

The New Generation of Tobacco Addiction

Tobacco-Free
FOR A HEALTHY NEW JERSEY



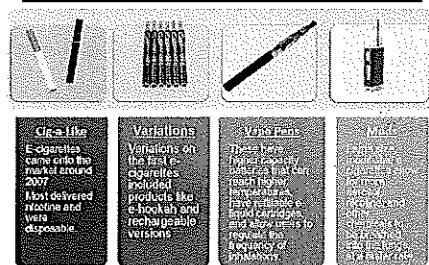
Electronic Nicotine Delivery System (ENDS)

- AKA: e-cigarettes, vape pens, hookah pens, tanks, mods, JUUL etc.
- Battery-powered heating devices
- Originally designed to deliver liquid nicotine to users in the form of a "vapor" (instead of smoke)
 - The "vapor" comes from heating liquid nicotine and flavoring.



SOURCE: A Report of the Surgeon General: E-cigarette Use Among Youth and Young Adults, 2016, CDC, 2018.

E-Cigarettes & Vape Pens Generations



12/20/18

Source: Research from the National Center for Tobacco Use and Research Promotion, 2018.

Vape Tricks



ENDS aerosol is NOT harmless "water vapor"



- Labeling is NOT always a reliable indicator of nicotine content
- About 99% of ALL e-cigs sold at convenience stores, supermarkets and similar outlets contain nicotine.

SOURCE: CDC, 2018. Truth Initiative, 2018.

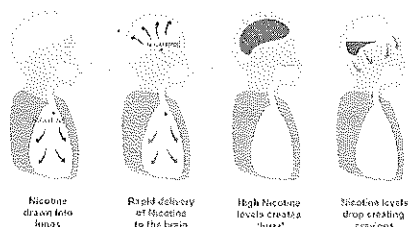
Nicotine Addiction & Youth

- Nicotine is dangerous and highly addictive for youth at any age because the brain is still developing.
- Nicotine affects brain circuits that control attention, learning, mood, impulse control, and increase susceptibility to addiction and other drugs use
- In addition to nicotine exposure, e-cig use can be harmful due to the other chemicals/substances present in e-cig devices.
 - Nearly 1 in 11 middle and high school vaped cannabis in the US



SOURCE: JAMA Pediatrics, 2018.
A Report of the Surgeon General: E-cigarette Use Among Youth and Young Adults, 2016.

The Cycle of Nicotine Addiction



- Nicotine is highly addictive, by activating areas of the brain involving feelings of pleasure (dopamine).



E-liquid Ingredients

- ENDS also contain propylene glycol or glycerin and flavorings.
- Some ENDS manufacturers claim these ingredients are safe because they meet the FDA definition of "Generally Recognized as Safe" (GRAS) for food additives NOT inhalation
- effects of many of these inhaled ingredients are largely unknown
- lung inflammation and disease (i.e.: popcorn lung)
- 75% of e-cigarette flavors tested contained diacetyl



SOURCE: CDC, 2018.

Unintended Injuries/Death

- Defective e-cig batteries have caused fires, explosions, and life threatening injuries.
- Nicotine exposure can be toxic. Children and adults have been poisoned by swallowing, or absorbing e-liquid.
 - Until July 2016, e-liquid were not childproof
 - 2014 more 4,000 cases
 - More than half under age 6
 - 2017 about 2,500 cases



SOURCE: CDC, 2018. American Association of Poison Control Center, 2011-2018.

New Toys...Old Tactics

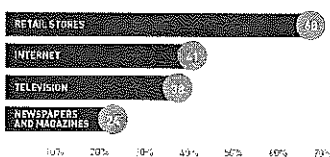
- E-cigs traditionally have been an unregulated industry
 - Nicotine concentration, other contents
 - Online sale to minors
 - Products made overseas
 - Advertising
- E-cig marketing tactics similar to tobacco
 - Misleading claims of being healthy & safe
 - Cessation device
 - Promote that e-cigarette can be used anywhere (indoors)
 - Proven to have increased use by youth
 - candy flavored products
 - themes of rebellion, glamour
 - sexy celebrity endorsements
 - sports and music sponsorships
 - discounts



Advertising

- By 2016, nearly 4 in 5 middle and high school students saw a e-cig ads.
 - More than 20 million youth exposed to ads
- Between 2014 and 2016, exposure to retail e-cig advertising among youth increased to nearly 20%.
 - \$115 million on e-cig ads in 2014.

Where young people are most likely to see e-cigarette ads



SOURCE: CDC, 2018. Truth Initiative, 2018.

Youth & ENDS

Current e-cigarette use among middle and high school students

High school students:



Middle school students:



Source: 2017 National Youth Tobacco Survey

- Over 2.1 million youth are current e-cig users.
- Youth e-cig users cited flavors as the reason for use.
 - 43% of youth who ever used e-cigs tried them because of the appealing flavors.

SOURCE: CDC, 2018. Truth Initiative, 2018.

Epidemic Levels

SURGE IN YOUTH CURRENT E-CIGARETTE USE — 1.5 Million More Students Used E-Cigarettes in 2018 vs 2017



SOURCE: FDA, National Youth Tobacco Survey, 2017-2018.

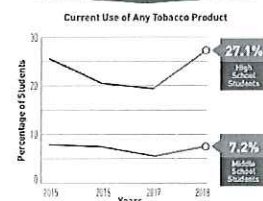
Increase Use & Trends

AMONG HIGH SCHOOL CURRENT E-CIGARETTE USERS — Rise in Frequency and Use of Flavor

E-CIGARETTE USE SURGE LED TO UPTICK IN OVERALL TOBACCO USE — Reversing Previous Declines

More Used E-Cigarettes on 20 or More Days
28% in 2018 vs 20% in 2017

More Used Flavored E-Cigarettes
68% in 2018 vs 61% in 2017

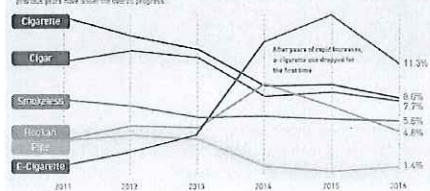


SOURCE: FDA, National Youth Tobacco Survey, 2017-2018.

Tobacco/ENDS use H.S. Students

NO SIGNIFICANT DECLINES IN OVERALL HIGH SCHOOL TOBACCO USE OVER THE PAST 5 YEARS

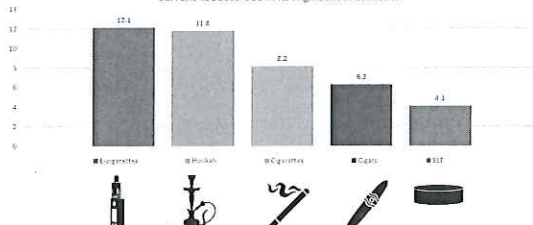
Cigarettes, e-cigs, hookahs, and pipe tobacco use continue to decline, but sharp increases in e-cigarette and hookah use in previous years have offset the overall progress.



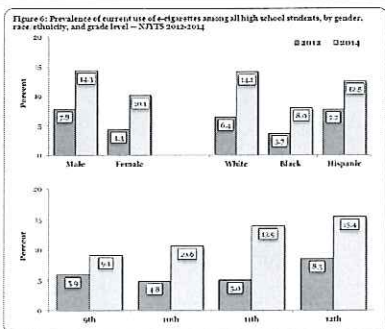
SOURCE: FDA, CDC, National Youth Tobacco Survey, 2011-2016.

Tobacco/ENDS use NJ Students

Current Tobacco Use in NJ High School Students



SOURCE: The 2014 New Jersey Youth Tobacco Survey: A Statewide Report, 2015.



SOURCE: The 2014 New Jersey Youth Tobacco Survey: A Statewide Report, 2015.

Dual Use

- The vast majority of current e-cigarette users are also current smokers.
- 65% of youth who had used an e-cig in the last 30 days also reported using another tobacco product in the same time frame.
- This raises additional concerns beyond the potential health effects of e-cigarettes alone.
- Research suggests that using e-cigarettes may lead youth to start smoking traditional cigarettes.

SOURCE: Truth Initiative, 2018.
The National Academies of Sciences, Engineering, and Medicine, 2018.

Young Adults & ENDS

- Among current e-cig users aged 18-24:
 - 40% never smokers
 - 43% were current smokers
 - 17% were former smokers
- Highest age group of adult nonsmokers to use e-cigs
- Young adults who use e-cigs are more than 4X as likely to begin smoking traditional cigarettes within 18 months as their peers who do not vape.

SOURCE: Campaign for Tobacco Free Kids, 2018. CDC/NCHS, National Health Interview Survey, 2014-2015. Truth Initiative, 2018. American Journal of Medicine, 2017.

Adult Use



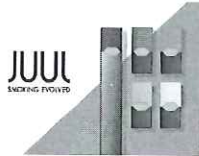
The data indicate that patterns of use are the opposite of what they should be. Rates are highest among younger age groups and decrease with age. The pattern should be just the opposite, with higher rates of adult use consistent with higher rates of smoking prevalence.

SOURCE: 2014 National Health Interview Survey

SOURCE: Truth Initiative, 2018.

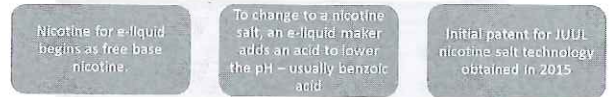
What's CUUL?

- WARNING: This product contains nicotine. Nicotine is an addictive chemical.
 - 1 Juul pod contains 0.7 ml with 5% nicotine by weight // approximately equivalent to about 1 pack of cigarettes
- CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



SOURCE: JUUL Labs, Inc., 2017.

Nicotine Salts



- JUUL claims that their nicotine salt formulation increases the rate and amount of nicotine delivered into the blood, compared with other formulations.
 - Delivery 2.7 times faster than other e-cigs

SOURCE: Truth Initiative, 2018. CDC, 2018.

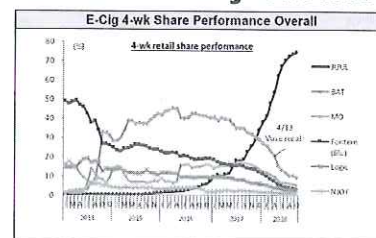
JUUL on the Rise

- JUUL, MarkTen, Vuse, Blu and Logic control 97% of the e-cig market
- As of October 2018, JUUL controls about 75% of the market



SOURCE: Nielsen Total US xAOC/Convenience Database & Wells Fargo Securities, LLC

Extraordinary Growth



- From 2016 to 2017, JUUL's sales spiked by 641% to 16.2 million e-cigarettes in 2017.

SOURCE: Nielsen Total US xAOC/Convenience Database & Wells Fargo Securities, LLC

Pop-culture Phenomenon

JUUL's original marketing campaign included billboards, YouTube videos, advertising in Vice Magazine, launch parties and a sampling tour.



Selena Gomez and other celebrities are "juuling" too!



One of the first major e-cig brands to rely heavily on social media to market and promote its products

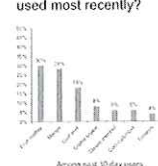


Back to school promotional sale. Photo taken outside a North Jersey convenient store.

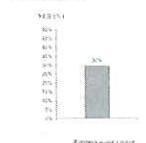
JUUL Flavor & Substance Use

- JUUL users largely report use of fruity and sweet flavors.

Which JUUL flavor pod used most recently?



Ever used marijuana with JUUL?



- Of youth who have ever used JUUL, 1 in 3 used marijuana with the device.

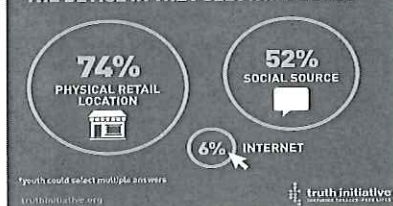
Source: Truth Initiative, 2018.

Happening in SCHUUL



Where are they getting it?

YOUTH WHO USED JUUL FLAVOR PODS IN THE PAST 30 DAYS SAID THEY OBTAINED THE DEVICE IN THE FOLLOWING WAYS.



- While Internet was not the most common, 89% of youth who attempted to purchase online were successful

Source: Truth Initiative, 2018.

Signs your student(s) maybe vaping

- Leaving class to use the bathroom at the same time everyday
 - Mood changes before and after leaving the room
- Texting or using social media
- Hanging out the in the bathroom stalls together
- Check pop-up ceiling (may find vaping devices)
- Returning to class smelling with a fruity sweet scents, especially male
- Putting thick markers or pens in their mouth
- Look for lanyards or hoodies that my hide vaping devices
 - Note devices may look like colorful USBs



FDA & ENDS Regulations

Deemed all tobacco products including ENDS

- Min. age 18
- Ban free samples & vending machines
- Warning Label (2018)

FDA & FTC took joint action against several e-liquid companies that marketed their products to look like candy, juice, cookies, etc. to remove from the market

FDA seized documents from JUUL in surprise raid



SOURCE: Food and Drug Administration, 2018.

State & Local Action

- In 2010, NJ's Smokefree Air Act was revised to include a ban on electronic smoking devices in indoor public places and workplaces.
- Age of sale in NJ to purchase e-cigs increased from 19 to 21
 - Online sale
- Many NJ municipalities have banned the use of e-cigs in city owned parks, playgrounds, and outdoor recreation areas.

SOURCE: NJ 26-3D-55; NJS 2A:170-51.1.



Talk to Your Teens

- **BEFORE THE TALK**
 - Know the facts
 - Be patient and ready to listen
 - Set a positive example by being tobacco-free
- **START THE CONVERSATION**
 - Find the right moment
 - Ask for support
- **ANSWER THEIR QUESTIONS**
 - Why don't you want me to use e-cigarettes?
 - What's the big deal about nicotine?
 - Aren't e-cigarettes safer than conventional cigarettes?
 - I (or my friends) have tried e-cigarettes and it was no big deal?
 - You used tobacco, so why shouldn't I?



SOURCE: Surgeon General - Know the Facts: E-cigarettes and Youth People



Quitting Resources

- NJ Quitline
 - Telephone based counseling
 - njquitline.org
- Free texting smoking cessation
 - Text QUIT to 47848
 - Smokefree.gov/smokefreetx
- Future NJ Grant

**NEW JERSEY
QUITLINE™
1-866-NJ-STOP**



Statewide Campaign

- www.DontGetVapedIn.com
 - Website for youth with factual information
- www.facebook.com/dontgetvapedin
- <https://www.instagram.com/dontgetvapedin/>
- <https://twitter.com/dontgetvapedin>



DONTGETVAPEDIN



More Resources

- www.e-cigarettes.surgeongeneral.gov
- https://truthinitiative.org/sites/default/files/Truth_E-Cigarette_FactSheet_FINAL.pdf
- www.tobaccofreeNJ.com
- www.teen.smokefree.gov
- www.njquitline.org
- <http://chnj.njpn.org/tobacco-free-for-a-healthy-nj/>



Questions?

- Cristina Martins, CHES
 - Health Educator
 - Southern New Jersey Perinatal Cooperative
 - D: 856-668-4434
 - cmartins@snjpc.org
 - Funded by the NIDOH
 - www.nj.gov/health

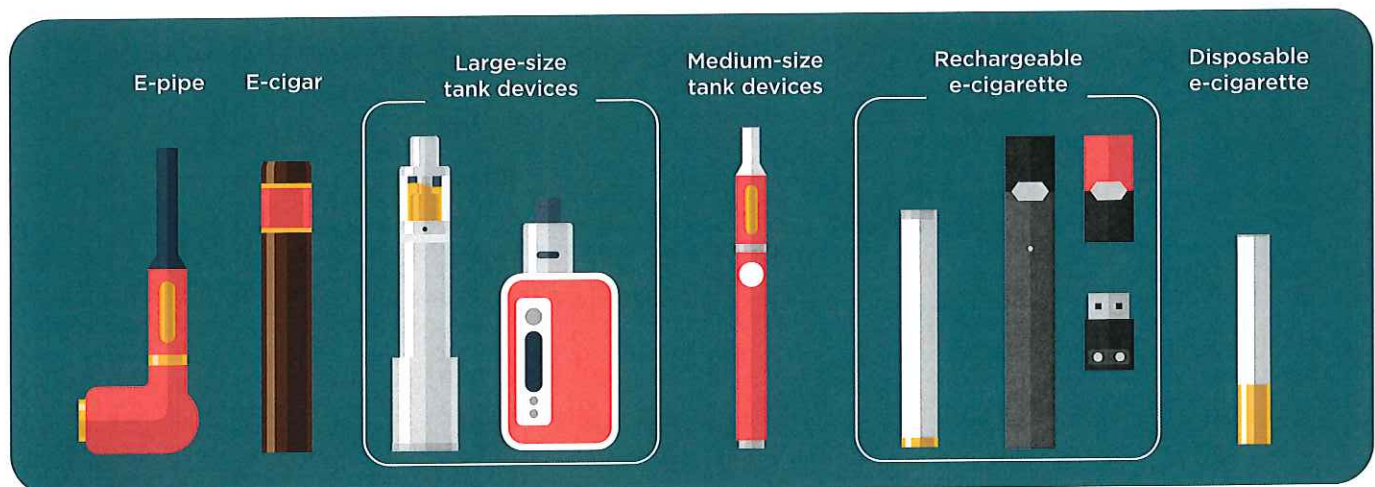


ELECTRONIC CIGARETTES WHAT'S THE BOTTOM LINE?

- » E-cigarettes have the potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products.
- » E-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products.
- » While e-cigarettes have the potential to benefit some people and harm others, scientists still have a lot to learn about whether e-cigarettes are effective for quitting smoking.
- » If you've never smoked or used other tobacco products or e-cigarettes, don't start.

WHAT ARE E-CIGARETTES?

- » E-cigarettes are known by many different names. They are sometimes called “e-cigs,” “e-hookahs,” “mods,” “vape pens,” “vapes,” “tank systems,” and “electronic nicotine delivery systems.”
- » Some e-cigarettes are made to look like regular cigarettes, cigars, or pipes. Some resemble pens, USB sticks, and other everyday items.
- » E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products—flavorings, and other chemicals that help to make the aerosol. Users inhale this aerosol into their lungs. Bystanders can also breathe in this aerosol when the user exhales into the air.
- » E-cigarettes can be used to deliver marijuana and other drugs.



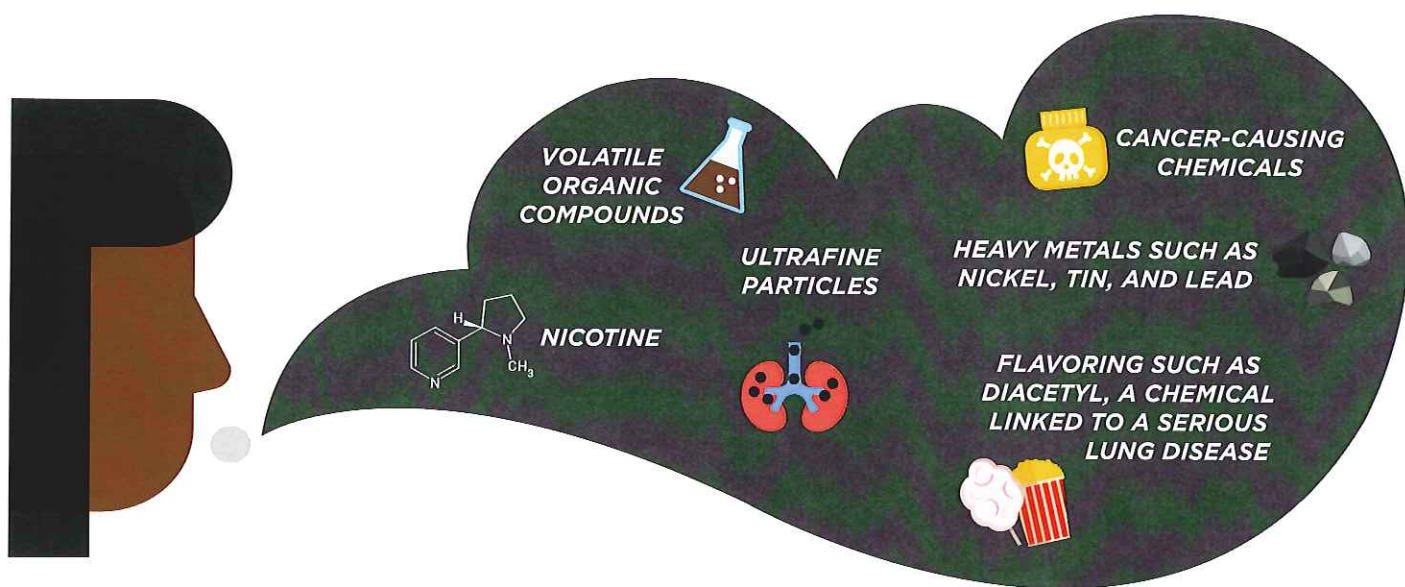
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U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

WHAT IS IN E-CIGARETTE AEROSOL?

THE E-CIGARETTE AEROSOL THAT USERS BREATHE FROM THE DEVICE AND EXHALE CAN CONTAIN HARMFUL AND POTENTIALLY HARMFUL SUBSTANCES:



It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.

ARE E-CIGARETTES LESS HARMFUL THAN REGULAR CIGARETTES?



VS



YES, but that doesn't mean e-cigarettes are safe.

E-cigarette aerosol generally contains fewer toxic chemicals than the deadly mix of 7,000 chemicals in smoke from regular cigarettes. However, e-cigarette aerosol is not harmless. It can contain harmful and potentially harmful substances, including nicotine, heavy metals like lead, volatile organic compounds, and cancer-causing agents.

WHAT ARE THE HEALTH EFFECTS OF USING E-CIGARETTES?

SCIENTISTS ARE STILL LEARNING ABOUT THE LONG-TERM HEALTH EFFECTS OF E-CIGARETTES. HERE IS WHAT WE KNOW NOW.

1 Most e-cigarettes contain nicotine, which has known health effects

- » Nicotine is highly addictive.
- » Nicotine is toxic to developing fetuses.
- » Nicotine can harm adolescent brain development, which continues into the early to mid-20s.
- » Nicotine is a health danger for pregnant women and their developing babies.



2 Besides nicotine, e-cigarette aerosol can contain substances that harm the body.

- » This includes cancer-causing chemicals and tiny particles that reach deep into lungs. However, e-cigarette aerosol generally contains fewer harmful chemicals than smoke from burned tobacco products.

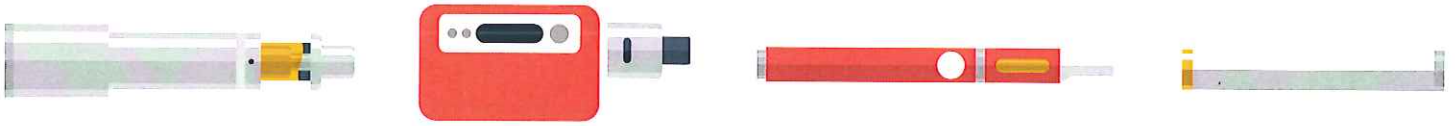


3 E-cigarettes can cause unintended injuries.

- » Defective e-cigarette batteries have caused fires and explosions, some of which have resulted in serious injuries.
- » In addition, acute nicotine exposure can be toxic. Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid.



CAN E-CIGARETTES HELP ADULTS QUIT SMOKING CIGARETTES?



E-CIGARETTES ARE NOT CURRENTLY APPROVED BY THE FDA AS A QUIT SMOKING AID.

The U.S. Preventive Services Task Force, a group of health experts that makes recommendations about preventive health care, concluded that the evidence is insufficient to recommend e-cigarettes for smoking cessation in adults, including pregnant women.



HOWEVER, e-cigarettes may help non-pregnant adult smokers if used as a complete substitute for all cigarettes and other smoked tobacco products.

TO DATE, THE FEW STUDIES ON THE ISSUE ARE MIXED.

Evidence from two randomized controlled trials found that e-cigarettes with nicotine can help smokers stop smoking in the long term compared with placebo (non-nicotine) e-cigarettes.

A recent CDC study found that many adults are using e-cigarettes in an attempt to quit smoking. However, most adult e-cigarette users do not stop smoking cigarettes and are instead continuing to use both products (“dual use”). Because smoking even a few cigarettes a day can be dangerous, quitting smoking completely is very important to protect your health.

WHO IS USING E-CIGARETTES?

E-CIGARETTES ARE NOW THE MOST COMMONLY USED TOBACCO PRODUCT AMONG U.S. YOUTH.

IN THE U.S.,
YOUTH ARE
MORE LIKELY
THAN ADULTS
TO USE
E-CIGARETTES



4.3%
MIDDLE SCHOOL
STUDENTS

In 2016, more than
2 MILLION

U.S. middle and high school
students used e-cigarettes in
the past 30 days, including:

11.3%
HIGH SCHOOL
STUDENTS



AMONG CURRENT E-CIGARETTE USERS AGED 18-24 YEARS,
40.0% had **NEVER BEEN** cigarette smokers

ADULTS

In 2016, **3.2%**
of U.S. adults were current
e-cigarette users

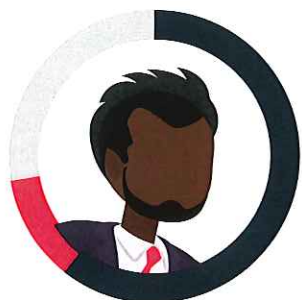
IN 2015, AMONG ADULT E-CIGARETTE
USERS OVERALL:

29.8%

were former
regular smokers

11.4%

had never been
regular cigarette
smokers



58.8%

were current regular
cigarette smokers

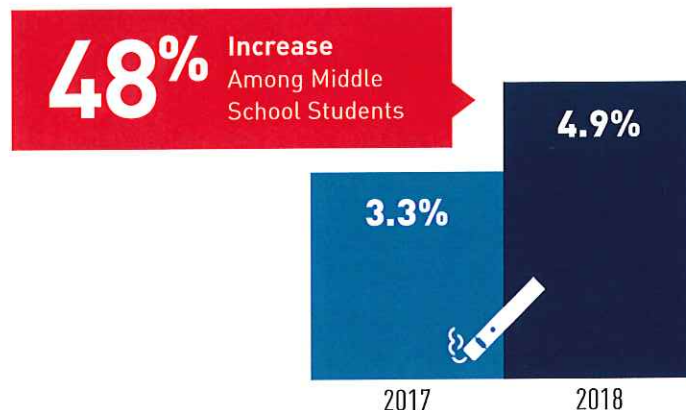
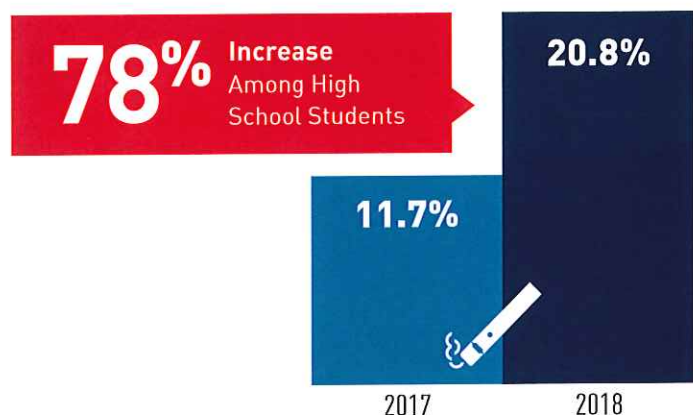


2018 NATIONAL YOUTH TOBACCO SURVEY FINDS CAUSE FOR CONCERN

Current e-cigarette use among middle and high school students **increased alarmingly** between 2017 and 2018.

Here is a breakdown of the recent findings:

SURGE IN YOUTH CURRENT E-CIGARETTE USE — 1.5 Million More Students Used E-Cigarettes in 2018 vs 2017

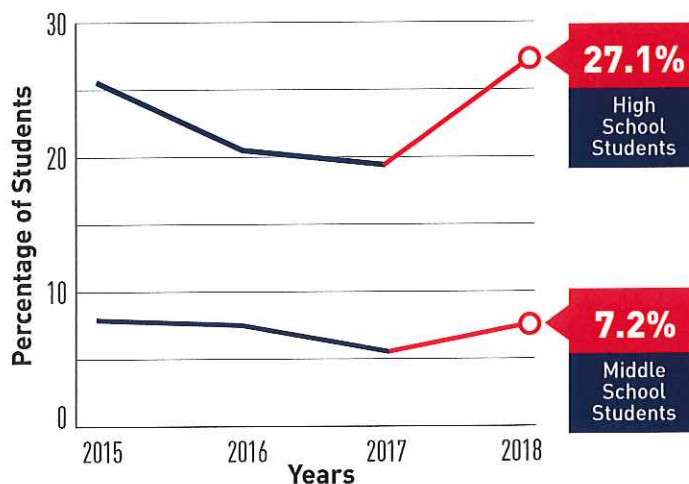


AMONG HIGH SCHOOL CURRENT E-CIGARETTE USERS — Rise in Frequency and Use of Flavors

E-CIGARETTE USE SURGE LED TO UPTICK IN OVERALL TOBACCO USE — Reversing Previous Declines



Current Use of Any Tobacco Product



Note: All numbers in this document are estimates.

Sources: (1) Cullen KA, Ambrose BK, Gentzke AS, Apelberg BJ, Jamal A, King BA. Notes from the Field: Increase in use of electronic cigarettes and any tobacco product among middle and high school students — United States, 2011–2018. *MMWR Morb Mortal Wkly Rep.* 2018;67(45). (2) Wang TW, Gentzke A, Sharapova S, Cullen KA, Ambrose BK, Jamal A. Tobacco product use among middle and high school students — United States, 2011–2017. *MMWR Morb Mortal Wkly Rep.* 2018;67(22).

CTP-116
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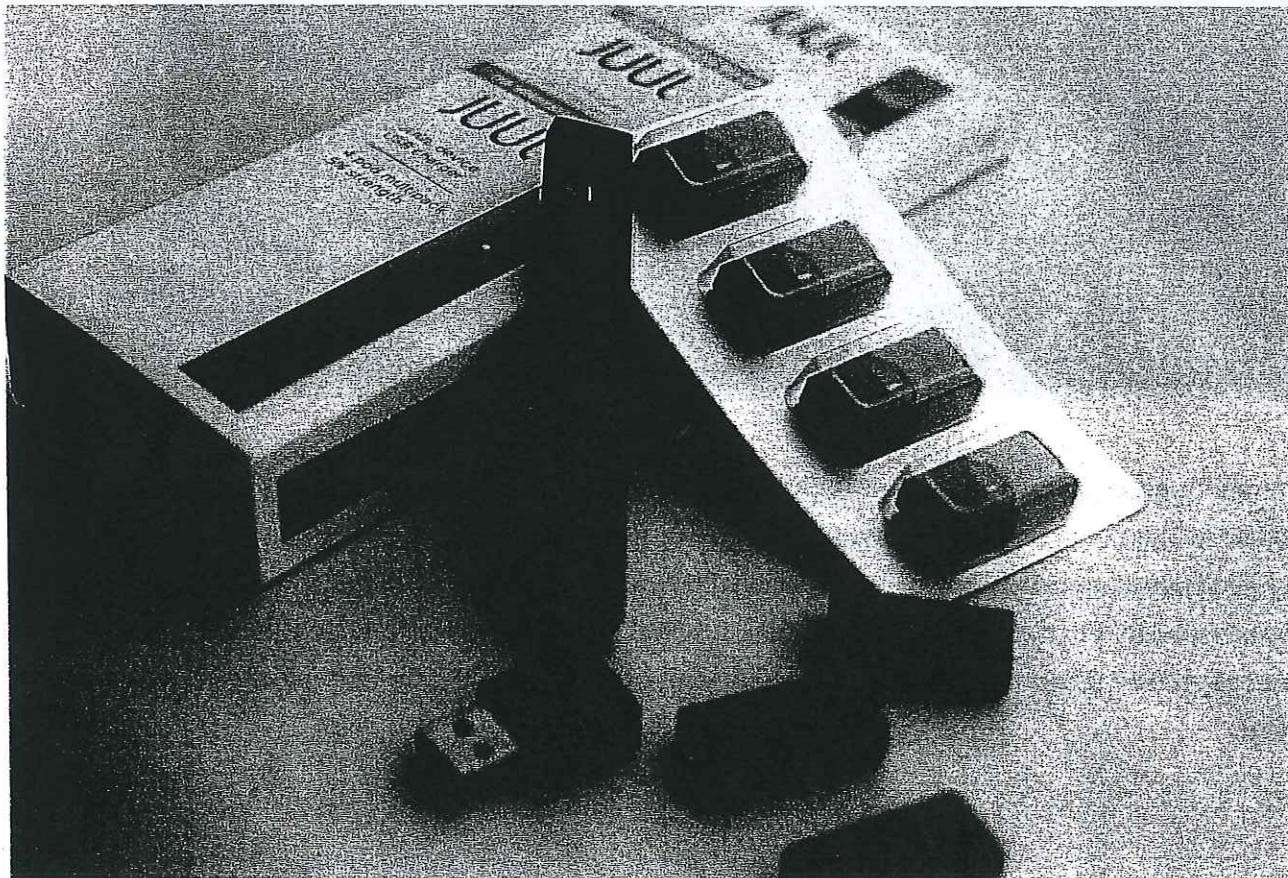
What is juul?

In just two years on the market, JUUL, a new type of e-cigarette, has become so popular among young people that it has already amassed nearly half of the e-cigarette market share. The product's quick rise in popularity prompted The Boston Globe to call it "the most widespread phenomenon you've likely never heard of."

Here are some important things to know about JUUL, which may be putting a new generation of youth at risk of nicotine dependence.

How does JUUL work?

JUUL devices heat up a cartridge containing oils to create vapor, which quickly dissolves into the air. The device is small enough to fit in a closed fist and has a sleek, tech-inspired design that resembles a USB flash drive.



While its manufacturer says that JUUL is only for adults, it comes in flavors — including mint, mango and crème brûlée — which are proven to appeal to young people and facilitate initiation of tobacco product use.

Does JUUL have nicotine?

Yes. In fact, a single JUUL cartridge is roughly equal to a pack of cigarettes, or 200 cigarette puffs, according to the product website. Nicotine is an addictive chemical, and evidence suggests that nicotine use during adolescence and young adulthood has long-term impacts on brain development.



Many young people, however, do not realize that they are inhaling nicotine when they vape or use e-cigarettes. The majority of youth e-cigarette users think that the last time they used a product they vaped only flavoring, not nicotine, according to the University of Michigan's 2016 Monitoring the Future study. Yet the Centers for Disease Control and Prevention reported that 99 percent of e-cigarettes sold in U.S. convenience stores, supermarkets and similar outlets in 2015 contained nicotine.

Is JUUL safer than smoking cigarettes?

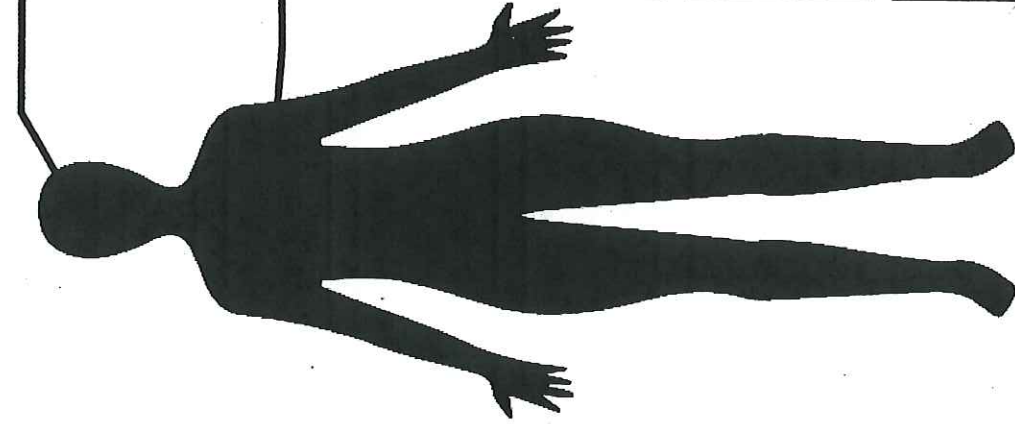
While e-cigarettes are less toxic than combustible tobacco products — still the leading cause of preventable disease and death in the country — there is a catch. Using e-cigarettes has been shown to increase the likelihood of smoking cigarettes among young people.

A new consensus report by the National Academies of Sciences, Engineering and Medicine, Public Health Consequence of E-Cigarettes, states that there is substantial evidence that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults. A December 2017 study by the University of Pittsburgh Schools of the Health Sciences, published in the American Journal of Medicine, found that young adults who use e-cigarettes are more than four times as likely to begin smoking tobacco cigarettes within 18 months as their peers who do not vape.

For more information on why young people should not use e-cigarettes, read our statement on the 2016 surgeon general's report on the topic.

Risks of E-Cigarette and Vape Pen Use

Although the overwhelming majority of young people do not use e-cigarettes, the recent increase in use among adolescent is concerning to health professionals.



Nicotine use in early adolescence causes changes in the brain that make life-long addiction much more likely for young e-cig/vape users.

Ear, eye and throat irritation is common among e-cigarette/vape pen users.

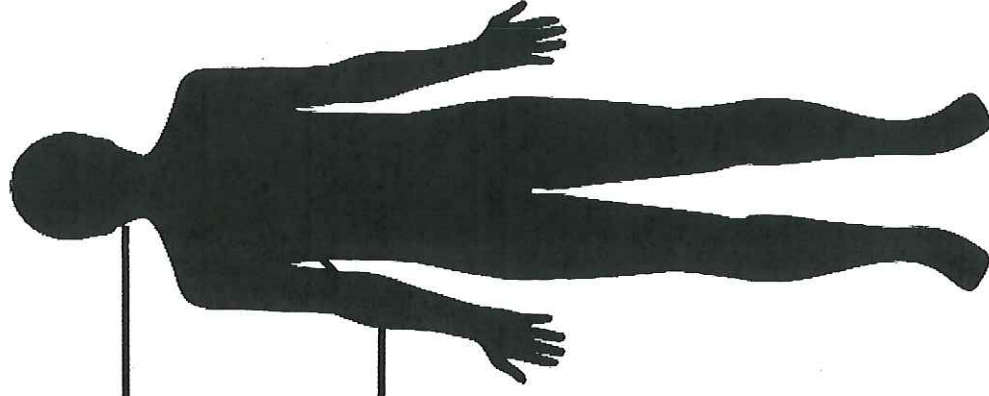
The aerosols produced by the chemicals in e-juice, enter into the user's lungs unfiltered and leave chemical residue behind.

Nicotine is known to have effects on the cardiovascular system. Some recent studies show that acute use of e-cigarette impaired flow-mediated dilation, this suggests that e-cigarettes can lead to cardiovascular diseases.

Recent studies show that e-cigarette/vape pen use is associated with the use of other tobacco products that are known to cause further health issues, including cancer and heart disease.

Many people incorrectly believe that these devices produce a water vapor when in fact they create aerosols that contain harmful chemicals, and ultra-fine particles that are inhaled into the lungs and out into the environment, making them harmful to the user and other nearby.

These devices are still very new so many of the long-term health consequences of their use is still not known. Even still, the mounting evidence shows that these devices are *not* harmless.



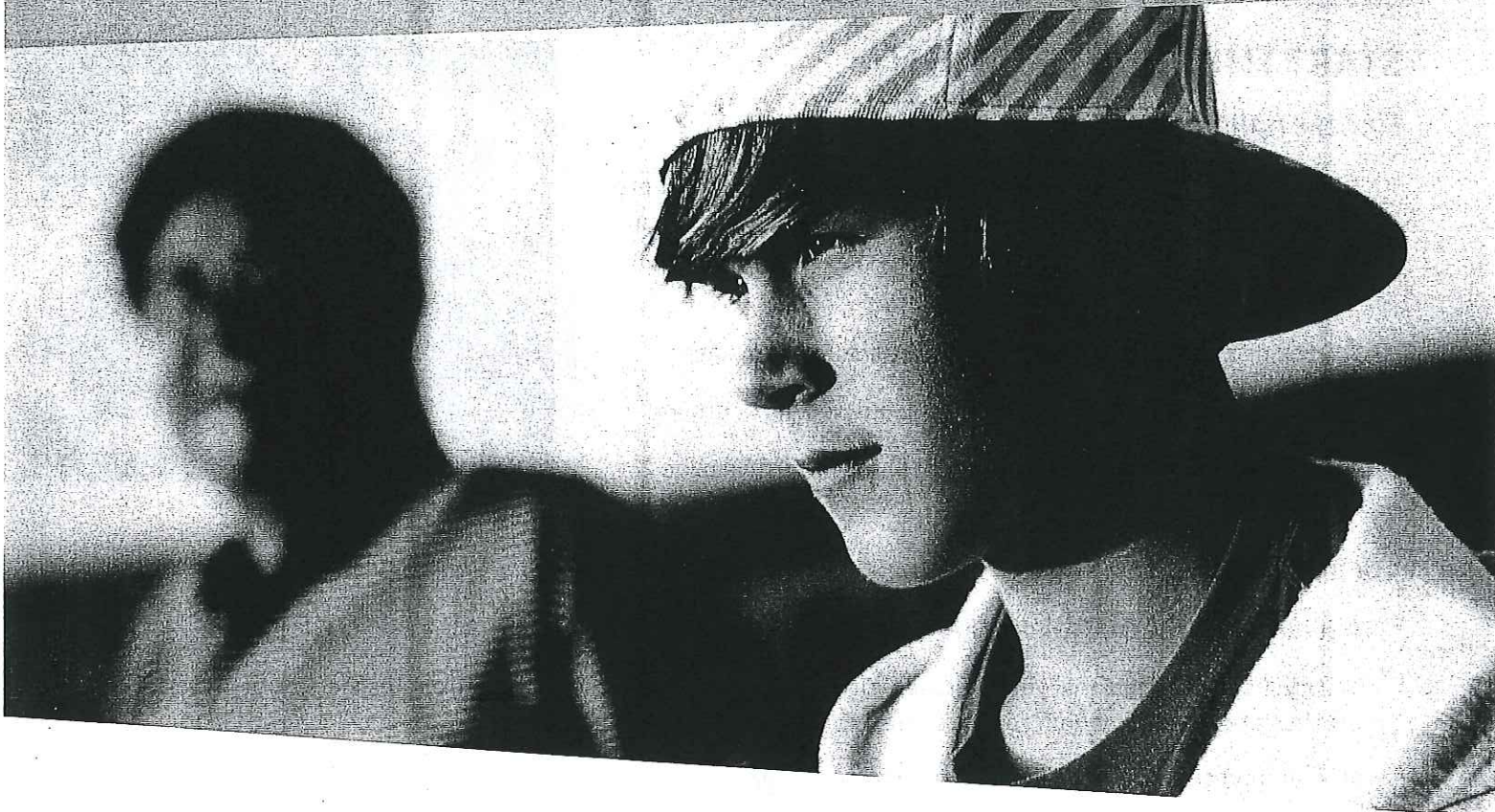
Tobacco Prevention Toolkit

Division of Adolescent Medicine, Stanford University

For more information go to: www.tobaccopreventiontoolkit.stanford.edu



Talk with Your Teen About E-cigarettes: A Tip Sheet for Parents



BEFORE THE TALK

Know the facts.

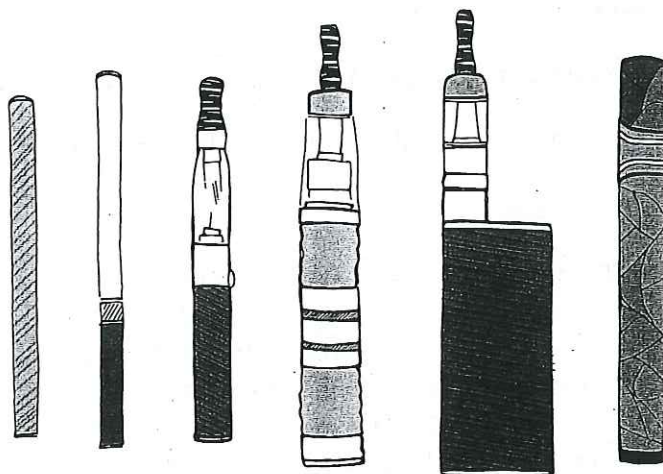
- Get credible information about e-cigarettes and young people at E-cigarettes.SurgeonGeneral.gov.

Be patient and ready to listen.

- Avoid criticism and encourage an open dialogue.
- Remember, your goal is to have a conversation, not to deliver a lecture.
- It's OK for your conversation to take place over time, in bits and pieces.

Set a positive example by being tobacco-free.

- If you use tobacco, it's never too late to quit. For free help, visit smokefree.gov or call **1-800-QUIT-NOW**.



START THE CONVERSATION

Find the right moment.

- A more natural discussion will increase the likelihood that your teen will listen. Rather than saying "we need to talk," you might ask your teen what he or she thinks about a situation you witness together, such as:
 - » Seeing someone use an e-cigarette in person or in a video.
 - » Passing an e-cigarette shop when you are walking or driving.
 - » Seeing an e-cigarette advertisement in a store or magazine or on the internet.



Ask for support.

- Not sure where to begin? Ask your health care provider to talk to your teen about the risks of e-cigarettes.
- You might also suggest that your teen talk with other trusted adults, such as relatives, teachers, faith leaders, coaches, or counselors whom you know are aware of the risks of e-cigarettes.
- These supportive adults can help reinforce your message as a parent.

ANSWER THEIR QUESTIONS

Here are some questions and comments you might get from your teen about e-cigarettes and some ideas about how you can answer them.

Why don't you want me to use e-cigarettes?

- Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Right now, your brain is still developing, which means you are more vulnerable to addiction. Many e-cigarettes contain nicotine, and using nicotine can change your brain to make you crave more nicotine. It can also affect your memory and concentration. I don't want that for you!
- E-cigarettes contain chemicals that are harmful. When people use e-cigarettes, they breathe in tiny particles that can harm their lungs.

- The cloud that people exhale from e-cigarettes can expose you to chemicals that are not safe to breathe.

What's the big deal about nicotine?

- Your brain is still developing until about age 25. The Surgeon General reported that nicotine is addictive and can harm your brain development.
- Using nicotine at your age may make it harder for you to concentrate, learn, or control your impulses.
- Nicotine can even train your brain to be more easily addicted to other drugs like meth and cocaine.

- I don't say this to scare you, but I want you to have the facts because nothing is more important to me than your health and safety.

Aren't e-cigarettes safer than conventional cigarettes?

- Because your brain is still developing, scientific studies show that it isn't safe for you to use any tobacco product that contains nicotine, including e-cigarettes.
- Whether you get nicotine from an e-cigarette or a cigarette, it's still risky.
- Some e-cigarette batteries have even exploded and hurt people.

I thought e-cigarettes didn't have nicotine — just water and flavoring?

- I used to think that too. But many e-cigarettes have nicotine. There are also other chemicals in them that can be harmful.
- Let's look at the Surgeon General's website on e-cigarettes (E-cigarettes.SurgeonGeneral.gov) together so you can see for yourself.

I (or my friends) have tried e-cigarettes and it was no big deal.

- I appreciate your honesty. In the future, I hope you (or your friends) will stay away from e-cigarettes and other tobacco products, including cigarettes. Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Next time we go to the doctor, let's ask about the risks of nicotine, e-cigarettes, and other tobacco products.

You used tobacco, so why shouldn't I?

- If I could live my life over again, I never would have started smoking. I learned that people who smoke cigarettes are much more likely to develop, and die from, certain diseases than people who don't smoke. This was really scary, so I quit smoking.
- Quitting was really hard, and I don't want you to go through that. The best thing is to not start at all.



KEEP THE CONVERSATION GOING

Many parents find that texting is a great way to reach their teens. Here are some suggestions for text messages that might catch your teen's attention. And, you can easily share pages of the website (E-cigarettes.SurgeonGeneral.gov) with your teen.



Share this page

Look for this symbol, click it, type in the message you want or use the message provided, and share with your teen via Facebook, Twitter, or email.

Connect and encourage.

- You always liked science. Check out the science about e-cigarettes and young people:
E-cigarettes.SurgeonGeneral.gov
- Getting off nicotine is hard but I'm so happy I quit. Don't make that mistake and get addicted. Smoking and tobacco use, including using e-cigarettes, are unsafe for young people.

Remind and repeat.

- Most teenagers don't use e-cigarettes. E-cigarettes with nicotine can mess with your brain, and your brain is still developing until you are at least 25.
- You might be tempted by e-cigarette flavors, but inhaling certain flavorings that have been found in some e-cigarettes can be harmful.

Share facts and resources.

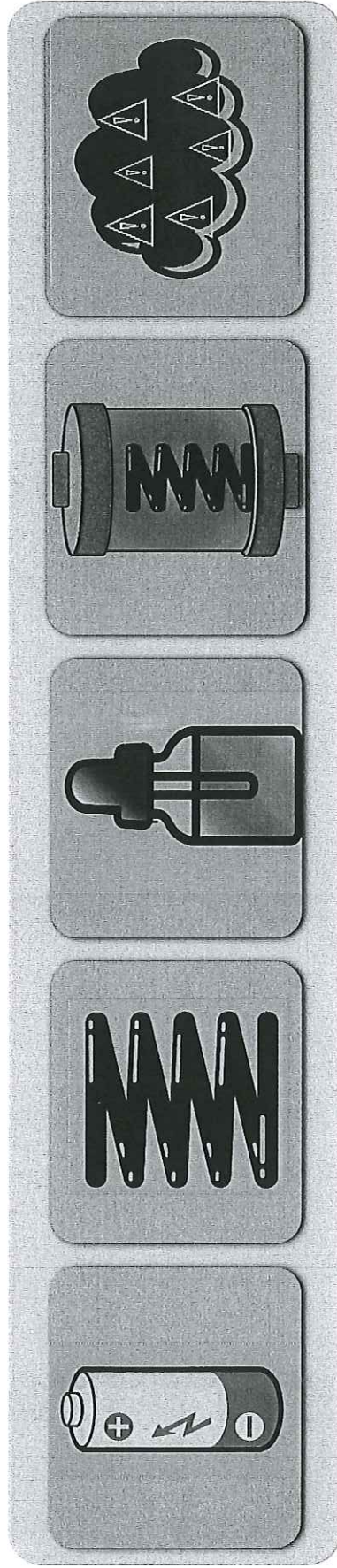
- Just learned that many e-cigarettes have nicotine in them. That's the drug that makes cigarettes so addictive. Nicotine can also mess with your brain development.
- Just saw a report from the Surgeon General that e-cigarettes can mess with how your brain develops and might even affect your mood and focus. Please don't use any products that contain nicotine.
- Hope none of your friends use e-cigarettes around you. Even breathing the cloud they exhale can expose you to nicotine and chemicals that can be dangerous to your health.



Centers for Disease
Control and Prevention
Office on Smoking
and Health



E-Cigarettes & Vape Pens Components



Battery

The battery is the energy source of the device and powers the atomizer

Atomizer

The atomizer is the heating element that heats the e-liquid and is often coil shaped

E-Liquid

Sometimes called e-juice, this is put into the device and often contains flavors and nicotine

Cartridge

The cartridge (tank) holds the e-liquid and may also hold the atomizer

Aerosol

Heating e-liquid inside the device creates an aerosol that is inhaled into the body and out into the air