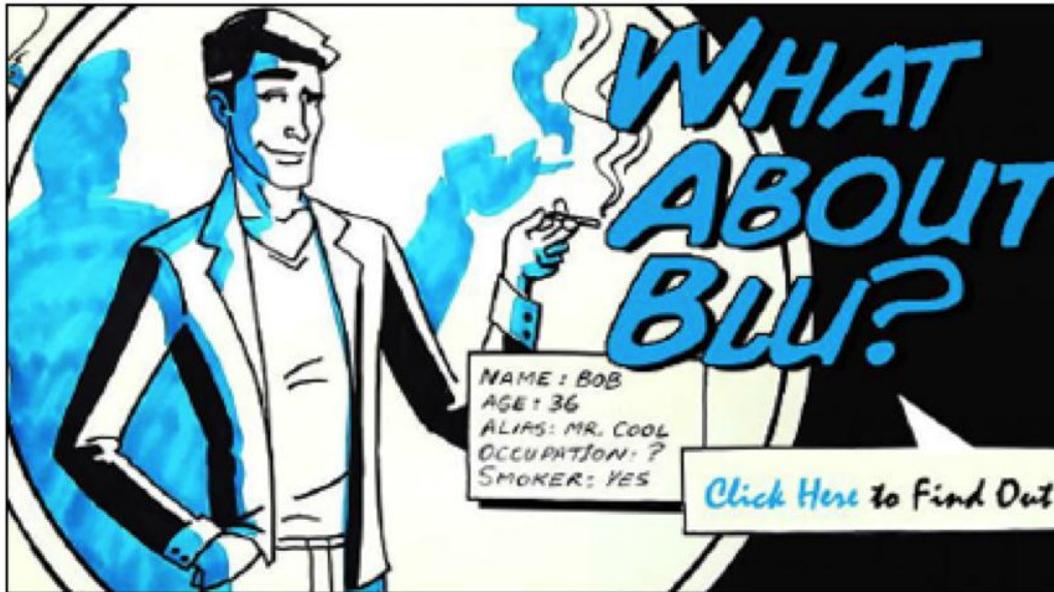
OLED 1.3

- Easily Replaceable Battery
- Advanced Safety Features
- Support Firmware Upgrading

- Fast and Precise Temperature Control
- 250W Maximum Power
- X-Taste Advanced Software
- Support A Variety of Coil Material

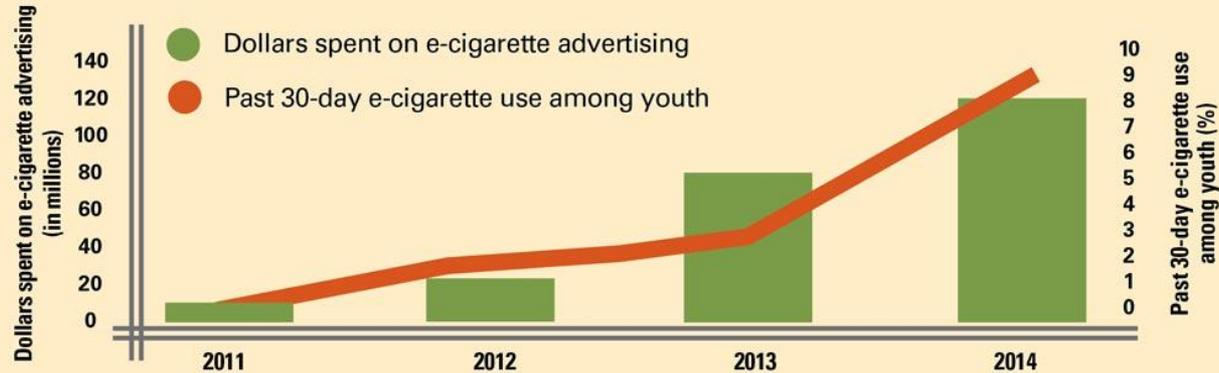
DHGate.com x-taste250

Joe Camel...meet Mr. Cool



Rise in vaping based upon exposure

E-cigarette use among youth is rising as e-cigarette advertising grows



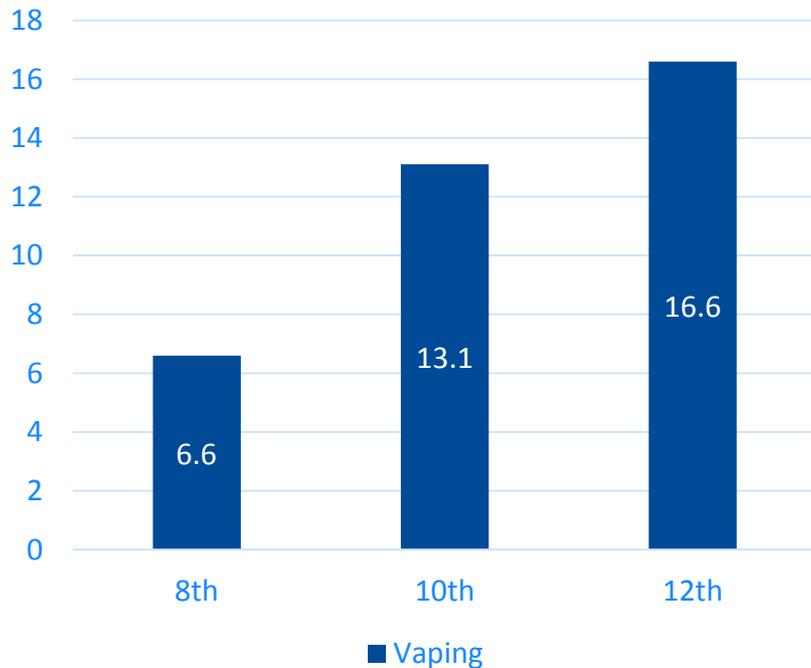
SOURCE: National Youth Tobacco Survey, 2011-2014; Kim et al (2014), Truth Initiative (2015).

In 2015, over half (54%) of 12-17 year olds tried an e-cigarette for the first time who had never smoked a cigarette.

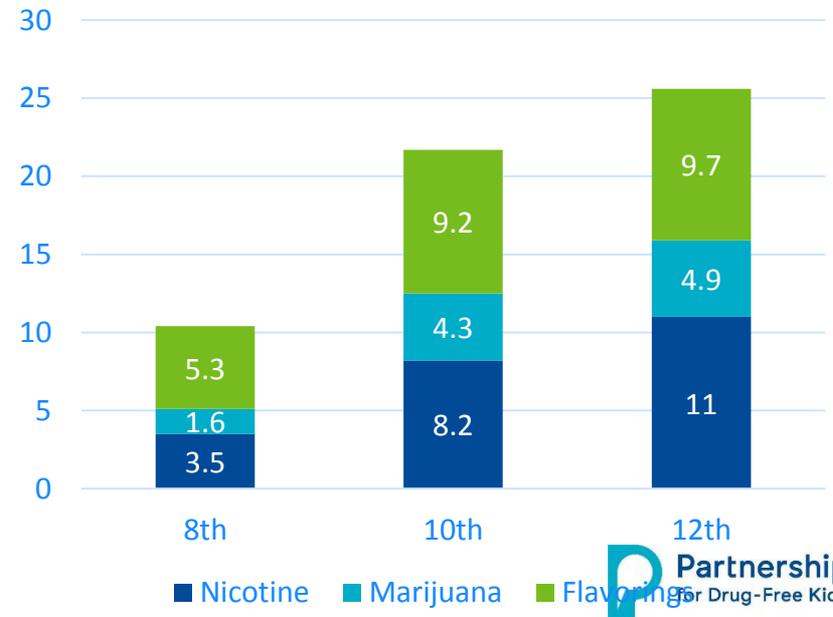
Prevalence of vaping (Monitoring the Future, 2017)

The survey shows that 27.8 % of high school seniors reported “vaping” in the year prior to the survey. When asked what they thought was in the mist they inhaled the last time they used the vaping device, 51.8% of 12th graders said, “just flavoring,” 32.8% said “nicotine,” and 11.1% said “marijuana” or “hash oil.”

Any Vaping Past Month Use

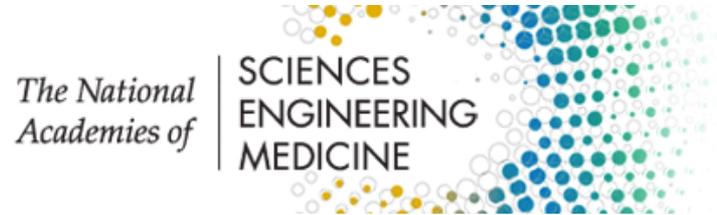


What Was Inhaled Past Month Use



Risks related to e-cigarettes

- Exposure to nicotine
- Exposure to toxic substances
- Symptoms of dependence
- Harm reduction for adult smokers
- Increased risk by youth and young adults of using conventional cigarettes
- No available evidence for cancer/respiratory problems
- Injuries and poisoning



“In some circumstances, such as their use by non-smoking adolescents and young adults, their adverse effects clearly warrant concern. In other cases, such as when adult smokers use them to quit smoking, they offer an opportunity to reduce smoking-related illness.” David Eaton, Committee Chair

Chemicals in e-cigarettes

Forty-Two Chemicals Identified in Electronic Cigarettes

2-butanone (MEK)
 2-furaldehyde
 Acetaldehyde ✓ *

Acetic acid
 Acetone ✓
 Acrolein ✓
 Aluminum
 Barium
 Benzene ✓ *

Boron
 Butanal

Butyl hydroxyl toluene
 Cadmium ✓ *

Chromium ✓ *
 Copper
 Crotonaldehyde
 Diethylene Glycol ✓
 Formaldehyde ✓ *

Glyoxal
 Iron
 Isoprene ✓
 Lead ✓ *

✓ = exposure can be harmful to health

* Known Carcinogen

Red = emitted in second hand vapor

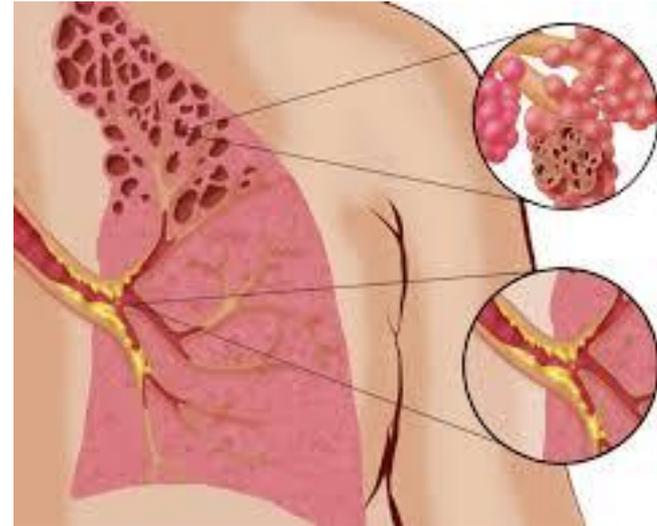
Limonene
 m,p-Xylen
 Magnesium
 Manganese
 Nickel ✓ *
 Nicotine ✓
 N-Nitrosornicotine ✓ *
 o-Methylbenzaldehyde ✓
 p,m-Xylene
 Phenol ✓
 Polycyclic Aromatic Hydrocarbons ✓ *

Potassium
 Propanal ✓
 Propylene Glycol ✓
 Sulfur
 Tin ✓
 Toluene ✓
 Valeraldehyde
 Zinc
 Zirconium

Bronchiolitis Obliterans

- Inhaled chemicals scar tissue in the lungs reducing capacity and efficiency
- Diacetyl found in some e-liquids
- Harvard 2015 Study found diacetyl in 39 of 51 flavors
- No known cases???

“Popcorn Lung”



Progression to combustible cigarettes

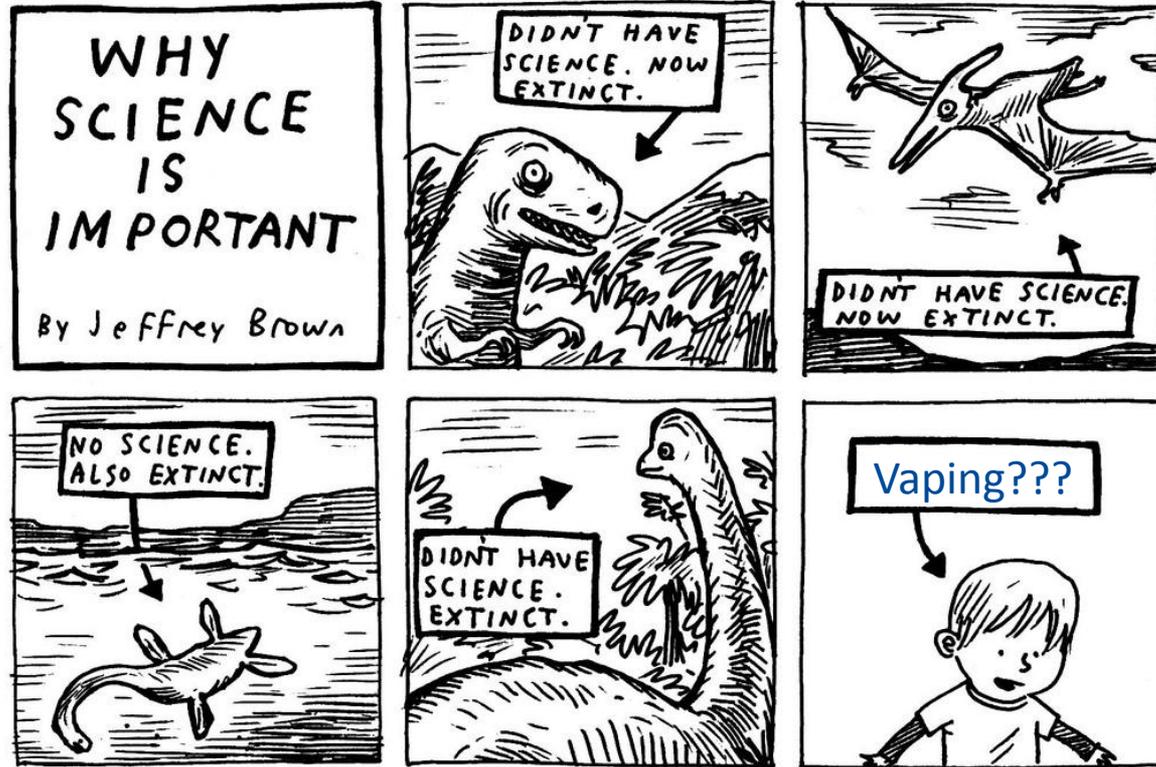
- **Association Between Initial Use of e-Cigarettes and Subsequent Cigarette Smoking Among Adolescents and Young Adults: A systematic review and meta-analysis.** Every study (9) found that e-cigarette use significantly predicts future smoking initiation. Taking into account findings from all studies, adolescent e-cigarette use increases the odds of smoking initiation about fourfold.



4x

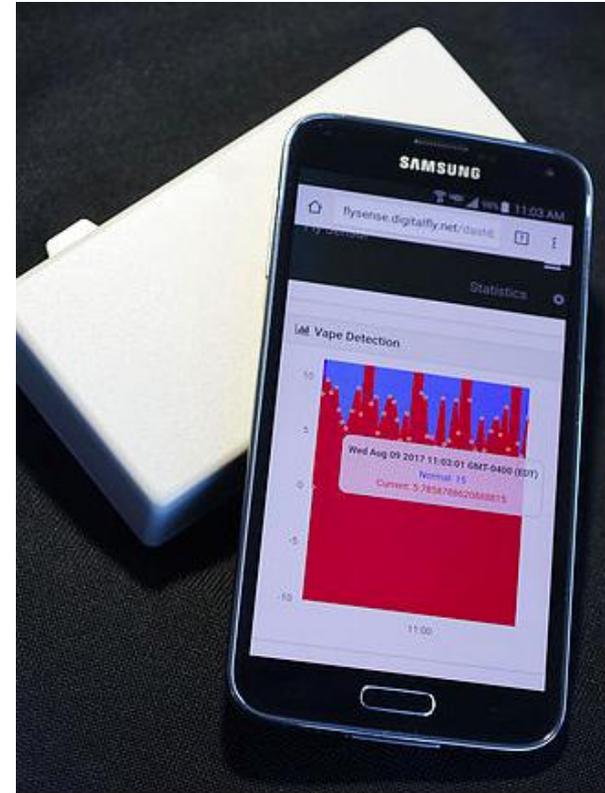


Need more studies to determine long-term risks



Schools and vaping

- Revising school policies to preclude vaping products
- Removing bathroom doors
- Restricting access
- No flash drives
- Testing Fly Sense



Signs of vaping

- Whiff of a scent
- Pens or flash drives that aren't pens or flash drives
- Dry mouth –drinking lots of liquids
- Nose bleeds
- Less caffeine use
- Glassy eyes



The FDA's 2016 "Deeming Rule"

New Tobacco Product Regulations



- Regulations provide:
 - Prohibitions on adulterated and misbranded products
 - Lists of ingredients and documents on health effects
 - Required registration of manufacturers
 - Information related to labeling and advertising
 - Premarket review of new tobacco products (i.e., those not on the market on February 15, 2007)
 - Restrictions on products marketed with claims about modified risk.

What to do?

- Have conversations...often
 - Before any talk, it helps to be equipped with the facts, but don't assume facts will translate into healthy behaviors
- Look for good opportunities:
 - When passing a vape shop
 - Seeing someone vaping on TV or in person
 - Seeing one of the ads for vapes
- Be ready to listen, not give a lecture
 - Try using open-ended questions to get their perspective, i.e. "What are your thoughts about vaping?"



What to do?

- Set clear expectations
 - Express your understanding of the risks, but also why a person might want to vape
 - Share why you don't want him/her vaping
 - Avoid scare tactics
 - Teach refusal skills
- Have your loved one talk to other trusted adults who can reinforce your message
- Model healthy behaviors



Resources on www.drugfree.org

The screenshot shows the website's navigation bar with the following elements:

- Logo: Partnership for Drug-Free Kids, with the tagline "Where families find answers".
- Navigation menu: Get Help & Support, Learn, Get Involved, Read Our Blog, About Us, Medicine Abuse Project.
- Call to Action: A green "DONATE" button and a grey "JOIN US" button.
- Search: A magnifying glass icon in a blue box.

The main content area features a light blue background with a faint image of hands. It includes the following text and icons:

- Text: "We are a nonprofit that supports families like yours struggling with their son or daughter's substance use. We're here to help."
- Section: "I want to..."
- Three circular icons with labels:
 - Icon of two people: "Help my child"
 - Icon of two speech bubbles: "Connect with others"
 - Icon of hands holding a heart: "Give back"

- 1-855-DRUGFREE Helpline
- Chat
- Ask a Coach

www.drugfree.org

- E-Cigarettes/Vaping <https://drugfree.org/drug/e-cigarettes-vaping/>
- The Teen Vaping Trend – What Parents Need to Know <https://drugfree.org/parent-blog/the-teen-vaping-trend-what-parents-need-to-know/>
- Vaping Tricks Increase Teens' Attraction to E-Cigarettes <https://drugfree.org/learn/drug-and-alcohol-news/vaping-tricks-increase-teens-attraction-e-cigarettes/>
- The Unique Risks of Substance Use <https://drugfree.org/article/why-just-experimenting-is-a-concern/>
- How to Talk About Marijuana <https://drugfree.org/article/how-to-talk-about-marijuana/>
- Look for Warning Signs of Teen and Young Adult Drug Use <https://drugfree.org/article/look-for-warning-signs/>
- When You Discover Teen or Young Adult Drug Use: Start Talking <https://drugfree.org/article/start-talking/>

Cigna Behavioral Health Awareness

If you are a Cigna customer and have questions about Substance Use treatment or about your benefits and how to use them, please contact:

Chantelle Hoogland – 888.244.6293 x 329159

Lisa Osborne – 770.779.2023