



# Healthy Futures



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## *Teacher Talking Points:*

- So I'm about to share some information with you in this PowerPoint presentation. I'd also like for you to share your thoughts and opinions through out the presentation.
- It's also okay if you disagree with some things I have to say. I respect your thoughts and opinions.
- Please make sure to ask questions at any point and I'll do my best to answer them.
- I'm going to pass out a booklet for you to work on as we proceed with our discussion. It focuses on the pros and cons on quitting vaping in relation to the brain, health effects, messaging, and the financial cost of vaping. Think of it as a roadmap based on your personal opinions and decisions.
- Let's get started. (**Pass out "Decisional Balance Booklet."**)

# What do you like about vaping/using e-cigs?



[tobaccopreventiontoolkit.stanford.edu](http://tobaccopreventiontoolkit.stanford.edu)

## *Teacher Talking Points:*

- As a warm-up, let's start with this question (*click*). What do you like about vaping/using e-cigs? (**Take a few responses.**)

## Image:

Pixabay.com

What do you NOT like about  
vaping/using e-cigs?

[tobaccopreventiontoolkit.stanford.edu](http://tobaccopreventiontoolkit.stanford.edu)

*Teacher Talking Points:*

- Thank you for sharing. I'm curious to hear what you do not like about vaping (*click*).  
(**Take a few responses.**)
- Let's continue.

Image:

Pixabay.com



*Teacher Talking Points:*

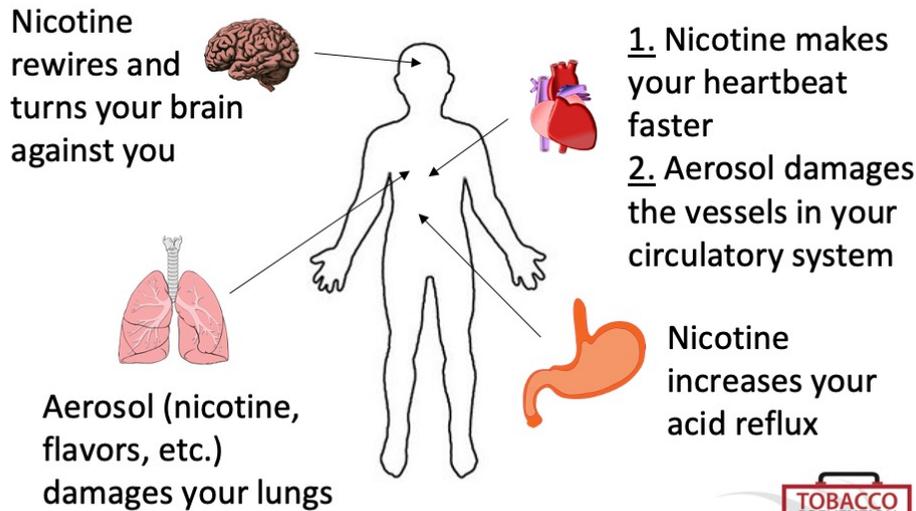
- I'd like to continue our presentation with this question. What are the long-term health effects of vaping? (Possible responses to prompt...it can worsen your health, lung problems, etc.)
- I'm curious to hear about your thoughts on the health effects of vaping. Please open the first part of your booklet and answer the square and circle questions (*click*) on Health and then we'll discuss your answers later. (**Give students enough time to write their answers.**)
- Let's continue.

Image:

Pixabay.com

# The Body When Vaping

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## Teacher Talking Points:

- E-cigarettes have not been around for a long time, but research on the short-term health effects is here.
- As a review, (*Click*) nicotine negatively impacts your brain, turning it against you by hijacking the reward pathway.
- (*Click*) Using nicotine can make your heartbeat faster because it activates your “fight or flight response.” The aerosol damages specific cells in your circulatory system, increasing your risk for heart disease.
- Nicotine salt e-liquids produce a faster heart rate than other **non**-nicotine salt e-liquids.
- (*Click*) The nicotine on its own can cause trouble breathing and damage to the lungs. Why do you think that is?
- Your lungs are not designed to have anything else in them besides oxygen. They can’t breakdown all of the chemicals that are in e-cigarette aerosols.
- The lung damage caused by e-cigarette aerosol increases the chances for lung injury and lung disease.
- (*Click*) Nicotine can also cause increased acid reflux.
- Last by not least, nicotine can even negatively impact your reproductive organs.

## References:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4363846/#ref1>

<https://patents.google.com/patent/CA2909967A1/en>

<https://www.bmj.com/content/366/bmj.l5275.long>

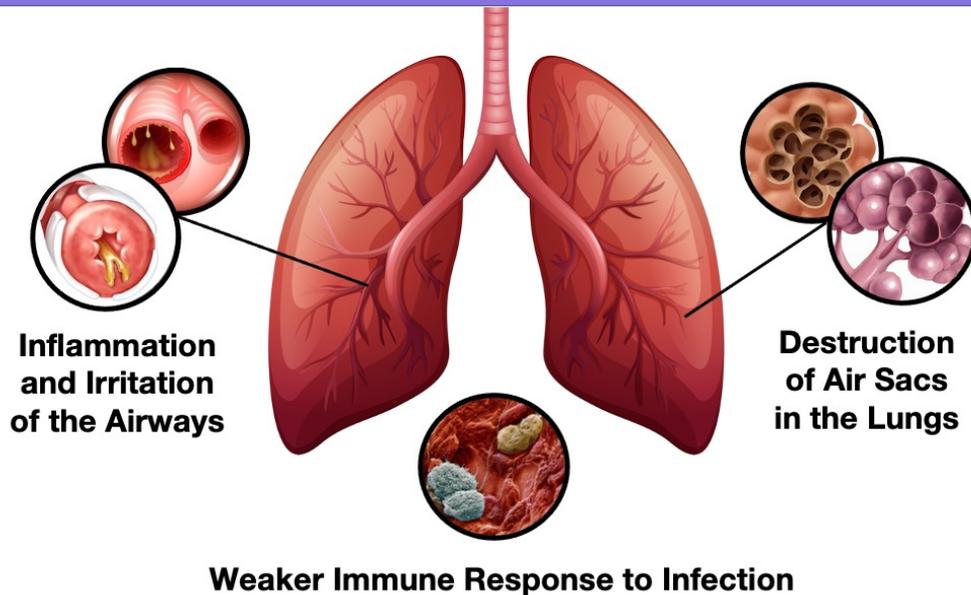
<https://www.ncbi.nlm.nih.gov/pubmed/31429679>

## Image Credit:

Pixabay.com, Deviantart.com, Wikimedia Commons

# No Fun in the Lungs

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## Teacher Talking Points:

- A recent study on e-cigarettes found that using them raises someone's risk of developing a long-term lung disease.
- This means someone using e-cigs for a few years could develop bronchitis (*click*), which is inflammation and irritation of major airways in your body. These airways are responsible for exchanging air in and out of your lungs.
- Emphysema can also be developed over time from using e-cigs. (*Click*) Emphysema is the destruction of air sacs in the lungs, which is a common disease that long-term cigarette smokers develop.
- Alveoli, the air sacs in your lungs are the place in the body where fresh oxygen is delivered and carbon dioxide is removed.
- Other lung diseases linked to e-cigarette use include asthma and chronic obstructive pulmonary disease. Those who use both e-cigarettes and cigarettes are at an even higher risk of developing a lung disease and or heart disease compared to someone only using e-cigarettes or cigarettes.
- Damaging this lung tissue could lead to a chain reaction of other health complications. Less oxygen will be sent to the brain which means less oxygen to the organs and tissues in the body.
- (*Click*) Other studies have confirmed that e-cigarette use weakens the lung's immune response to infection, making it harder for the lungs to fight off harmful viruses and bacteria.

## Sources:

[https://www.ajpmonline.org/article/S0749-3797\(19\)30391-5/fulltext](https://www.ajpmonline.org/article/S0749-3797(19)30391-5/fulltext)  
<https://www.ncbi.nlm.nih.gov/pubmed/31483291>

## Images:

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<http://www.hetheronillustration.com/hihome>  
[https://www.sciencesource.com/Doc/TR1\\_WATERMARKED/8/1/f/8/SS2587095.jpg?d63642824148](https://www.sciencesource.com/Doc/TR1_WATERMARKED/8/1/f/8/SS2587095.jpg?d63642824148)  
<https://media.sciencephoto.com/image/c0090408/800wm>  
<https://www.vecteezy.com/>

# Hit or Miss, the Case of EVALI

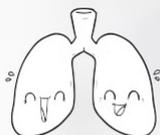
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**For the first time, we have seen a vaping device cause sudden, immediate, serious and sometimes fatal damage to the lungs.**



**The Centers for Disease Control and Prevention (CDC) recommends to not use THC-containing e-cigarette/vape products particularly from informal sources like family/friends, dealers, online or other sources.**



**Since these products are not regulated, there is no guarantee that any part of an e-cigarette is safe for your health. Your lungs are the most happy and safe when you only breathe in oxygen and clean air.**

## Teacher Talking Points:

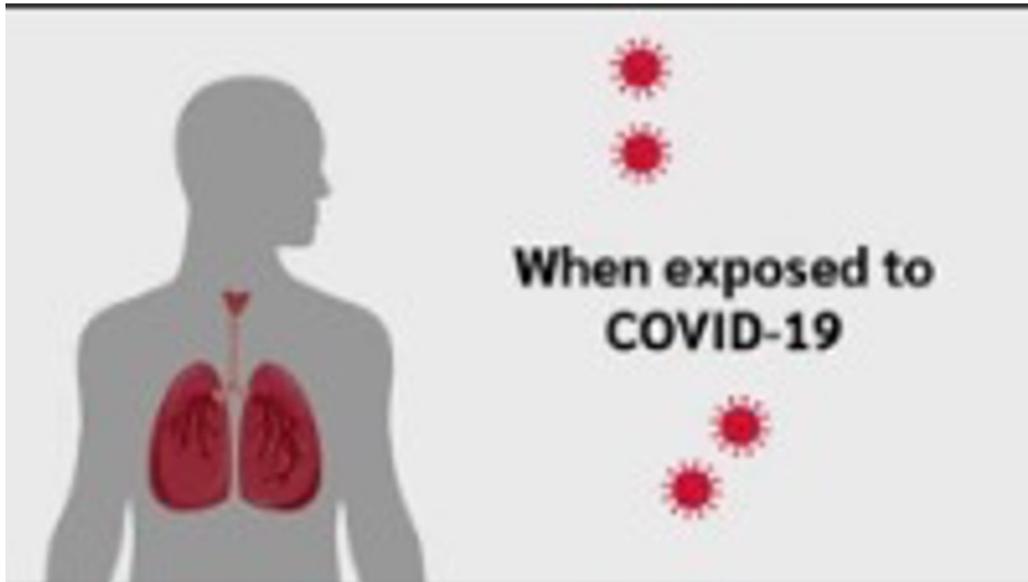
- We know that e-cigarette aerosol damages the lungs and increases the chances of developing a lung disease later in life. What if the aerosol or one chemical from vaping caused severe damage to the lungs after a few hits?
- In August of 2019 this began to happen. People were hospitalized for injured lungs from vaping. This outbreak was later named EVALI which stands for E-cigarette or Vaping product use-Associated Lung Injury.
- Most EVALI patients reported using THC-containing products and most said they got their products only from informal sources. THC is the chemical found in cannabis/marijuana that gives users a “buzz/high.”
- Scientists found Vitamin E Acetate, an oily chemical found in some THC-containing e-liquid, in the lungs of EVALI patients and in e-cigarette/vape products that the patients said they used. Vitamin E Acetate was mostly likely the cause of the outbreak. Breathing in Vitamin E Acetate can cause inflammation of the airways and interfere with normal lung functioning.
- What are some of your main takeaways after hearing about EVALI? (Wait for responses.)
- To add to or summarize what you already said, some main takeaways for EVALI include:
  1. (Click) This is the first time we’ve seen a vaping device cause sudden, immediate, serious and sometimes fatal damage to the lungs.
  2. (Click) The Centers for Disease Control and Prevention, better known as the CDC, recommends to not use THC-containing e-cigarette/vape products particularly from informal sources like family/friends, dealers, online or other sources.
  3. (Click) Since these products are not regulated by the government, there is no guarantee that any part of an e-cigarette is safe for your health. Something you can always be sure of is that your lungs are the most happy and safe when you only breathe in oxygen and clean air.

## Reference:

[https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html)

# Going Smoke-free or Vape-free

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*Teacher Talking Points:*

- We are going to watch a video that covers the benefits of going smoke-free or vape-free.

***[Hover over slide and click the play button.]***

***If technical issues should arise then watch this video with your students on YouTube by using this link:*** <https://www.youtube.com/watch?v=IYBWAQluuUg>

Sources:

<https://www.bmj.com/content/366/bmj.l5275>

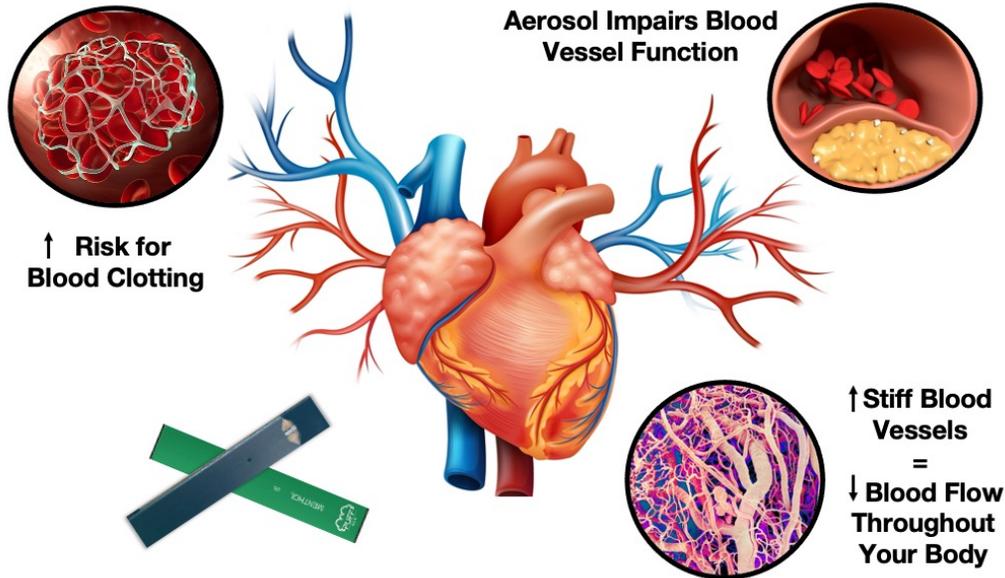
<https://tobacco.ucsf.edu/comment/33096#comment-33096>

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# A Hit to the Heart

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## Teacher Talking Points:

- The evidence that e-cigarettes, including products like JUUL, increases cardiovascular or heart risk is piling up.
- The heart is the center for pumping blood throughout a complex network of blood vessels in the body. These blood vessels are responsible for delivering fresh oxygen to organs or tissues. Your cells need oxygen to survive and work properly.
- Scientists have discovered that e-cigarette aerosol from using or breathing in secondhand aerosol can (*click*) impair the function of blood vessels by making them stiff. This stiffness (*click*) can decrease blood flow throughout the body and (*click*) lead to blood clotting.
- Breathing in the aerosol from the e-cigarette, even if you aren't the one using it, can lead to blood vessel stiffness and possibly affect your heart's ability to move fresh oxygen to your brain, muscles, liver, and other parts of your body.
- Ultimately, blood vessel stiffness and blood clotting can increase someone's risk for heart attack or heart disease.

## Sources:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6953758/>

<https://www.ncbi.nlm.nih.gov/pubmed/28146259>

<https://www.ncbi.nlm.nih.gov/pubmed/31715629>

<https://www.health.harvard.edu/heart-health/e-cigarettes-boost-the-risk-of-heart-attack>

## Images:

<https://www.news-medical.net/health/What-is-Arterial-Stiffness.aspx>

<https://www.thoughtco.com/blood-vessels-373483>

[https://www.drugtopics.com/sites/default/files/Blood-Clot\\_0.png](https://www.drugtopics.com/sites/default/files/Blood-Clot_0.png)

<https://www.vecteezy.com/>

# Risk for Heart Attack

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**GOOD NEWS:**  
Risk goes down  
immediately after you  
stop smoking or  
using e-cigarettes

family history  
exercise  
diet  
race

## Teacher Talking Points:

- Your risk for a heart attack is determined by many factors such as your genetics, environment, and lifestyle (*click*).
- Factors that play a role in your risk for heart attack include family history, race, where you live, what kind of air you breathe in, what you eat, how much you exercise, and overall lifestyle.
- Choosing not to use tobacco or nicotine reduces your overall risk for heart attack or heart disease.
- Let's imagine the chance of having a heart attack is represented by dice and a higher the total rolled represents a higher chance of developing heart disease.
- Someone who does **not** use e-cigarettes or cigarettes is rolling with only one dice.
- Now imagine this person starts using e-cigarettes everyday (*click*). Their chances of having a heart attack would now double. This is a fairly similar amount of damage to the heart as someone who is smoking cigarettes everyday.
- This is one reason e-cigarettes are not considered safer than cigarettes. They both release ultrafine particles and toxins that damage blood vessels, encourage blood clotting, and can lead to heart attacks.
- Let's complicate this story further by assuming that this person starts using cigarettes too (*click*) whenever they don't have access to their vape. Now they are using both e-cigarettes and cigarettes.
- This would increase their risk for heart attack by five-fold. In other words, they are now gambling with five dice!
- On the bright side, this works the other way too. The risk of having a heart attack can drop immediately after quitting cigarettes(*click*). It could also down after quitting e-cigarettes (*click*).
- (*Click*) Someone could take action right away to protect their heart by stopping any e-cigarette or cigarette use.

## Sources:

<https://www.ncbi.nlm.nih.gov/pubmed/30166079>

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<https://www.heart.org/en/health-topics/heart-attack/understand-your-risks-to-prevent-a-heart-attack>

<https://www.health.harvard.edu/heart-health/e-cigarettes-boost-the-risk-of-heart-attack>

## Images:

<https://i.pinimg.com/originals/6b/9e/53/6b9e53b8f71f2d84c66e1ea0b98d91a8.jpg>

<https://www.vecteezy.com/>

## E-Cigarettes/Vape Pens: Just Water Vapor?

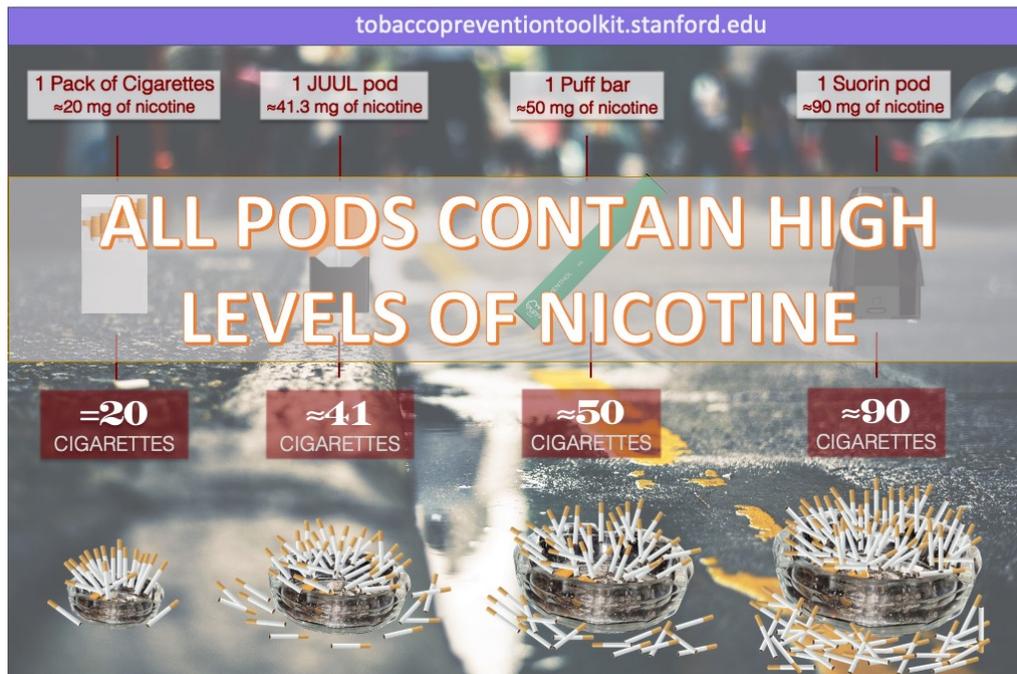
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### *Teacher Talking Points:*

- For so many years consumers were told that the clouds made by e-cigarettes/vape pens was "just water vapor."
- Do you think that is true?
- E-cigarettes/vape pens allow the user to make large clouds that many think are just water vapor.
- In reality the 'cloud' is a mixture of many different chemicals that were either present in the e-liquid before or produced during the heating process.
- A vapor is a chemical that has evaporated.
- An aerosol is a mixture of liquid particles suspended in a gas and can contain many chemicals.
- Instead of just mixing with the air like a pure gas, aerosols can leave drops behind (*click*).
- Vaping is NOT vapor!

# Cigs in a Pod



## Teacher Talking Points:

- If you don't know, a standard pack of cigarettes contains 20 cigarettes (*click*). There is 1 mg of nicotine absorption per cigarette, so about 20 milligrams of nicotine delivered to the body from a whole pack of cigarettes.
- Unlike other e-juices which may or may not contain nicotine, ALL salt-based e-juice contains nicotine!
- According to JUUL Labs, one JUUL pod contains 41.3 milligrams of nicotine. This is equal to the amount of nicotine you'll find in about 40 cigarettes (*click*).
- How many packs of cigarettes would a JUUL pod then be equal to? *Answer: about 2 packs*
- As mentioned before, this is a high amount of nicotine and can be intense for first-time users. Our concern is that young people are being introduced to a high amount of nicotine, developing a tolerance quickly, and becoming addicted as a result.
- 1 Puff bar contains 50 milligrams of nicotine (*click*), which is equivalent to 50 cigarettes. How many packs of cigarettes would a Puff bar then be equal to? *Answer: about 2 ½ packs*
- 1 Suorin Vagon cartridge contains up to 90 milligrams of nicotine or 90 cigarettes (*click*). How many packs of cigarettes would a Suorin pod then be equal to? *Answer: about 4 and a half packs*
- (*Click*) No matter what pod device you are using, all of them contain high levels of nicotine which is extremely addictive, which keeps you coming back for more.

PLEASE SEE BELOW FOR A THOROUGH BREAKDOWN:

*For the nicotine levels in these pod-based products, we looked at the amounts in milligrams per milliliter and/or percentage of nicotine by weight reported by these pod-based companies. Here is a stoichiometry breakdown:*

*One JUUL pod is reported to contain 59 mg/mL (<https://support.juul.com/home/learn/faqs/juulpod-basics>), but one JUUL pod is only 0.7mL per pod.*

[59 mg/mL] x [0.7mL] equals **41.3mg** (NOTE: milliliter units cancel out)

*The makers of Puff bar report there being 50 milligrams of nicotine per Puff bar (<https://puffeciq.com/puff-bar-disposable-device/>).*

*The Suorin Vagon cartridge/pod can hold an e-juice volume of 2mL (<https://www.suorinusa.com/collections/suorin-vagon/products/suorin-vagon?variant=8436760281141>). Suorin devices are semi-closed systems meaning that they are not pre-loaded like PHIX and JUUL, but Suorin still sells salt-based nicotine with nicotine by weight close to what JUUL and PHIX have. In their case, it is 4.5% (<https://www.suorinusa.com/collections/blowsauce-salted/products/blowsauce-watermelon-lollipop-e-juice-by-dripfire-30ml-salted-edtion?variant=1053863936026>).*

We used a simple conversion of 45mg/mL to represent the 4.5% nicotine by weight, so [45mg/mL] x [2mL] equals **90mg**.

*We decided to use 41.3mg since it is the true amount of nicotine in one pod. One JUUL pod is equivalent to smoking anywhere from 26 to 40 cigarettes, which is more than 1 pack of cigarettes (20 cigarettes). This range depends on whether there is an uptake of 1mg or 1.5mg of nicotine per cigarette, for someone using. We decided on 1mg since it captures the maximum potential of nicotine uptake for these pod-based devices.*

#### References:

<https://www.ncbi.nlm.nih.gov/pubmed/6705448>

<https://www.ncbi.nlm.nih.gov/pubmed/11208883>

<https://www.drugabuse.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/how-does-tobacco-deliver-its-effects>

#### Images:

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JUUL pod – <https://www.juul.com/shop/pods/mango-5-percent>

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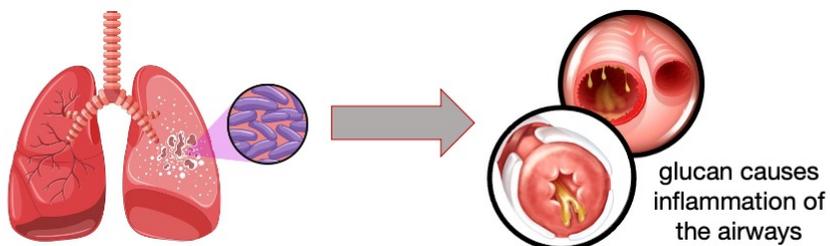
# What's in that Pod?

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**Glucan, a microbial toxin, found in Juul's nicotine vaping liquids**

January 2, 2020 – E-cigarette products made by Juul Labs were contaminated with a microbial toxin that can cause long-term lung damage according to an analysis conducted by researchers from Harvard T.H. Chan School of Public Health.

The study, published online December 9, 2019 in the American Journal of Respiratory and Critical Care Medicine, was co-authored by David Christiani, Elkan



## Teacher Talking Points:

- Based on what we know about e-juice/liquid, what chemicals would you specifically find in these pods? Let's look at the ingredients that JUUL Labs reports as being in a JUUL pod.
- (Click) Nicotine: the addictive chemical in all pods.
- (Click) Benzoic Acid: pairs up with nicotine to help deliver high amounts of nicotine to the brain.
- (Click) Glycerol and propylene glycol: common ingredients found in most e-juices. Propylene glycol is not approved by the government for inhaling.
- (Click) The other chemicals include natural oils, extracts and flavors. What do they mean by extracts and flavors? What else is in this?
- Well, scientists started to look at all the chemicals in the JUUL pod e-juice. Guess what, they found these (click) 59 chemicals when they looked at all the pod flavors. Why wouldn't they want us to know this?
- Maybe this will help you answer that question. (Click) The names in red represent chemicals that are corrosive, irritants, harmful, toxic and dangerous to the environment. What you see in orange (click) are chemicals that are harmful and those in light blue (click) represent chemicals that are irritants.
- Recently (click), a Harvard University study found that a toxin named glucan was found in JUUL pods. Glucan is commonly found in the outer layer (click) of fungi or fungus. Glucan is known for causing inflammation of airways in the lungs which can lead to long-term lung disease.

## References:

<https://pubs.acs.org/doi/10.1021/acs.chemrestox.8b00381>

<https://www.hsph.harvard.edu/news/features/glucan-a-microbial-toxin-found-in-juuls-nicotine-vaping-liquids/>

<https://futurism.com/neoscope/harvard-researchers-microbial-toxin-juul-pods>

## Images:

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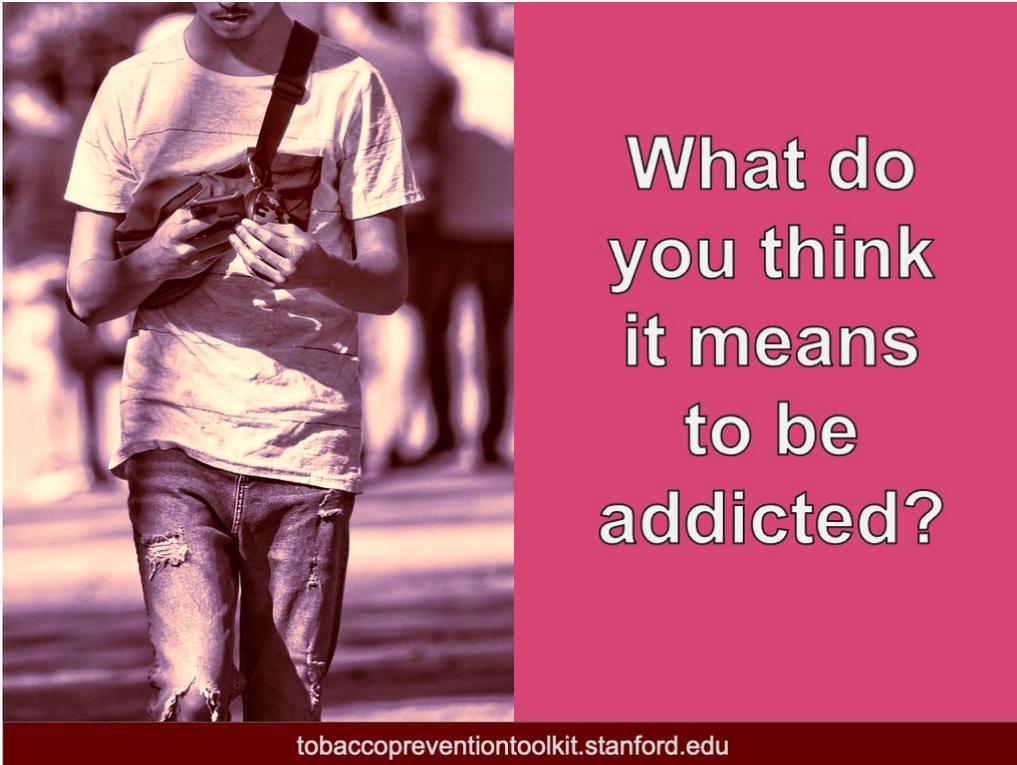
<http://www.hethertonillustration.com/hihome>

<https://www.vecteezy.com/>



Teacher Talking Points:

- Let's think about everything we discussed up to this point about health effects. Please complete the triangle and star questions (*click*) about Health and then we'll discuss what you wrote later in this session. (**Give students enough time to write their answers.**)
- Let's continue.



*Teacher Talking Points:*

- As a warm-up to our next topic, let's start with this question. What do you think it means to be addicted? (**Wait for responses.** Possible responses to prompts...do something that you can't stop even though it may be unhealthy, having strong cravings, etc.)
- Thank you for sharing. This part of today's session focuses on the brain and addiction.
- I'm curious to hear how vaping usually makes your brain feel. Please answer the square and circle questions (*click*) about the Brain and then we'll discuss what you wrote later. (**Give students enough time to write their answers.**)
- Let's continue.

Image:

Pixabay.com

# Teen-Age Brain

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## *Teacher Talking Points:*

**[Facilitate this discussion to get to ideas about doing well as a student, working to be a good big brother, playing a positive role in the family community, etc. Finalize to the individual or group that roles also represent goals to achieve. What skills do the students identify that are needed to be successful?]**

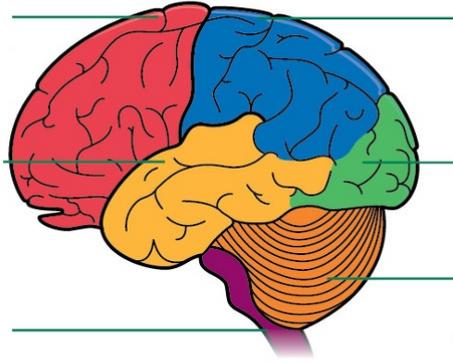
- What do you think is your job as a teenager? (**Pause, wait for some responses.**)
- The adolescent brain is wired to learn anything and everything that you find interesting. Some examples are playing sports, learning a musical instrument or a foreign language, basically anything because your brain is still developing. In other words, your brain is at its greatest potential for learning.
- For sure one of the goals is for you to do as well as you can in school, but equally important is how to deal with stressful situations in a helpful way, how to navigate friendships in good times and bad, or how to handle your friends when suddenly they change in a way you don't like. Other goals may include how to deal with teachers you don't like, how to deal with your first romantic partner that dumps you or what to do when you and your parents or adults in your life are not getting along.
- These are all normal situations you must go through as you navigate and learn from the teen years. Much of this is learning the skills you will need to be successful with life's challenges.

## Reference:

<https://www.edutopia.org/article/teenage-brain-is-wired-to-learn-donna-wilson-marcus-conyers>

# Brain Background

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## *Teacher Talking Points:*

- Our brain affects how we experience the world around us. It keeps our body functioning and it also controls our behavior.
- Some things our brain does (*click*) without us thinking about it (like breathing) while other behaviors (*click*) we have more control over (talking, singing).
- There is even a part of the brain that controls speech and another that controls smell.
- Multiple areas (*click*) of the brain are often working at the same time to help us engage in different behaviors. For example, when we are walking, this involves using multiple areas of the brain starting from our decision to walk to us standing up and taking our first step.

## *Image:*

<https://socratic.org/questions/how-many-parts-is-the-human-brain-divided-into-is-one-of-the-parts-the-hind-brain>

# Drugs Affect the Brain

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**1. Stimulates the “reward pathway”**

**2. Copies the natural chemical messengers (neurotransmitters)**

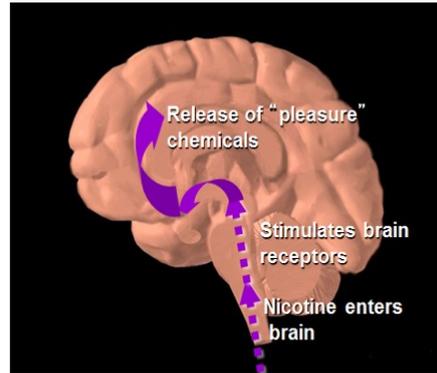


Image Credit: NIDA and NIH via Wikimedia Commons

## *Teacher Talking Points:*

- In general, there are two main ways that drugs can affect the brain.
- Drugs can affect the brain by over-stimulating a part of the brain called the “reward pathway;” the reward pathway is what makes people feel good, it’s how in this case nicotine makes people feel good.
- Or drugs pretend to be our natural chemical messengers (neurotransmitters) and takes advantage of the neurons that normally use those neurotransmitters.

Reference:

<http://teens.drugabuse.gov/drug-facts/brain-and-addiction>

Image:

<https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preface>

## Understanding Addiction as a Disease (Wait21)

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### *Teacher Talking Points:*

- The brain is also important as it continues to grow and develop during adolescence. Anything you put into your brain changes it and makes you that much more likely to become addicted.
- This video explains how addiction is a disease. The video uses alcohol as an example but the same is true for nicotine products.
- Pay special attention to the description of the Hierarchy of Survival as we will discuss it again soon.

***[Hover over slide and click the play button in the bottom left corner.]***

***If technical issues should arise then watch this video with your students on YouTube by using this link:*** <https://www.youtube.com/watch?v=-w8n9UOiBxE>

- *[After video is shown]* I noticed that a few of you were laughing a bit while watching that, me too when I first saw it. It tries to get a point across about how addiction works in a funny but true way.
- So tell me...what did you think of the video? *(Take a few responses)* What part of this makes sense? Can you understand a bit how nicotine may work?

# The Brain on Nicotine

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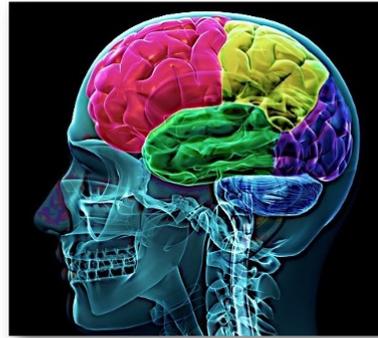
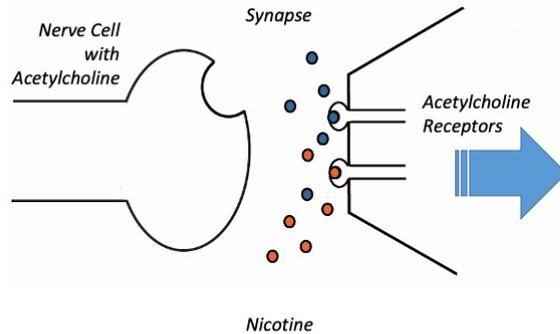


Image Credit: By United States: National Institute of Health via Wikimedia Commons



## Teacher Talking Points:

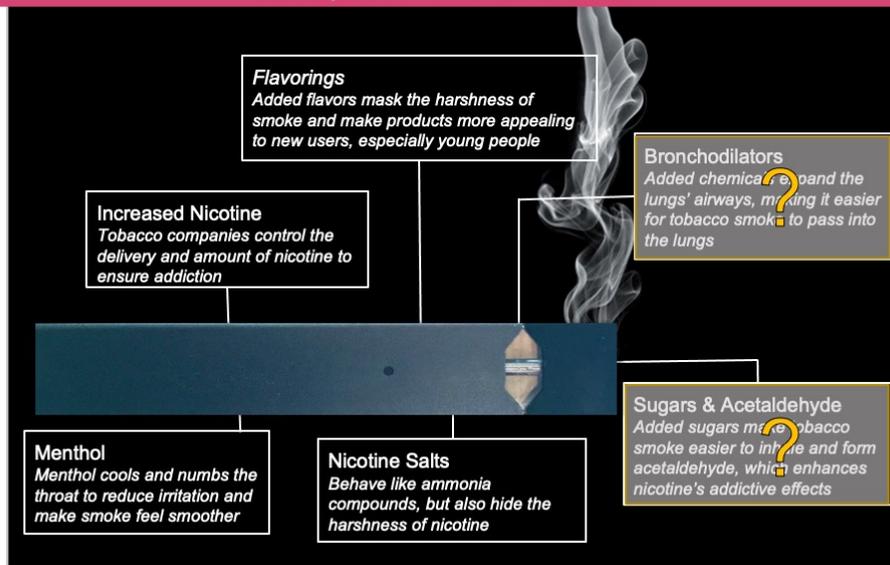
- In order to understand how nicotine is so good at creating addiction, we must know how it takes advantage of our brains (*click*).
- Nicotine mimics a chemical that our brains produce naturally and easily binds to receptors in the brain that are made for that chemical.
- When those receptors get filled, it sets off a chain reaction that leads the brain to feel pleasure.
- Why do you think it's important for our brains to feel pleasure? (**Take a few responses.**)
- Pleasure is necessary for survival because it encourages us to do activities that keep us alive like eating, sleeping, and building relationships.
- However, no matter what kind of device it comes from, nicotine hijacks this "pleasure pathway" and tricks the brain into interpreting the chemical signal as pleasurable and necessary for survival.
- Continuing to use nicotine in any form will result in addiction. This means that nicotine turns your brain against you so that you feel forced to keep using nicotine just to feel normal.

## Reference:

<http://drugabuse.com/visualize/the-science-behind-addiction/>

# Increasing Addictiveness

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## Teacher Talking Points

- There are several features of cigarettes that are designed to make them as addictive as possible.
- (Click) The nicotine levels in cigarettes are controlled by the tobacco companies. This is true of both cigarettes and e-cigs/vapes.
- (Click) Menthol is a substance found in mint plants that cools and numbs the throat to reduce irritation and makes smoking feel smoother, making it easier to keep smoking.
- (Click) Added flavors mask the harshness of smoke and make products more appealing to new users. Flavors are still being used in new tobacco products like in the e-liquid used in e-cigs/vapes. Flavors are found to be especially appealing to young people.
- (Click) Ammonia or ammonia compounds are added to cigarettes, which increase the speed at which nicotine is delivered to the brain.
- (Click) Bronchodilators are chemicals that expand the lungs' airways, making it easier for tobacco smoke to pass into the lungs, ultimately delivering more nicotine to the brain.
- (Click) Adding sugars makes tobacco smoke easier to inhale and form acetaldehyde, which enhances nicotine's addictive effects.
- (Click) Don't forget that this design applies to pod-based e-cigarettes as well. That shouldn't surprise you though because e-cigarette companies followed the playbook from cigarette companies.
- Some ingredients are still being identified in e-cigarettes, such as bronchodilators, sugars and acetaldehyde. Researchers are catching up with studying these recent devices.
- (Click) Nicotine salts in pod-based e-cigarettes act like ammonia compounds but also hide the harshness of nicotine.

Reference:

Campaign for Tobacco-Free Kids. (2014). [Designed for Addiction: How the Tobacco Industry Has Made Cigarettes More Addictive, More Attractive to Kids and Even More Deadly.](#)



*Teacher Talking Points:*

- Let's think about all we discussed up to this point about the brain. Please complete the triangle and star questions (*click*) about the Brain and then we'll discuss what you wrote later. (**Give students enough time to write their answers.**)
- Let's continue.



*Teacher Talking Points:*

- Ok, here is another question for you to think about. Why do you think people start vaping? (**Wait for responses.** Possible responses to prompts...it's fun, tastes good, harmless, everyone is doing it, etc.)
- Please unfold your booklet again and answer the square and circle questions (*click*) on Messaging and then we'll discuss what you wrote later. (**Give students enough time to write their answers.**)
- Let's continue.

# Why Flavors?

tobaccopreventiontoolkit.stanford.edu

**Science News** from research organizations

**Widely used e-cigarette flavoring impairs lung function**

Date: May 23, 2018  
Source: American Thoracic Society

**Stanford MEDICINE** News Center

Email Share 1K Tweet

E-cigarette use, flavorings may increase heart disease risk, study finds

E-cigarette flavorings damage human blood vessel cells grown in the lab even in the absence of nicotine, Stanford researchers and their colleagues found. Cinnamon and menthol flavors were particularly harmful.

## Teacher Talking Points:

- Earlier we discussed how pod-based companies have fruity and sweet flavor pods along with colors.
- (Click) Why would there be over 15,500 e-juice flavor options such as Banana Butt and Honey Doo Doo?
- It's important to be aware that this is another example of the pod-based companies following well-known advertising strategies from Big Tobacco's playbook.
- They know that flavors are a great way to attract young costumers because they are the group most interested in sweet flavors and bright colors.
- This tactic is so effective that flavored cigarettes have been banned since 2009, since extensive research shows that they are more appealing to young people. The pod-based companies along with other e-cigarettes have yet to be regulated in this way.
- (Click) More and more evidence is piling, proving that these flavors are dangerous in and of themselves.
- (Click) So far we know that flavors can impair lung function and increase risk for heart disease.
- But pod-based companies continue to use them because they know it makes their products seem appealing and safe to teens.

## Reference:

<https://www.flavorshookkids.org/>

<http://www.onlinejacc.org/content/73/21/2722>

<https://www.sciencedaily.com/releases/2018/05/180523172310.htm>

## Images:

<http://www.liherald.com/rockvillecentre/stories/rockville-centre-coalition-for-youth-persists-to-stop-flavored-juul-sales,114268>

<https://thepodgod.shop/collections/puff-bars?page=1>

<https://thepodgod.shop/collections/puff-bars?page=2>

# Truth About Menthol

tobaccopreventiontoolkit.stanford.edu

Use of flavors not allowed in cigarettes,  
except for menthol

Nearly 9 in 10 Black smokers aged 12 and  
older use menthol cigarettes

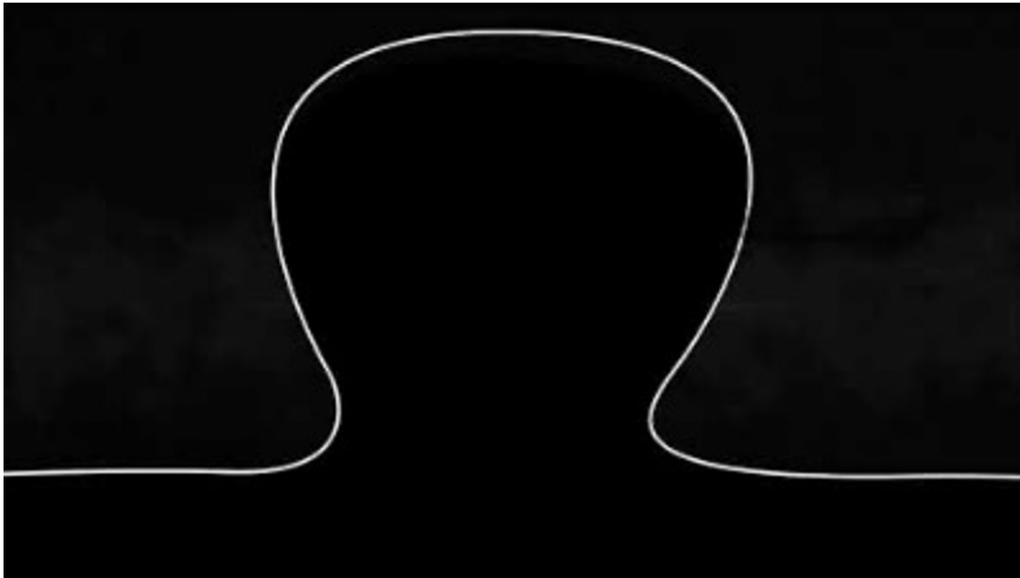
## *Teacher Talking Points:*

- Remember that flavored cigarettes have been banned since 2009, but Big Tobacco fought to keep menthol as a flavor.
- Historically, the Tobacco companies reinforced the popularity of menthol tobacco products by exploiting vulnerable communities. For example, in the Black communities, a tobacco company would drive a van through districts and give away free cigarettes.
- And recent studies have concluded that menthol cigarettes lead to increased smoking initiation among youth and young adults, greater addiction, and decreased success in quitting smoking.
- Removal of menthol cigarettes from the marketplace would benefit public health in the United States, especially among communities of color and other vulnerable groups of people.

## *Image:*

<https://californiahealthline.org/news/flavor-bans-multiply-but-menthol-continues-to-divide/>

# Enough is Enough



*Teacher Talking Points:*

- It is incredibly important that Black people, and other people of color, are represented in movies, magazines, and other media. It's a different story when the product that is being sold is addictive and deadly.
- It is even more frustrating to see how the Black community is targeted by tobacco companies when you know that smoking is a major cause of heart disease, the number one cause of death for people who are Black.
- We are going to watch a video to see spoken word artist Six Footah The Poet's take on menthol.

***[Hover over slide and click the play button.]***

***If technical issues should arise then watch this video with your students on YouTube by using this link:*** <https://www.youtube.com/watch?v=j-pzmb-85wQ>

# Who's the Target Audience?



[tobaccopreventiontoolkit.stanford.edu](http://tobaccopreventiontoolkit.stanford.edu)

## *Teacher Talking Points:*

- What audience do you think this ad is targeting? (**Wait for responses.**)
- How does this woman in the ad have a youthful appearance?
- So do you think a company like JUUL Labs targeted youth like you or your friends? If so, how and why?

*Discussion starters/hints:* 1. ponytail hair, 2. letterman's jacket, 3. position of her body (pose)

- (Click) Here is another campaign of ads from a different pod-based e-cigarette brand.
- Who does this person with the short hair look like? (**Wait for responses.**)

*Discussion starters/hints:* 1. The Parkland Student Activist 2. Do you think it was an accident that this model resembles a girl who received a lot of press and air time? 3. How do you think this ad may be exploiting that?

- How is this Blu ad different from the JUUL ad?

*Discussion starters/hints:* 1. femininity (gender expression) 2. social message 3. city backdrop vs. geometric shapes 4. how the device is being held

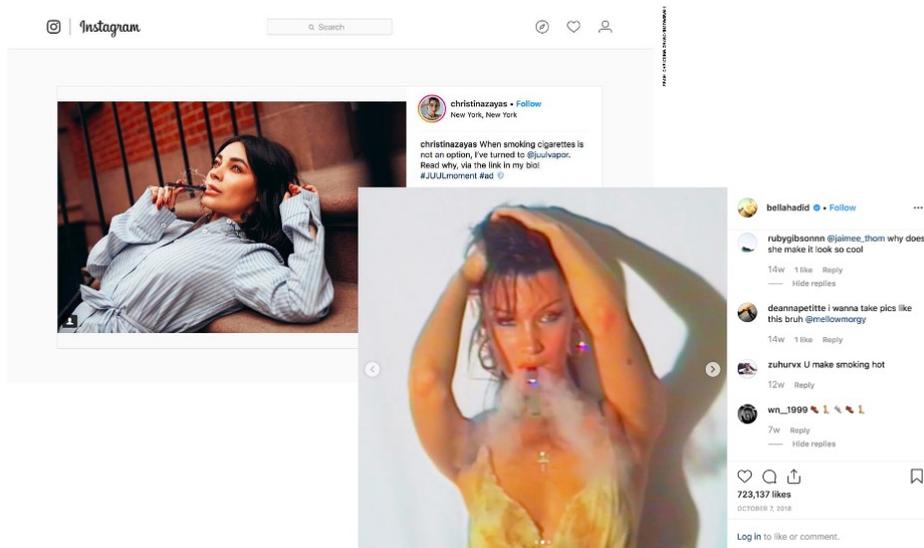
## *Images:*

[http://tobacco.stanford.edu/tobacco\\_main/main\\_pods.php](http://tobacco.stanford.edu/tobacco_main/main_pods.php)

<http://www.styleitholmes.com/advertising/> (*Rolling Stones July 2018 Issue*)

# Social Media Targeting

tobaccopreventiontoolkit.stanford.edu



## Teacher Talking Points:

- There has been increasing concerns around how young people have been targeted by these pod-based companies on social media.
- (Click) For example, young social media influencers and other third party influencers were paid by JUUL Labs and other vaping companies to make JUULing or vaping look cool.
- (Click) Here is a comment from one social media influencer who JUUL Labs paid to promote their product to young people. This one influencer's comments regarding JUULs was "liked" by over 700,000 people!
- After JUUL stopped paying influencers to post their content, they promoted the device on social media in other ways, including commenting on people's posts and sharing discount codes.
- Even after JUUL "shut down" its Instagram page, they still have an active account that is being tagged in posts daily.
- Many social media accounts post videos of young people using these products, while giving shout-outs to JUUL and other pod-based brands.
- Don't get trapped by these strategies to attract young people as customers!

## References:

<https://tobacco.ucsf.edu/sites/tobacco.ucsf.edu/files/wysiwyg/Dkt%20082%20%28SAC%20w%20corrections%29.pdf>

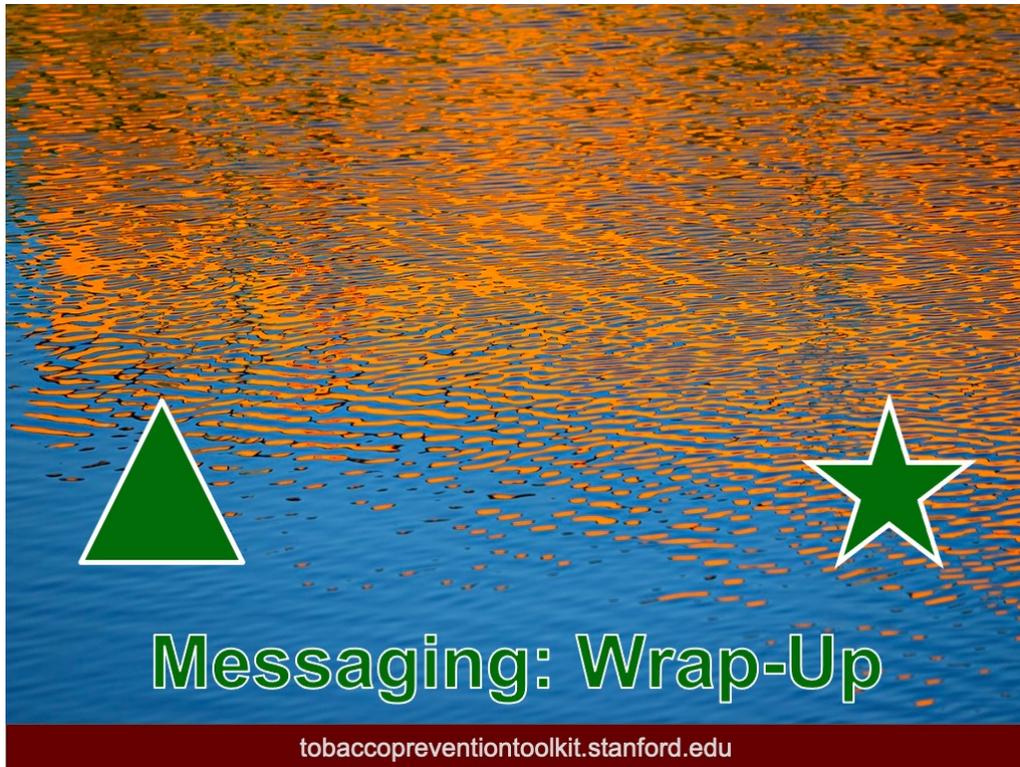
<https://www.cnn.com/2018/12/17/health/juul-social-media-influencers/index.html>

## Images:

<https://pxhere.com/en/photo/1438939>

<https://www.instagram.com/christinazayas/?hl=en>

<https://www.instagram.com/bellahadid/?hl=en>



*Teacher Talking Points:*

- Let's think about all we discussed up to this point about the messages we hear about e-cigarettes/vapes. Please complete the triangle and star questions (*click*) about Messaging and then we'll discuss what you wrote later. (***Give students enough time to write their answers.***)
- Let's continue.

Image:

Pixabay.com



Alex goes through one pod during the school week. How much does Alex spend in a month?

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*Teacher's Talking Points:*

- Today we are going to talk about the costs of vaping. Let's take a look at this scenario and discuss (**ask a young person to read out loud**). (NOTE: pod prices may vary, have the youth share how much Alex might spend in a month).
- Please answer the square question only (*click*) about Cost and then we'll discuss what you wrote later. (**Give students enough time to write their answers.**)
- Let's continue.

Image:

Pixabay.com

# How Much Does Vaping Cost You?



<https://tinyurl.com/TPT-COST>

[tobaccopreventiontoolkit.stanford.edu](http://tobaccopreventiontoolkit.stanford.edu)

## *Teacher Talking Points:*

- It's interesting to consider how much money you spend on e-cigarettes and vapes.
- Use this calculator to find out how much you spend in a year.
- Once you have calculated how much you would spend in a year, go ahead and complete the circle question in the Cost section of the booklet. (***Give students enough time to use the calculator and answer the circle question.***)
- What are three things you could afford with this amount of money? (***Take a few responses.***)
- What is your reaction to this number?

# What is Vaping Costing You?



[tobaccopreventiontoolkit.stanford.edu](http://tobaccopreventiontoolkit.stanford.edu)

## Teacher Talking Points:

- What you choose to spend your money on is a reflection of what you value.
- For example, someone who spends a large percentage of their income on a nice car likely values social status and luxury.
- What value do you think might be reflected when someone decides to spend their money on vaping?
  - Possible Responses: *Temporary feelings of pleasure, social acceptance, trendiness*
- What would a young person who values independence likely spend their money on?
  - Possible Responses: *their own apartment, a car or transportation*
- What would a young person who values social justice likely spend their money on?
  - Possible Responses: *fair trade items, charitable causes, education*
- What would a young person who values travel likely spend their money on?
  - Possible Responses: *airfare, new foods, lodging*
- If you were to only spend your money on what you value, what would you spend your money on?
- Of the values listed here, which would you like to invest more money in?

## Cost: Wrap-Up



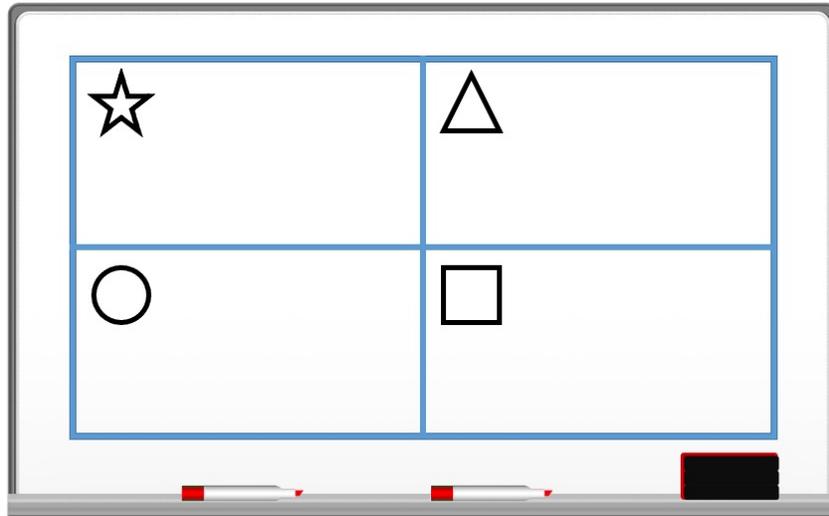
### Teacher Talking Points:

- Let's think about all we discussed up to this point about the costs of vaping. Please complete the triangle and star questions (*click*) about Cost and then we'll discuss all of our booklet answers. (**Give students enough time to write their answers.**)
- Let's continue.

### Image:

Pixabay.com

# Group Share



## *Teacher Talking Points:*

- Everyone's roadmap is different or it may be similar.
- As a group, let's see how that looks. Using your handout, let's as a group do a share-out of your roadmap.

(NOTE: used prepared poster board with items discussed: Health Effects, Your Brain, Messaging, and Cost. Each young person will read their responses to each item discussed and the teacher will fill out the poster or the group can go up to the poster board and write in their own responses.)

- (**After share-out, discuss.**) Many of you have shared similar viewpoints.
- You are not alone.
- We are here to support you every step of the way.

## Image:

Pixabay.com

# Make Your Momentum



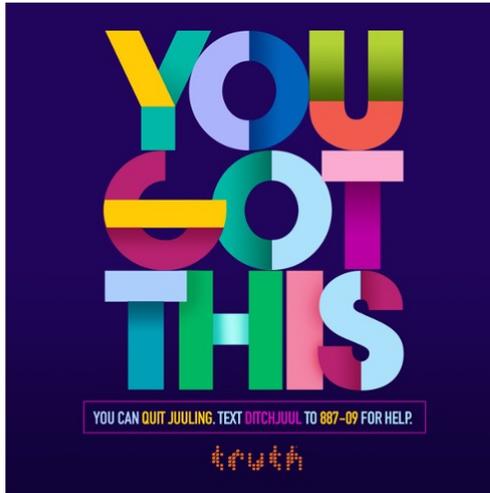
## *Teaching Talking Point:*

- Now that you're completed the Healthy Futures program, we are going to focus on what you think about vaping right now. Let's take a look at the Make Your Momentum section of your handout and read out loud (***if in a group, ask for volunteers; if for an individual, take turns reading with youth. Read up to the fill-in questions of handout.***)
- Cutting back or quitting vapes may or may not be something you are thinking about right now.
- It's your decision if/when you want to quit, so we aren't going to pressure you to do anything you don't want to do. Instead, we're going to ask you to decide for yourself what your next step will be, when it comes to vaping.
- There are lots of other possible small and meaningful steps that you could take within the next 24 hours that could lead to a healthier, happier version of yourself.
- Going back to your handout, please write up your plan. This is your individual plan that you will take home with you today.

## Image:

Pixabay.com

## Text “DITCHJUUL” to 887-09



- Daily quitting tips
- Designed with feedback from teens and college students who have tried to quit, or have successfully quit

### *Teacher Talking Points:*

- Finally, I would like to share some resources with you. If you would please take out your phones and text "DITCHJUUL" to 887-09. You will get daily tips on how to quit vaping. It's easy to use and easy to stop if you don't want it.

### Reference:

<https://truthinitiative.org/what-we-do/quit-smoking-tools>

# Teen.smokefree.gov

## 1-800-QUIT-NOW (1-800-784-8669)



### How to Quit Vaping

Quitting vapes can be easier when you prepare in advance and have a plan. Find out what you can do to get ready to quit.



### 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.

#### *Teacher Talking Points:*

- There is a national website that offers information on quitting e-cig/vape use.
- There is a national hotline, 1-800-QUIT-NOW (1-800-784-8669). When you call that number and give them the state you're calling from, they will connect you to your state's hotline.
- Each state varies in the type of services offered (<http://map.naquitline.org/>)

#### References:

<https://teen.smokefree.gov/>

<http://map.naquitline.org/>

# California Smoker's Helpline



Search all products...



Cart

FREE MATERIALS AND RESOURCES FOR QUITTING SMOKING

[Tobacco Users](#) [Friends & Family](#) [Health Care Providers](#) [Behavioral Health Professionals](#) [Community Partners](#) [Special Projects](#) [First 5 Materials](#)

[Home](#) > [Tobacco Users](#) > [E-cigarettes](#)

## 1-844-8-NO-VAPE

## 1-844-866-8273

### *Teacher Talking Points:*

- This resource is for people who live in California.
- Free individual counseling and coaching is available to youth who want to quit e-cigs/vapes. You need to enroll first, it only takes about 5 minutes to do that. They can also email free reading materials if you want them.

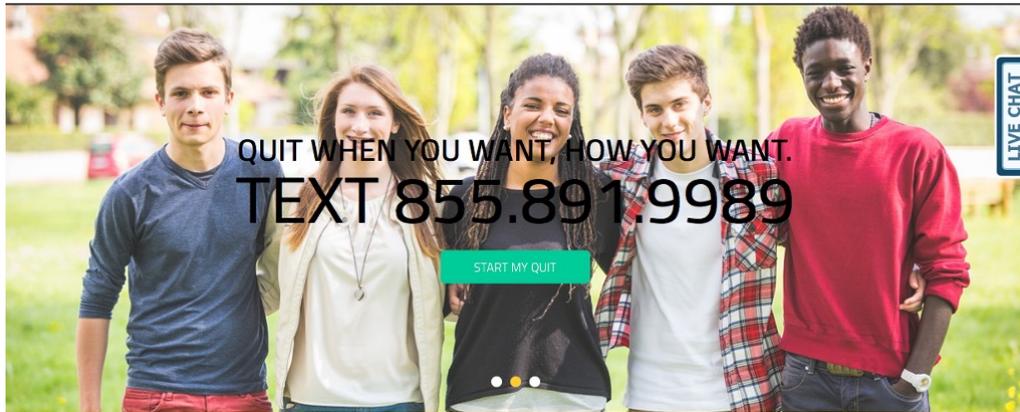
### Reference:

<https://www.nobutts.org/>

# My Life, My Quit

<https://mylifemyquit.com>

Text **“Start My Quit”** to **855-891-9989**



## *Teacher Talking Points (outside California):*

- There is also a new youth tobacco/nicotine cessation program, available for free in Colorado, Hawai'i, Idaho, Iowa, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Utah, Vermont, and Wyoming.
- They provide structured, live coaching sessions for youth using multiple communication tools. Visit MyLifeMyQuit.com or text “Start My Quit” to 855-891-9989 to learn more. #MyLifeMyQuit #StartMyQuit.

## Reference:

[https://www.mylifemyquit.com/?utm\\_source=fb&utm\\_medium=soc&utm\\_campaign=TPT](https://www.mylifemyquit.com/?utm_source=fb&utm_medium=soc&utm_campaign=TPT)